

NATIONAL STANDARDS CURRICULUM

GRADE 3

Integrated Studies • Language Arts • Mathematics





NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3

INTEGRATED STUDIES | LANGUAGE ARTS | MATHEMATICS

ACKNOWLEDGEMENT

Our connection with each other is unquestionable and so at the end of this arduous yet rewarding journey, the Ministry of Education, Youth and Information gratefully acknowledges the contributions of the following individuals and institutions who generously gave of their time and resources in the planning and development of the National Standards Curriculum (NSC):

- Mrs. Sharon Neil- former DCEO, Curriculum and Support Services, who provided leadership to the process during her tenure
- Mrs. Lena Buckle Scott- DCEO, Curriculum and Support Services, who provided leadership to the process
- Dr. Mary Campbell- former ACEO, Core Curriculum Unit, who started the process
- Mr. Derrick Hall- former ACEO (Acting), Core Curriculum Unit, who continued it
- Dr. Clover- Hamilton Flowers- ACEO, Core Curriculum Unit, who completed the task
- Dr. Lorna Thompson who led the development of the Integrated Studies and Mathematics Window
- Mrs. Novelette McLean Francis, Mrs. Fiona Morris Webb, Mrs. Christa Ferguson Rainford, Mrs. Taina Marsh Harris, Mrs. Michelle Kerr and Mrs. Olivette Lue-Nicholson who led the development of the Language Window
- Current and former Education Officers of the Core Curriculum Unit who participated in the writing of the curriculum and gave oversight to the development process
- Principals/ school administrators, lecturers, teachers and other resources persons who participated in the writing process
- Principals and staff of the forty (40) pilot schools who facilitated the two years of curriculum piloting in their schools
- Regional Directors and Territorial Education Officers who contributed to the development and implementation of the curriculum
- The team of Mathematics and Literacy coaches and specialists led by Dr. Tamika Benjamin and Dr. Andre Hill respectively who participated in the writing and review of the documents

Consultants:

- Ms. Lila Oliver, Ms. Mary Surridge, Mr. Brian Male and Ms. Wendy Pemberton for their guidance in the development and design of the curriculum
- Dr. Sherril Gardner and Mrs. Herma Meade Thompson for guidance in the area of integration at Grades 1-3
- Dr. Nancy George and Mrs. Diane Browne for work on the evaluation of the draft curriculum documents
- The team of local reviewers
- The team of international reviewers led by Professor Jari Lavonen, Dr. Kaisa Hahl and Dr. Mary Jean Gallagher

- Miss Jean Hastings, former Director of the Education System Transformation Programme, who during her tenure in the post facilitated the processes involved in the development of the Curriculum
- Mrs. Winnie Berry and Mrs. Sophia Forbes Hall, former Senior Functional Education Officers of the Core Curriculum Unit who provided administrative and technical leadership to the development process.
- Mrs. Michelle Kerr, Senior Functional Education Officer (Acting) and Mrs. Coleen Clarke Russell, Functional Education Officer who provided
 administrative leadership to the production process
- The members of the Curriculum Secretariat, the administrator and secretaries in the Core Curriculum Unit who provided administrative support during the development and implementation of the curriculum
- The team of curriculum editors led by Mrs. Taina Williams and Dr. Donna Powell Wilson
- Curriculum formatters Mrs. Leonie Rhule and Mr Marlo Scott
- The various stakeholder groups, who provided valuable information on societal needs in relation to the curriculum
- All others whose names do not appear, but who contributed to the production of the NSC

TABLE OF CONTENTS

Title Page	
AcknowledgementsII	
Table of ContentsIV	
MessagesVIII	
NSC Glossary of TermsXIV	
INTEGRATED STUDIES	1
Philosophical Statement	2
Overview	4
TERM1	
UNIT1	18
UNIT2	36
TERM2	
UNIT1	50
UNIT2	67
UNIT3	90
TERM3	
UNIT1	109
UNIT2	132
THE LANGUAGE ARTS WINDOW	154
Philosophical Statement	
Guidelines	
Scope and Sequence	157

	TERM1	
	UNIT1	172
	UNIT2	199
	TERM2	
	UNIT1	221
	UNIT2	244
	TERM3	
	UNIT1	267
MA	THEMATICS	299
	Introduction	302
	The Structure and Development of the Standards	303
	Grade 3	
	Scope and Sequence	304
	Process Strand Checklist	312
	Illustrative Activities	316
	Grade 3 Mathematics Content Standard - Number	317
	Grade 3 Mathematics Content Standard - Measurement	353
	Grade 3 Mathematics Content Standard - Geometry	370
	Grade 3 Mathematics Content Standard - Algebra	373
	Grade 3 Mathematics Content Standard – Statistics and Probability	377

APPENDICES	380
Stem & The NSC	381
NSC – The 5Es	387
Attainment Targets	394
Lesson Plans	398
Integrated Studies	399
Language Arts	405
Mathematics	409
Teaching Mathematics: Ideas & Activities	415
12 Most important things you can do to be a teacher of Mathematics	445
Sequencing of teaching and learning activities in the Mathematics Classroom	452
Mathematical Thinking	456

MESSAGE



Education has always been pivotal to societal and economic development. It is for this reason that Jamaica remains unshaken and hopeful of a realized vision to be "the place of choice to live, work, raise families and do business." The assurance of the possibility of all that such a vision entails comes from the recognition that Jamaica is endowed with tremendous God-given talent and creative potential and as a people of strong faith in spiritual principles and resilience; we are able to harness our capabilities, to make significant influence on the world. It is through this new National Standards Curriculum (NSC) that we hope to propel this vision of the education system whilst becoming more relevant, current and dynamic.

The team at the Ministry of Education Youth and Information is cognizant of the fact that the curriculum is the heart and mind of education and remains the most powerful means by which any country can develop and be sustainable. It is for this reason that the NSC has been designed with the understanding that people, learning and national development are at the core of our existence in a time of rapid change in the physical, social, economic and other dimensions of the global landscape. As a consequence, we celebrate the wisdom of the developers who through the engagement of numerous stakeholder groups, have responded favourably to the need for that kind of education that prepares our young people for life; while challenging our more mature to join in this lifelong journey of learning to learn.

Our commitment to the development of each learner and our support and appreciation of the various stakeholder groups that are partnering with us in providing quality education, remain at the forefront of our efforts in

ensuring that this journey transforms education. This commitment is conveyed through our adoption of a Pathway Approach to learning that demands of us to provide customized programmes, differentiated learning experiences and specialized support for our learners. Our actions have been fruitful as is evident by the systems and conditions we have put in place for successful implementation.

Like the rest of Jamaica, I look forward to the testimonials of students, parents, teachers and other stakeholders of the empowering effect of this learner-centred curriculum and remain confident that it will contribute to make Jamaica renown.

The Honourable, Senator Ruel Reid, CD

Minister of Education, Youth & Information

MESSAGE



Building a modern society where young people can prosper and achieve their aspirations is paramount on the Ministry of Education, Youth and Information's (MoEYI) agenda. In its bid to advance this agenda the team at the MoEYI has developed the National Standards Curriculum (NSC) on a clear set of values that will permeate learning and become embedded in young people's approach to life. Young people need to be clear about their Jamaican identity. Justice, democracy, tolerance and respect need to be more than mere words; they need to become an essential part of people's lives. Young people's understanding of, and commitment to, sustainable development is critical to the future of Jamaica and of the world. These values that permeate the new curriculum and more importantly, will by its use, be ingrained in the fabric of the Jamaican society.

The development of a new curriculum is a major achievement in the life of any country. It is even more noteworthy because this curriculum embodies the set of knowledge, skills, values and attitudes that our country deems relevant at this particular time. It is intended that these attributes be conveyed to the next generation as a means of cultural continuity in preparation to cope with the future, both nationally and individually.

I am particularly excited about the prospects of the NSC honing key twenty-first century skills such as communication, collaboration, critical thinking and creativity in our youth as they prepare to take on their roles as global citizens. I encourage parents, students, teachers and indeed the community to partner with us as we prepare our young people not just for today, but for the rapidly changing times ahead.

The Honourable, Floyd Green, MP

State Minister in the Ministry of Education, Youth & Information

M E S S A G E



In responding to the challenges confronting education in Jamaica, The Ministry of Education Youth and Information has taken strategic measures to address the need for a national curriculum that is relevant for the 21st century, the dynamics of the Jamaican context and the profile of the learners at the pre-primary, primary and secondary levels. One major output of these strategic actions is the National Standards Curriculum. This curriculum is intended to be one of the means by which the Jamaican child is able to gain access to the kind of education that is based on developmentally-appropriate practice and the supporting systems and conditions that are associated with high quality education.

This curriculum has the potential to inspire and provide challenges in the form of problem situations that all our learners can handle in ways that are developmentally appropriate. It compels us to move beyond the traditional functional perspectives of being literate to a focus on the physical and physiological as well as the ethical, social and spiritual.

I invite all our stakeholders to fully embrace this new curriculum which promises to excite imaginations, raise aspirations and widen horizons. Learners will become critical and creative thinkers with the mindset required for them to be confident and productive Jamaicans who are able to thrive in global settings as they take their place in the world of uninhibited change.

Mr. Dean Roy Bernard

Permanent Secretary, Ministry of Education, Youth & Information

MESSAGE

It was the mandate of the Curriculum Units of the Ministry of Education, Youth and Information to spearhead the crafting of a new curriculum for the nation, in keeping with international standards, global trends in the educational landscape and societal goals and aspirations. The mandate had several facets: to establish clear standards for each grade, thereby establishing a smooth line of progression between Grades 1 and 9; to reduce the scope, complexity and amount of content; to build in generic competencies such as critical thinking across the subjects; to ensure that the curriculum is rooted in Jamaica's heritage and culture; to make the primary curriculum more relevant and more focused on skills development, and to ensure articulation between primary and secondary curricula, especially between Grades 6 and 7. To achieve this, the MoEYI embarked on an extensive process of panel evaluations of the existing curricula, consultation with stakeholders, (re)writing where necessary and external reviews of the end products.

Today, we are indeed proud that, the curriculum development teams have succeeded in crafting a curriculum which has met these expectations. Under the National Standards Curriculum (NSC) focus will be given to project-based and problem-solving learning, with an integration of Science, Technology, Engineering and Mathematics/Science, Technology, Engineering, Arts and Mathematics (STEM/STEAM) methodologies across the system. Learners will benefit from more hands-on experiences which should enhance the overall learning experience and cater to the different kinds of learners in our classroom. In addition, they will be exposed to work-based learning opportunities that will help them become productive citizens of Jamaica and the world at large.

It is anticipated that as school administrators and teachers system-wide implement the National Standards Curriculum that improvements will be evident in the general academic performance, attitude and behaviour of our students.

We anticipate the participation of all our stakeholders in this process as we work together to improve the quality of life and prospects for all the children of Jamaica and to realize our mantra that *every child can, and must, learn.*

Dr. Grace McLean

Chief Education Officer, Ministry of Education, Youth & Information

M E S S A G E



The Ministry of Education Youth and Information (MoEYI) is committed to providing high quality education to all Jamaican children. We have heard the cries from the various sectors of the Jamaican society about the level of preparedness/readiness of our students for life in the 21st century; and we are taking the necessary steps to ensure that our students graduate with marketable skills. The MoEYI has reviewed and redesigned the Grades 1-9 curricula around the principles of Vision 2030 Goal number one; "Jamaicans are empowered to achieve their fullest potential".

The National Standards Curriculum (NSC) will lay the foundation for students by preparing them for working lives that may span a range of occupations, many of which do not currently exist. This has been done by way of designers carefully integrating the theoretical principles of Science, Technology, Engineering and Mathematics/Science, Technology, Engineering, Arts and Mathematics (STEM/STEAM) methodologies into the curricula at all grade levels. The NSC illustrates that in order to make education effective for our 21st century children; we need to change how we teach, and what we teach.

We are satisfied that the curriculum designers and writers have produced a curriculum that is indeed fitting for the 21st century. The NSC was designed to develop students' understandings of subject matter and their ability to apply what is learnt; it fosters their ability to communicate and solve problems collaboratively, think critically and create novel solutions.

The success of our children is dependent on the participation of all stakeholders in the learning process. We encourage you all to be our committed partners in education as the true impact of this curriculum will only be

felt when we have all hands on board. I am indeed proud to be associated with the development and implementation of this curriculum; it will inspire hope in our nation and future generations; kudos to the various teams that contributed to its development.

Mrs Lena Buckle Scott

Deputy Chief Education Officer,

Curriculum and Support Services, Ministry of Education, Youth & Information

MESSAGE



The National Standards Curriculum (NSC) rests on the belief that all learners are endowed with the capabilities, gifts and talents to fulfil their divine purpose. These attributes are to be further enhanced or improved in a nurturing, inspiring and inclusive environment; one that caters to the whole person (soul, spirit and body - spiritual, emotional, social, physical and mental). As learners assume their roles and responsibilities individually and as communities of learning in such an environment, they become critical-reflexive thinkers, creative problem solvers, effective communicators and natural collaborators.

A curriculum design of this nature, calls for transformative change at the societal level (Elkind, 2004)¹ and not just at the school and classroom levels. This is a call for all stakeholders, as users of the curriculum, to adopt a critical -reflective and reflexive stance and join learners in the quest for meaning, purpose and stability as they help to shape the world. By integrating principles from various disciplines and their related methodologies, learners who interact with the curriculum are provided with enriching experiences, opportunities for creative expressions and authentic exploration of problems from a classical standpoint as well as in the context of workplace learning. This is due to the fact that the NSC recognizes the importance of each discipline in the problem solving process and in development.

Assessment as an element of the curriculum becomes primarily a learning process for charting progress through self-corrective measures that are informed by feedback from peers and teacher-facilitator. By providing assessment criteria statements in the curriculum, teachers are encouraged to facilitate learners functioning as self and peer assessors. This approach should see the learner developing self-direction with

the support of mentors and coaches and forming an intrinsic desire to succeed. These attributes prepare them to face high stakes assessment as problems to be confronted with courage, a sense of readiness, insight and creative prowess.

These features of the NSC have the potential to influence learners' profile as Jamaicans who are gratified by an identity of cultural excellence that embodies moral obligations, intellectual rigour, innovativeness, environmental stewardship and productivity. The curriculum echoes the sentiments of our National Anthem, National Song and Pledge and serves as rich and credible source of the values and virtues that are woven together to convey the Jamaican identity. I wish for our school administrators, teachers, students and other stakeholders much success as they work with the document.

Dr Clover Hamilton Flowers

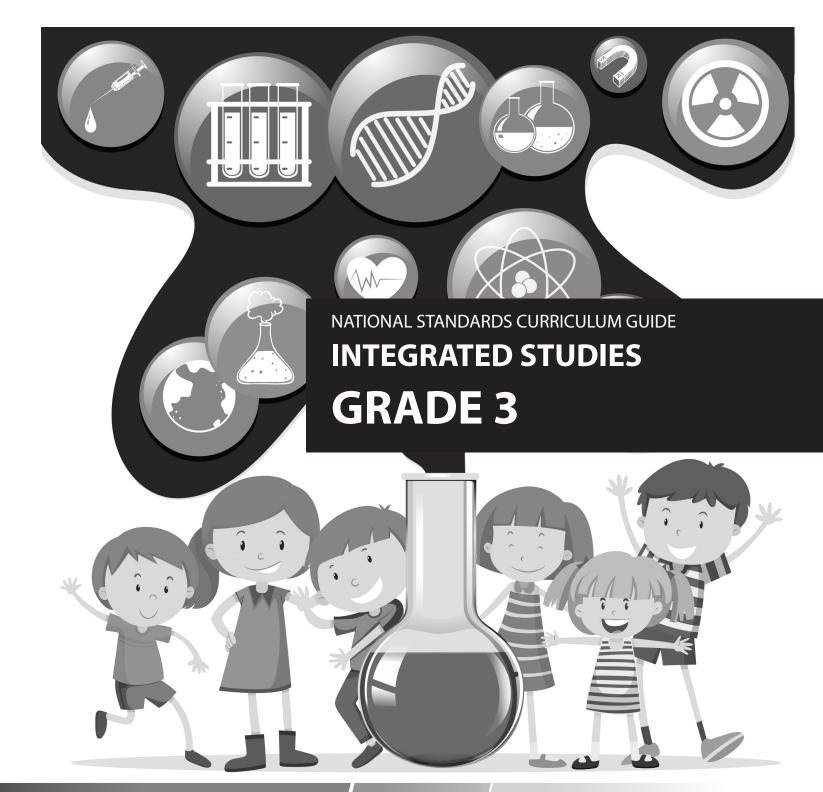
Assistant Chief Education Officer, Core Curriculum Unit, Ministry of Education, Youth & Information

¹ Elkind, D. (2004). The problem with constructivism. The Educational Forum, 68(4), 306–12.

NSC Glossary of Terms

TERMS	DEFINITIONS	
Range of Content	Provides an overview of the concepts, knowledge, skills and attitudes that will be developed in a unit of study.	
About the Unit	Gives a brief overview of the content, skills and the methodologies that are covered in the unit as well as the attitudes to be developed.	
Standards	Statements that explain what all students are expected to know and be able to do in different content area by the end of a course of study e.g. by the end of period spanning grades 4 – 9.	
Attainment Targets	An attainment target is a desired or expected level of performance at the end of a course of work, within a given/specified teaching-learning period. Attainment targets identify the knowledge, skills and understanding which students of different abilities and maturities are expected to have by the end of each Grade. It is the standard that we expect the majority of children to achieve by the end of the grade.	
Benchmarks	Behaviours students are expected to exhibit at different stages of development and age/grade levels.	
Theme/Strands	Unifying idea that recurs throughout a course of study and around which content, concepts and skills are developed.	
Prior Learning	It is what students are expected to already know through learning and experience about a topic or a kind of text.	
Specific Objectives	Specific objectives state what the student is expected to know or understand as a result of the learning experience. The specific objective is usually framed in the areas of the knowledge, skills and attitudes that the students are expected to achieve. Specific objectives tell us what the children will learn or will be taught.	
Suggested Teaching/Learning Activities	A teaching/learning activity is an organised doing of things towards achieving the stated objectives. They are suggested activities that are crafted in a way to be an efficient vehicle which can move the student between what is to be learnt (objective) and what the student is to become (outcome).	
Key Skills	Indicate the important skills that students should develop during the course of a unit. Key skills are aligned to the suggested teaching and learning activities in the unit which are intended to develop the skill to which it is aligned. Included in the key skills are the 21 st century skills such as critical thinking and problem solving, collaboration, communication and ICT.	

Assessment	An assessment is a determination of whether intended results have been achieved. This section of the curriculum speaks to both the product that will be judged as well as the criteria against which it will be judged. It must be noted that this section does not introduce new activities. Instead, it speaks to the judging of the suggested teaching and learning activities. Formal assessment may be conducted with the aid of instruments (e.g. via written test, portfolio) or by requiring students to complete assigned tasks (e.g. performance), and is usually recorded against a predetermined scale of grading. Informal assessment (e.g. via observation or spontaneous student expression) may also reveal important evidence of learning.
Points to Note	This section provides technical information that must be considered in delivering the unit. It may also include information that provides additional explanation of key concepts that may be unfamiliar to the teacher as well as suggestions for infusion within the unit.
Extended Learning	These are opportunities for students to utilise the knowledge and skills they would have acquired in the unit in authentic situations/experiences.
Learning Outcomes	A learning outcome is a demonstration/behavioural evidence that an intended result has been achieved at the end of a course of study. The learning outcome tells us if pupils have understood and grasped what they have been learning.
Links to other Subjects	Suggests opportunities for integration and transfer of learning across and within different subject areas.
Key Vocabulary	This section consists of a number of words/phrases that addresses the skills, topics and content that must be covered in the unit.



PHILOSOPHICAL STATEMENT

The NSC for the Grades 1-3 level (early primary) is designed on child centred principles. The multi-disciplinary approach characterised by themes and related focus questions, serve as contexts for children to explore their environment and solve problems so that they learn about others, themselves and their environment on a whole. Integrated Studies as one of the Exploratory Core learning area, is complemented with two other Exploratory Core areas; Language Arts and Mathematics that allow children to be provided with specific learning experiences to enhance literary and numeracy in addition to other skills, attitudes and values and understandings. The child-centred design is justified as children's curiosity about their world is based on their interest in disciplines. Children do not try to understand disciplines as we represent them with labels or names such as Science, Mathematics, Social Studies etc. Instead, their focus is on the use of their senses to experience the world and to derive meaning from their efforts to satisfy their curiosity. A reward of this natural tendency is the nurturing of the function of the brain, which thrives on making connections. They also benefit from their acquisition of knowledge and a variety of skills that help them to survive within the boundaries of the prevailing/acceptable culture of the society. Children are also better able to experience the interactive and dynamic nature of the world from being able to see the 'big picture'.

Integration at Grades 1-3, is conveyed in multiple ways by the Integrated Studies Curriculum. These include:

- (a) Interdisciplinary Approach using Thematic Web: Problems are presented in the form of themes with overlapping concepts and competencies that allow children to naturally make connections to multiple learning/subject areas without using these as separate units of knowledge as they try to understand their world and satisfy curiosity. The Thematic Webb serves as a means of content organization.
- (b) STEAM as a methodology: Children explore real-life problems that are appropriate for their level of development, by drawing on concepts, principles, processes and dispositions from Science, Engineering Design, the Art Forms, Mathematics and Technology as a problem solving tool.
- (c) Culture and Creative Art as carriers of content: As children engage in dramatic, musical and visualized art to express themselves, they learn how to manage their feelings, their imagination, develop confidence, think analogically and reflectively, and become more intuitive among others. Relevance to the Jamaican culture as conveyed by National Symbols and emblems are encouraged through the opportunities provided for them to be creative in expressing their ideas and feelings and in demonstrating their physical skills.
- (d) Projects in the context of work: The Resource and Technology projects are used to help children handle real life problems with manageable scope. These projects are also used to begin to expose children to positive work habits and work ethics. They also benefit in terms of developing physical skills as projects require the manipulation of tangible tools.

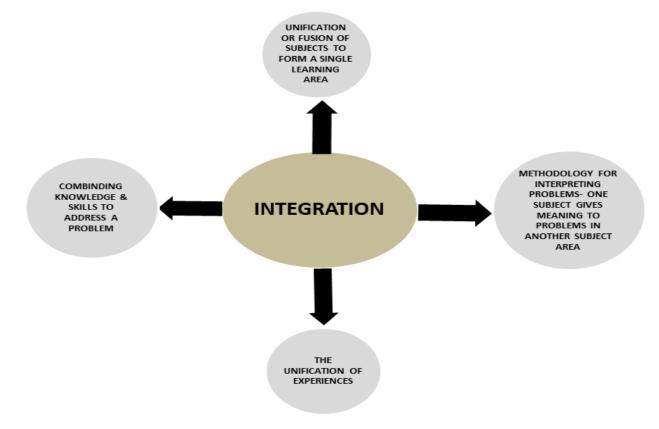


Figure 1 illustrating some typical perspectives of integration

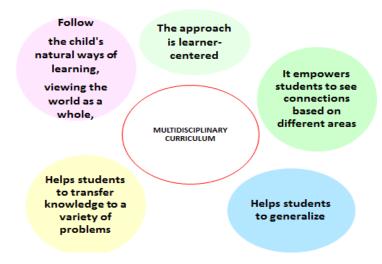


Figure 2 conveying some benefits of the Integrated Studies Curriculum

INTEGRATED STUDIES OVERVIEW GRADE 3

THE INTEGRATED CURRICULUM GRADES 1 TO 3

1. INTRODUCTION

An Integrated Curriculum

An integrated curriculum is an approach that starts with the holistic experience of the child and purposefully draws together knowledge, skills, attitudes and values from within or across subject areas to develop a more powerful understanding of key ideas. It provides an interconnected and interwoven approach in which learning experiences are inextricably linked and become more meaningful for the young learner. However, the design of an integrated curriculum does not abandon the skills and understandings that are specific to the individual key learning areas and these are woven into that integration as clear early learning standards to form an 'underpinning architecture' on which the integrated curriculum is based and on which the curriculum for Grades 4 upwards can be built.

The Method of Integration Underpinning the Grades 1 to 3 Curriculum

The main method of integration utilized in the design of the Jamaican Integrated Curriculum is the Multidisciplinary approach. This includes thematic approaches, intra-disciplinary approaches, fusion and infusion of subjects. This approach has been used to organize the standards from disciplines around agreed themes. Subjects, such as Information, Communication and Technology, Technical & Vocational Education and Civics Standards are infused throughout the curriculum. Mathematics and Language Arts will be taught as discrete subjects within the daily time allocated session 'Windows'. However, teachers will utilize all available opportunities to infuse the concepts that are taught in the discrete Language Arts and Mathematics Programmes whilst they are delivering the integrated curriculum.

OVERVIEW OF INTEGRATED CURRICULUM THEMES GRADES 1 TO 3

	GRADE 1	GRADE 2	GRADE 3	
THEME	ALL ABOUT ME AND MY ENVIRONMENT			TERM
SUB-THEME	M Y S	E L	F	
UNIT 1	WHO AM I?	MY BODY (II)	MY BODY (III)	1
UNIT 2	MY BODY (I)	CARE & SAFETY OF SELF	SATISFYING OTHER NEEDS	
SUB-THEME	MY HOME	MY FAMILY	MY COMMUNITY, THE NATION AND THE WIDER WORLD	
UNIT 1	MY FAMILY	LIVING TOGETHER AS A FAMILY	PROVIDERS OF GOODS AND SERVICES	2
UNIT 2	THINGS IN THE HOME	SATISFYING OUR NEEDS	RELATING TO OTHERS OUTSIDE OF JAMAICA	
UNIT 3			ASPECTS OF JAMAICAN CULTURE	
SUB-THEME	MY SCHOOL	MY COMMUNITY	MY PHYSICAL ENVIRONMENT	
UNIT 1	MYSELF AT SCHOOL	THIS IS MY COMMUNITY	LIVING AND NON-LIVING THINGS IN MY ENVIRONMENT	3
UNIT 2	TOGETHER AT SCHOOL	PLACES OF INTERST IN MY COMMUNITY	CARING FOR MY ENVIRONMENT	
UNIT 3		PLANTS AND ANIMALS IN MY COMMUNITY		

Philosophical Underpinning

The National Standards Curriculum (NSC) takes a constructivist approach which is based on the belief that learning occurs when learners are actively involved in a process of constructing meaning as opposed to passively receiving information (Bruner, 1966; Vygotsky, 1978). Constructivist teaching fosters critical thinking, and creates motivated and independent learners. This was also the basis of the existing curriculum but this curriculum places greater emphasis on generic skills, such as critical thinking, problem solving and independent learning in order to better prepare students for their future in the twenty-first century (Ananiadoui, 2009).

The foundation of a child's early learning must be secure and structured to enable them to formulate the underpinning principles, competencies and values that will ensure that they can continue to develop their knowledge and skills base from Grades 4 and beyond within a curriculum that is both progressive and aligned (Goswamy, 2008). So in addition to the greater focus on generic skills and competences, the NSC ensures that all subjects are well sequenced with clear progression from Grades 1 right through to 9 so that students are prepared adequately for the upper grades of secondary schooling. The clear statements of standard or grade expectation for each subject ensure that all education stakeholders: teachers, students, parents, and employers are clear about the expected level of competence of each student in each subject and grade.

While the former Grades 1 to 3 curriculum took an integrated approach on the basis that children naturally learn about the world as an integrated whole, the revision maintains the integration for the same philosophical reasons but woven within that integration, are clear early learning standards which form an 'underpinning architecture' on which the integrated curriculum is based. This underpinning structure identifies standards and progression in learning and ensures adequate coverage of essential components of the subject curriculum that a child is expected to achieve, which articulate clearly with expectations in the Grade 4 curriculum and beyond.

The overall design of the NSC ensures that the holistic learning needs of children are met from the time they enter school until they complete secondary schooling (Gardner, 1999). The Grades 1 to 3 curriculum has been revised to ensure that the same principles, philosophy and methodology would be applied consistently throughout a child's learning journey.

The Design Of The Jamaican Integrated Curriculum

The team of Core Curriculum Unit (CCU) Officers, Technical and Vocational Unit Officers, the Head of both units, a local early year's consultant recommended by the MoE and other selected resource persons worked with the international team of consultants. Together they collaboratively agreed on the guidelines for the design of the integrated curriculum as follows:

- It will be a multidisciplinary design with an intra-disciplinary and sub-disciplinary approach. Subjects such as Social Studies, Science, and Religious Education would form the core; whilst music, drama, visual art, physical education and ICT would be "the Drivers"
- The Arts to be used as a vehicle to encourage independent thinking, creative and learning skills and holistic learning and for delivering a curriculum most suited to learning in the early years.
- * The integrated curriculum places emphasis on the teaching of higher order critical thinking and learning skills throughout
- Vygotsky's constructivist approach will be used, as throughout the whole curriculum as well as Norman Webb's Depth of Knowledge
- The integrated curriculum will be aligned with the Jamaican National Curriculum Standards with progression evident in each grade
- Themes will be used that are located in the experience of the child and to suit the Jamaican learning context the thematic integrated approach will be based on the same themes as the existing Grades 1 to 3 curriculum
- ❖ ICT and Technical Vocational Education Standards for Grades 1 to 3 will be infused throughout
- The discrete teaching of Language and Maths competences will occur in daily 'windows' for an allocated time on the daily classroom timetable for the teaching of Maths and Language
- ❖ Maths and Language will be integrated wherever practicable and possible within the multidisciplinary design
- Culture will be infused within the integrated curriculum
- Civics will be part of the integrated subject focus
- As far as practicable, the national celebrations of Jamaica will be built into the integrated curriculum such as Jamaica Day and Heroes Day

The Key Differences Between the Former Curriculum and the Revised Jamaican Integrated Curriculum For Grades 1 To 3

The key changes that have been made to the revised Jamaican Integrated Curriculum for Grades 1 to 3 are as follows:

- The integration has been written against the revised Jamaican curriculum standards; this ensures that teachers know what level of knowledge and skills are achieved at the end of each year in order that these build year on year and so that there is a firm base on which Grade 4 builds
- There is a seamless transition for continuing learning after the integration from Grade 3 to Grade 4 with the revised curriculum standards
- Critical thinking and learning skills has been incorporated into the integrated units of work, assisting students to analyse, problem solve, investigate, question assumptions, apply learning and transfer the key skills that they have learnt into any given situation and then into lifelong learning
- ❖ The content of the integration has been revised in keeping with the 21st Century teaching & learning experiences
- The assessment is part of the learning process and enables the teacher to make informed and critical judgements on student progress
- Greater emphasis is placed on building future citizens with a focus on morals, values, principles, attitudes, integrity, heritage
 & culture through the curriculum standards and in the teaching of Religious Education, Civics and Social Studies
- ❖ Technical Vocational Education Standards for Grades 1 to 3 have been infused within the integration
- Consistency of Core Curriculum Unit Officers in the writing of Grades 4 to 6 as well as Grades 1 to 3 has enabled a holistic overview of the entire content and curriculum coverage
- The discrete Maths and Language programmes that are taught within the 'windows' are both encompassed within the integrated document for ease of reference for teachers

The Teacher's Guide

Our aim is that this Teacher's Guide will provide all teachers with a comprehensive collection of exciting, challenging, interesting ideas and suggestions that will enable them to deliver a varied, stimulating and motivational curriculum to their pupils.

The Statutory Curriculum Standards for Grades 1 to 3 can be found in the Curriculum Framework document. This details the Curriculum Standards which should be achieved by students in each grade. The Teacher's Guides have been written against the Statutory Curriculum and all Learning Objectives are directly linked to the Standards.

In this Teacher's Guide, each Grade is divided into separate sections. Within each Grade, the Units have been written against the agreed themes for Grades 1 to 3. The Units have been carefully written and structured to take account of the key cultural and historical days throughout the year such as Jamaica Day and Heroes Day. The integrated planning to include these key dates will make it easier for teachers to teach the lessons for each term.

The Units of work

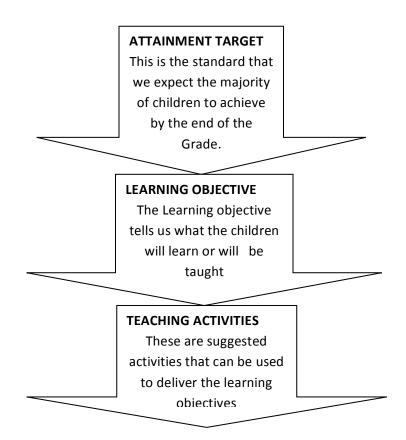
Each Unit has been sub- divided into weekly blocks of work to enable full coverage of the Standards and Learning Objectives which are directly linked to the theme that is being covered for each term. For example, within the theme Who Am I? For Unit 1 Term 1 Grade 1, there are 6 weekly blocks of suggested activities that can be taught. Each Focus Question has been divided into weekly blocks of work within each Unit. However, if teachers do have other creative ideas and suggestions of how the Standards and Learning Objectives can be taught and delivered over the term, then they can include these in the Units of work and modify the weekly blocks of activities accordingly.

Language Arts and Literacy and Mathematics will be taught as discrete subjects every day. An 'Open Window' will be on the daily timetable to teach both these subjects against the programmes that have been designed. However, there are numerous opportunities within each Unit of work to integrate Maths and Language Arts & Literacy within each theme. Ideas and suggestions of how Language Arts, Literacy and Maths can be integrated throughout each theme have been included within the Units in this Teacher's Guide. What is to be taught discretely in the 'Open Window' each term for Language Arts and Literacy and Maths has been included in a separate programme in each Unit of work.

The first page of each unit consists of an overview of the entire learning experience for pupils within the Term. The key skills, resources and vocabulary that are listed will provide teachers with the complete expected coverage and focus on each specific area for the Term. The key

focus for each curriculum area will enable teachers to have an overview of the way in which the integration has been achieved to ensure coverage of a well-balanced, varied, interesting, enjoyable and integrated curriculum.

The following diagram details how the Curriculum Standards will be achieved through the delivery of the Units in this Teacher's Guide and defines each of the main terms used in the document.

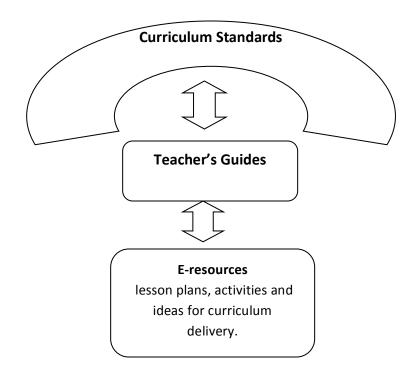


LEARNING OUTCOME

The learning outcome tells us if pupils have understood and grasped what they have been learning

The most important point for teachers to remember is that the Standards or the Statutory Curriculum must be taught and covered in each Grade as specified. This Teacher's Guide provides a structure that covers the teaching of the Statutory Curriculum and it has been compiled by educators who have experience and expertise in early childhood education and understand the developmental needs within the Jamaican context.

The Teacher's Lesson Planning and Curriculum delivery e-resource will be formulated so that all teachers will be able to contribute their individual lesson plans and ideas for delivering the curriculum. This e-resource can then be utilized by all teachers to assist them with implementing the curriculum, as well as to integrate technology in the lessons. The diagram below illustrates the three components of the curriculum.



The Methodology for the Grades 1 to 3 Integrated Curriculum

The curriculum has been specifically designed to suit Jamaica's population, location, resources, community and cultural values. It is based on sound development principles, accepted standards of quality and best practices. Pupils will be able to make clear links for learning through the Integrated Curriculum.

The integrated learning process will promote children's understanding that knowledge across disciplines is inextricably interconnected rather than a series of disparate actions – like real life when we connect learning in simple tasks such as cooking – we are reading recipes for understanding and meaning (Literacy & Language) and we are reliant on the skill of memory recall, experimenting (Science), calculating (Maths),

tasting (senses) social skills (Health and family life) etc. when carrying out the cooking task. The integrated curriculum has been written to ensure that the learning experience is interconnected and that the skills which children learn are transferable.

Civics forms a part of the integrated curriculum. Culture is not taught as a discrete subject in schools, nor does it have a set of standards and attainment targets. The policy that governs Culture In Education, positions culture as an agent of change and thus views it as a critical mechanism for identity formation and positive behaviour as gateways to academic excellence. Thus, the fundamental principle for the use of culture in the curriculum is that it becomes the context, content and methodology by which the curriculum is delivered at all levels across all subject areas and activities. The context element of culture ensures that everything within the curriculum relates to what is appropriate for the Jamaican context in which the Jamaican learner is situated. The content of culture relates to everything that contributes to the students understanding of their uniqueness and the special place of Jamaica in the world. The methodology includes, but is not limited to, the performing arts. It extends to all aspects of the expressive culture that enriches learning experience and extends beyond chalk and talk. Examples are: field trips, fashion shows, art exhibitions, panel discussions, games, storytelling and movies.

In delivering the curriculum, teachers will ensure that it is based on the child's interests as well as the principles of child development and best practices - this will mean that both the teacher and the child enjoy the learning experience and have fun while teaching and learning. Teachers have the opportunity to plan learning creatively for students within the Units of work. They are able to be flexible to cater for the learning development and holistic needs of children through a well-planned, vibrant interlocking curriculum that will ensure children learn and develop physically, emotionally, morally, socially, intellectually and culturally.

An innovative, integrated curriculum will inevitably improve standards of achievement and ultimately increase children's enjoyment and engagement in their learning process. The Integrated Curriculum for Grades 1 to 3 ensures that the holistic needs of pupils are met through the teaching and learning of high level critical thinking skills and competencies which will ensure that students can mature into adults who can problem solve, think critically and hence transfer and adapt their knowledge and skills into different learning situations.

Why the Arts should drive the Curriculum

Recent scientific research has sought to make important connections between the brain and the learning experience. The greatest evidence of this is seen in the brain's response to things we do in the arts, bringing strong arguments about why the arts are fundamental to the activities of the brain. The arts connect each new generation to those who have gone before. They equip the newcomer in his or her own pursuit of the abiding questions: Who am I? What must I do? Where am I going?

The arts are holistic phenomena; they accord with the way the child views his or her world – not in compartments, but as a continuum. They exercise and develop right-brain thinking, so that when the child learns through the arts, he or she acquires an equitable balance between linear and process thought, emerging as a well-balanced, well-coordinated human being, with inventive and problem-solving capabilities.

Children come "wired for learning" from birth; the things they do naturally at play are all natural forms of art. Give them space and freedom, and they will play (sing, dance, draw, and pretend). Auditory, kinaesthetic, verbal and visual engagement takes place naturally. These activities make use of all the senses, and prepare the brain to learn successfully.

Young children are naturally curious, they want to begin to explore their surroundings and environment from the time they are born and discover new things. They learn by inquiring, experimenting, using trial and error processes to come to an understanding of the world around them. In later years, we call these activities and processes 'science' and as a subject it is well-suited to active younger children. Science and process skills of science are an important part of the foundation for the education of all children and we have ensured that the elements of scientific inquiry, investigation and process skills are embedded in this important early stage of a child's learning within the Integrated Curriculum.

This is our vision for each Jamaican learner: a well-balanced, well-coordinated human being, with inventive and problem-solving capabilities. Our ambition is that every child will leave school and be able to enter a vocation that is suited to his/her skills, talents and expertise. To ensure that we fully equip them to achieve this target, Resource and Technology overall knowledge, skills and understanding have been infused throughout this integrated curriculum. Career Awareness, Creativity and Innovation, Exploring Methods and Procedures & Applying solutions have all been included in this early stage of the Jamaican child's learning experience and they will continue to be developed subsequently in the primary and secondary phases.

We hope that all teachers enjoy using this Teacher's Guide and wish them every success in the progress and achievement of their pupils in Grades 1 to 3. All Grades 1 to 3 Teachers will play a crucial role in laying the critical foundation stages of learning for the future citizens of Jamaica. Also, be reminded of the four pillars of education:

- > Learning to live together
- Learning to know
- Learning to do
- Learning to be

2. A GUIDE FOR TEACHERS - HOW TO USE THE GRADES 1 TO 3 INTEGRATED CURRICULUM TEACHER'S GUIDES

Teachers will need to ensure that they:

- Read the entire Unit before starting to plan their integrated lessons for the term. This will give teachers a holistic overview of everything that is to be covered under the theme of the Unit and develop a better understanding of the complete context and content for the learning of their class for the Term.
- Create the learning maps
- Use the 5Es instructional design to plan and write the lesson
- Read the discrete Language Arts and Mathematics programmes for the term and identify opportunities where concepts can be infused and reinforced during the integrated curriculum
- Plan their lessons carefully to ensure that they are able to cover all of the identified curriculum for the term
- Make lessons enjoyable and exciting for children and use other ideas and strategies that they may have to compliment the integrated curriculum
- Plan their weekly timetable to ensure that children have a holistic curriculum and a variety of different activities distributed throughout the week to ensure that they are receiving a broad and balanced curriculum
- Familiarize themselves with the definitions used in the Curriculum documentation. The definitions for the core curriculum language used can be found in the preliminary section of the Grades 1, 2 & 3 Teacher's Guides
- Identify key resources that will enable the delivery of the curriculum
- Identify any items or resources that they will need children to bring to school or that parents can assist with, for example, photographs of themselves for the Unit entitled 'Who Am I?'.

Themes used in Grades 1 to 3

The overall encompassing theme that has been used on which all Units have been positioned is All About Me and My Environment. This overall theme has then been further broken down into sub themes and then each Unit has been written under a specific theme. For example, in Grade 1 the overall encompassing theme is All About Me and My Environment. The Sub Theme for Term 1 is Myself and then there are 2 separate Units with individual themes for Term1 which are Who Am I? and My Body (Part 1).

Almond, R.G., Steinberg, L.S., & Mislevy, R.J. (2003). *A framework for reusing assessment components*. In H. Yanai, A. Okada, K. Shigemasu, Y. Kano, & J.J. Meulman (Eds.), *New developments in psychometrics* (pp. 28-288). Tokyo

Ananiadoui, K., & Claro, M. (2009). 21st century skills and competences for new millennium learners in OECD countries. OECD Education Working Paper, No. 41. doi: 10.1787/218525261154)

Bruner JS (1966) Towards a theory of instruction. Cambridge Mass. Harvard University Press

Foster, M. (2004) Higher Order Thinking Skills in Research Developments, Vol. 11

Gardner, H. (1999). The Disciplined Mind. London:

Goswami, U. (2008). Cognitive Development: The Learning Brain. Psychology Press, Taylor & Francis

Hargreaves, .D (2006) A new shape for learning London SSAT

Mislevy, R.J., Almond, R.G, & Lucas, J.F. A brief introduction to evidence-centred design Princeton NJ

OECD (2003). The PISA 2003 Assessment Framework – Mathematics, Reading, Science and Problem Solving Knowledge and Skills. Paris:

Organisation for Economic Co-operation and Development

Verhoeven, L. (ed) (1994) Functional Literacy. Tilburg

Vygotsky, L. S. (1978) Mind in society: The development of higher psychological processes, Cambridge, MA: Harvard University Press.

Webb, N.L. (2005) *Alignment, depth of knowledge and change*. Wisconsin

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 INTEGRATED STUDIES TERM1 – UNIT1

Prior Learning

Check that students can:

Identify some internal organs of the body

Recall their learning experiences in My Body Part 2 in Grade 2

UNITS OF WORK GRADE 3 TERM 1 UNIT 1 My Body

Focus Question 1: Why are teeth, stomach and lungs important parts of my body?			
Attainment target(s):	Objective(s):		
Science	Identify the different types of teeth		
Explore the attributes/characteristics/features of people and objects in the	 Identify the external parts of a tooth 		
environment in order to classify and make comparisons.	 Distinguish between temporary (primary, 		
	milk, baby) and permanent teeth		
	 Locate the stomach and lungs in the human 		
Begin to understand and apply aspects of the scientific method.	body		
	Describe the appearance/structure of the		
	stomach and lungs – size, shape and colour		
	 Describes changes in the chest as air enters 		
Explore the properties of various materials, selected forces and forms of energy	and leaves the lungs		
through the use of the senses.	 Investigate the functions of the teeth, 		
	stomach and lungs		
	Demonstrate, using simple apparatus, how		
	the lungs work		
	Investigate the elastic nature of the stomach		
Language Arts			
Write well-constructed paragraphs which have linking sentences within and	Relate information about the teeth, stomach		
between them.	and lungs using well-constructed		
Communicate with confidence and competence for different purposes and	paragraphs		
audiences, using SJE and JC appropriately and creatively.			
ICT			
Students use digital tools to design and produce creative multimedia products to			

demonstrate their learning and understanding of basic technology operations.	•	Use ICT tools to create a multimedia presentation on teeth
Visual Art Plan and design Visual Arts expressions	•	Create models of the lungs, stomach and a tooth using a variety of materials
Religious Education Recognise that religion contributes to shaping our identity and guides our understanding of the meaning and purpose of life	•	Relate the religious story of 'Jonah and the Whale' to the elastic nature of the stomach
Drama Explore and create, exercising critical thinking skills, throughout the dramatic process	•	Use drama modes to portray the functions of the teeth, stomach and lungs
Music Create musical compositions exploring varied elements of music Perform varied repertoire of music	•	Create jingle about the teeth, stomach and lungs Use body percussion and instruments to apply the correct rhythm/ beat/ tempo / timing Use appropriate breathing exercises to produce a variety of long, detached and smooth sounds
Mathematics Read and interpret information presented in tables or graphs Use the basic operations with numbers and number patterns	•	Construct simple tables or graphs to record data about the teeth, stomach and lungs

Suggested Teaching and Learning Activities – Focus Question 1: Why are teeth, stomach and lungs important parts of my body?	Key Skills	Assessment
Students will: Using a mirror make observations of their teeth and talk about the location of the different types of teeth Record which of their temporary (milk, baby, primary)teeth are still present. View a chart/video/multimedia presentation on the external parts of a tooth or examine preserved specimens. Identify the	Make observations, Make observation	Different types teeth accurately recorded Crown and root of teeth correctly identified
crown and root of each type of tooth, record any differences and share findings with the class.	Report to class	
Watch video / examine specimens or pictures of intact teeth temporary (primary, milk, baby) and permanent in the upper and lower jaw. In groups make observations about their shape, texture, size, number and position and record information.	Make observations Record information	Differences between temporary and permanent teeth correctly identified
Count the number of each type of teeth in each picture and record information in a table then respond to teacher generated questions about the teeth. Use appropriate ICT drawing tool or draw and colour/paint, and label the crown, root and enamel of the tooth. Present to class correctly labelled drawings. Make non-electronic or electronic journal entries about their findings during the activity.	Label parts of the tooth Draw and colour tooth	Crown, root and enamel correctly labelled and appropriate observations made
Eat samples of own food brought from home to identify the function of each type of tooth. Record observations then discuss, in groups, the chewing process and the functions of each type of tooth (include common names - e.g. front teeth – incisors (biting/cutting), 'eye' teeth – canines (tearing and gripping), and 'Jaw' teeth – molars (crushing/grinding).	Make observations Record and discuss	Types of teeth correctly linked with their role(s) in the chewing process

Suggested Teaching and Learning Activities – Focus Question 1: Why are teeth, stomach and lungs important parts of my body?	Key Skills	Assessment
In groups, use presentation software to design a creative multimedia product/handout showing the types of teeth and their functions. Share digital product/handout with the class, highlighting main ideas about teeth. Complete teacher generated worksheet and crossword puzzle about the teeth.	Design multimedia product	Information in handout relevant and accurate Presentation shows originality and creativity Worksheets and crossword puzzle accurately completed
Sing/create songs about the types and functions of teeth. Select any tune/melody of their choice and use body percussion and classroom instruments to accompany singing. Count and clap steady beats to the song. Keep in time with each other.	Create songs Maintain steady beat	Singing done accurately to rhythm steady beat maintained
From a variety of materials create models of tooth/stomach/ lungs using the most appropriate selections (modelling clay, play dough, etc.) to get the desired effect for model. Write a paragraph using well-constructed sentences and appropriate punctuation marks to describe the models they have created.	Create models Develop paragraphs	Models adequately represents tooth, stomach and lungs Information in paragraphs is relevant and accurate Sentences well-constructed
Discuss the importance of taking care of their teeth. Listen to the instructions of the dentist , if possible take a field trip to the dentist.	Brushing and flossing	Punctuation marks correctly used Brushing and flossing techniques correctly described
Use their bodies to show approximate position of the stomach. Watch video/examine picture/ chart (online or offline) of the stomach. In groups, discuss the functions, location and appearance of the stomach. Drink 2-3 cups of water and then tell its effect on the stomach.	Discuss functions Observe position of stomach	Approximate position of the stomach satisfactorily identified Function, location and appearance of the

Suggested Teaching and Learning Activities – Focus Question 1: Why are teeth, stomach and lungs important	Key Skills	Assessment
In small groups, carry out investigations using balloons to show some functions of the stomach. (E.g. to accommodate food). Record the process and findings in a paragraph. Read the story	Investigate using balloons Observe pictures	stomach correctly identified and adequately discussed Effects of additional water in the stomach
of Jonah and the Fish. View pictures (online or offline) with Jonah in the stomach of the fish. In groups, discuss how Jonah was able to fit in the whale's stomach and present the information	Listen to story Discuss story Record findings	adequately described Investigation accurately recorded
through any creative means. Create jingles about the role of the stomach and present for class critique.	Create jingles	Paragraph appropriately written to reflect procedures and findings Presentations show creativity and
Use their bodies to indicate approximate position of lungs on their bodies. Watch video/examine picture/ chart (online or offline) of the lungs. In groups, discuss the functions, location	Identify position Observe changes Communicate	originality Jingles appropriately reflects the role of the stomach
and appearance. Inhale and exhale large puffs of air. Observe, comment on and record changes in chest during the activity.	findings	Functions, location and appearance, of
Conduct simple investigation using balloons, plastic bottle, straws and elastic bands to demonstrate how the lungs work. Write a paragraph/poem/jingle about the lungs and present it to class.	Conduct investigations Write paragraph /poems/jingle	lungs accurately represented Changes in the chest during breathing appropriately recorded
Conduct breathing exercises to develop techniques for singing and playing – broken (staccato) then smooth sounds - (legato). Create simple melodies incorporating ostinatos (repeated patterns) from sounds produced and perform pieces for the class.	Practice controlled breathing Create melodies	Demonstration of how the lungs work correctly done Paragraphs/poems/jingles correctly reflect the functions of the lungs; Presentations show accuracy and creativity

Suggested Teaching and Learning Activities – Focus Question 1: Why are teeth, stomach and lungs important parts of my body?	Key Skills	Assessment
		Breathing techniques correctly executed melodies accurately produced.
Learning Outcomes Students will be able to:		·
✓ Indicate type and location of teeth and parts of a tooth		
✓ Know the difference between temporary and permanent t	eeth	
✓ Explain the functions of each type of tooth		
✓ Explain the functions of the stomach/lung		
✓ Draw conclusions from experiments about the functions o	f the teeth	

Points to Note:

 A class book about the internal organs of the body will be kept for upcoming weeks

✓ Explain the changes in the chest cavity when inhaling and exhaling
 ✓ Manipulate clay, play dough etc. to create models of teeth and lungs

✓ Work collaboratively to produce multimedia product on how to care for our teeth

✓ Use body percussion and instruments to apply the correct rhythm/ beat/ tempo / timing to jingles created

- Conduct experiments before class to ensure they are workable
- Ensure there is a variety of materials for students to work with when making models
- Teacher should ensure that all students have a chance to use digital tools
- Ostinatos are short rhythmic/melodic patterns that are repeated through a piece of music
- o Teacher can generate crosswords and puzzles
- Wherever activities indicate teeth/stomach/lung, treat each in a separate lesson
- o Encourage students to be creative when designing

Extended Learning

Create a TV or radio ad with a jingle to show how to care for the teeth

Can form an ensemble and perform at a school function

|--|

Check that students can:

Demonstrate the knowledge of the importance of the teeth, stomach and lungs

UNITS OF WORK GRADE 3 TERM 1 UNIT 1

Focus Question 2: Why and how should I care for the different parts of my body?		
 Objective(s): Explain why we need to care for different parts of our bodies Illustrate ways in which we should care for parts of our body Demonstrate ways we care for our teeth Differentiate between healthy and unhealthy habits. Recognize the need to care for oneself through living a healthy life style Use simple sentences to communicate ideas about caring for parts of the body 		
Research religious sayings about the care of the body		
Explain how exercise keeps their bodies healthy		

Drama Explore and create, exercising critical thinking skills throughout the dramatic process Express a range of feelings and emotions through the enactment of dramatic scenarios	Use a drama mode to demonstrate the effects of not taking care of the teeth
Use digital tools to design and produce creative multimedia products to demonstrate their learning and understanding of basic technology operations	Use ICT tools to communicate information by entering text and graphics to create flier/handout
Music Create musical compositions exploring varied elements of music Perform varied repertoire of music for an audience	 Sing or compose songs about caring for the body Use body percussion and instruments to create accompaniment for jingles. Maintain steady beat patterns
Visual Arts Demonstrate the creation of art through the use of tools, themes and materials	Explore a variety of methods, materials, tools and techniques, including digital art in the making of art

Suggested Teaching and Learning Activities – Focus Question 2	Key Skills	Assessment
Why and how should I care for the different parts of my body?		
Students will:		Respond to questions
Sing the song 'My Head, My Shoulders, My Knees, My Toes'. Discuss and	Discuss information	accurately
answer questions about why and how to care for the parts of the body	Write note	Activities correctly
mentioned in the song. Write a 'thank you' note to the Creator, about	List habits	identified as healthy or
the parts of the body and present in the form of dub poetry. Talk about	Share information	unhealthy
healthy and unhealthy habits. List six unhealthy things done the previous	Discuss care of teeth	Letter satisfactorily
day /week ,discuss and identify ways to correct them. Share information	Write letter	constructed
with the class		

Suggested Teaching and Learning Activities – Focus Question 2	Key Skills	Assessment
Why and how should I care for the different parts of my body?		
Discuss the care of the body (hygiene, diet, exercise, rest). Create tableaux depicting persons caring for the body. Construct and print a class letter to be sent to the nearest Health Centre requesting a resource person to speak about caring for themselves and seek permission to record the presentation. Record the presentations made by the resource person and playback for class discussion. In groups, use appropriate digital tool, design a poster/flier/hand out that discourages the eating of Junk food and encourages the eating of healthy foods. Share with the class then pin on the Bulletin Board/ upload to the class page	Record presentation Design poster/flier Communicate information Discuss healthy habits Sing to rhythm	Models satisfactorily constructed Posters creatively designed with accurate information information correctly entered n poster/flier/hand out
Use previously created models to show how to care for the teeth. Talk about the healthy habits that must be practised. Sing the song 'Brush your teeth' to any popular tune and use body percussion and classroom instruments to accompany singing Brush your teeth, Brush your teeth Give them all a treat up and down and all around, to keep them clean and sheen In the morning and the night, clean them twice a day up and down and all around keep cavities away. Work in three (3)/ five(5) groups. Create jingles/songs about the	Keep steady beat Listen to each other	Jingles/songs
Work in three (3)/ five(5) groups. Create jingles/songs about the different parts of the body. Take turns to perform jingles/song, while one group maintains a steady beat and the other creates a different rhythmic pattern. As a class, keep in time with each other	Compose and perform jingls/songs	satisfactorily created Rhythmic patterns synchronised

Suggested Teaching and Learning Activities – Focus Question 2 Why and how should I care for the different parts of my body?	Key Skills	Assessment
In role as dentist/dental hygienist/dental technician state what he/she does at the clinic. Use electronic device to capture the presentation and playback for class discussion.	Create presentation Record presentation Dramatize roles	Digital presentation properly developed Information accurately presented
		role of dental personnel correctly depicted
Do exercise/physical activity such as: run on the spot for 30 seconds then bend and touch their toes ten times. Then touch their toes, hip, shoulder, stretch arm above head ten times. Talk about how the body responds to these activities [sweating, increased breathing, increased pulse, tiredness] and how the body benefits from these activities. Examine multi-media materials including newspaper or magazine clippings of athletes and other persons engaged in exercise activities, then discuss and record in tabular form, advantages/disadvantages of exercising.	Create tables Discuss benefits of exercise Record in tables	Advantages and disadvantages of exercising accurately recorded
Pretend to be someone with a problem relating to the teeth, stomach or lungs. Use an art form e.g. short poem, song, mime, dance to convey: What the problem is. How it could have been prevented (healthy eating / diet). How it can be remedied. Document information in any creative way and share with e-pals.	Create artistic pieces Document information electronically	Problem, its prevention and remedy adequately portrayed in artistic piece
Work in small groups (with teacher's assistance), research and then prepare a set of simple sayings from different religions, concerning how we need to keep our bodies healthy. Make a decorated sticker for each saying (identifying source), and display on personal possessions or in	Research sayings Compose songs/poems	Religious sayings adequately represented in poems/songs

Suggested Teaching and Learning Activities – Focus Question 2 Why and how should I care for the different parts of my body?	Key Skills	Assessment
classroom. Compose songs/poems about the saying. Practise the use of		
long and short sounds when singing		
Design (individually or in groups) a board game (e.g. 'snakes and ladders' with 'forward' move for positive responses and 'backward' move for negative responses), based on behaviours/practices that show caring for the body. In groups discuss materials to be used and evaluate ways to improve their design. Make a set of 'caring for my body' cards, depicting	Design game Make cards	Games accurately portray healthy and unhealthy behaviour/practices
negative and positive behaviour.	Compile portfolio	Porfolio appropriately compiled
Compile a portfolio using pictures of items that are used to care for the	Create prototype of items	Items created show
body. Use discarded materials to make these items.		correct representation.

- ✓ Recognize habits that have healthy and unhealthy effects
- ✓ Appreciate how and why we need to care for different parts of our bodies
- ✓ Recognize the effects of exercise on the body
- ✓ Identify long and short sounds in songs and use their voices effectively to make each type of sound
- ✓ Use long and short sounds to create a variety of movement patterns
- ✓ Combine graphics and texts to enhance design
- ✓ State advantages and disadvantages of exercising
- ✓ Create jingles/songs about specific parts of the body
- ✓ Make decorated stickers of religious sayings.

Points to Note	Extended Learning
Ensure that resources are prepared in advance of the lesson e.g.	Interview a family/community member to ascertain the methods
Video/digital presentations	used in the past to care for their bodies; then make a tabular
	comparison to how it is done now.

Check that students can:

Explain how to care for different parts of their bodies

UNITS OF WORK GRADE 3 TERM 1 UNIT 1

Focus Question 3: How does food help to make my body healthy?		
Attainment Target(s): Science Explore some/selected attributes of people and objects in the environment in order to classify and make comparisons.	 Objective(s): Identify foods according to their groups and nutrients Explain ways in which foods help to keep us healthy Identify some problems which result from not eating a balanced diet. Identify the key ways in which food can keep our bodies healthy Identify habits that have healthy and unhealthy effects/consequences 	
Language Arts Apply relevant decoding skills to decode words from key vocabulary	Use adjectives correctly when creating well-constructed sentences and paragraphs	
Mathematics Use the correct units, tools and attributes to estimate, compare and carry out the processes of measurement to given degree of accuracy.	Identify units of measure for items bought or sold	
Physical Education Develop the understanding and skills that support healthy, safe, and active individuals	Recognise the need for food and fluid to support physical activity	
Visual Arts Demonstrate the creation of art through the use of tools, themes and materials	Explore a variety of methods, materials, tools and techniques, including digital art in the making of art	
Drama Explore and create, exercising critical thinking skills throughout	Use various drama modes to demonstrate how food makes our	

the dramatic process.	bodies healthy		
Use technology to communicate ideas and information and work collaboratively to support individual needs and contribute to the learning of others Use appropriate digital tools to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions. Recognise human, social, ethical cultural and legal issues and implications surrounding the use of technology and practice	 Use digital device to communicate information on food nutrients, balanced diet, obesity and rickets Use digital tools to gather information on food nutrients, balanced diet, obesity and rickets 		
online safety and ethical behaviour Music Create musical compositions exploring varied elements of music	Create jingles representing the importance of healthy foods		
Resource &Technology Use simple materials, tools and equipment to develop skills in cutting, assembling and decorating	 Explore ways of preparing food and explain hygienic practices to be observed in the preparation 		
Religious Education Display an appreciation of some of the beliefs, practices and expressions of persons from different religious faiths	 Investigate reasons given for food-related practices among religious groups Describe some dietary customs which conform to guidelines for good health rooted in religious practices 		
Suggested Teaching and Learning Activities – Focus Question 3 How does food help to make my body healthy?	Key Skills	Assessment	
Students will:			
Collect and examine pictures of foods and place these into the food groups: - staples, legumes, fruits and vegetables, fats and oils, and food from animals. Construct a table to record the food groups and the examples and write short sentences stating how	Observe pictures Categorize foods Construct table Communicate information	Food samples correctly categorized into food groups Statements accurately written on the role of foods	

the foods in each group contribute to good health (food for 'go' - energy; 'grow' - building and maintaining the body; 'glow'-regulating body processes). Use the cut out pictures to make a collage about healthy foods. Sing songs with varied elements about the food groups using appropriate techniques.	Create collage Sing with accuracy	Pictures in collage appropriately depict healthy foods
Create a digital story/role-play to show how food helps to keep the body healthy. Record drama piece using a recording device and playback for class discussion.	Create digital story Record drama piece	Digital story/role play correctly reflects how food helps to keep the body healthy
In small groups, research food nutrients and balanced diet using online/offline sources. Make a journal entry showing a plate with drawings depicting a balanced diet. Use vox pop to share the information orally with the rest of the class.	Collaborate with each other Research food nutrients and balanced diet Write journal entries	Information on food nutrients and balanced diet accurately presented Illustration on plate correctly reflects a balanced diet
Plan a field trip to the market to observe various foods on a preprepared list. State the units of measure suitable for selected items in the market and record the units in a variety of ways. Purchase a few food items from the list especially fruits and vegetables. Observe food colour and texture. Identify which foods are usually eaten cooked and which are usually uncooked. Use image capturing devices to record/capture images of the field trip and foods. Compile images and place on class page/notice/bulletin board. Be guided by teacher in the preparation of a simple dish, e.g.	Make observations Identify foods Record images Differentiate between foods Sort and Classify foods Collaborate Cooperate with classmates Cut out pictures	Units of measure correctly identified Foods eaten cooked and uncooked correctly identified Dishes include two or more food groups Proper bygiene demonstrated in the
Fruit salad, or a simple meal, e.g. Cheese sandwich. Demonstrate	Make observations	Proper hygiene demonstrated in the preparation of meals

proper hand washing, ensure ingredients, utensils and working Cleanliness properly practiced throughout the preparation of the areas are clean. meal Final product creatively presented Examine pictures/video tapes/other multi-media materials of Paragraphs well-constructed malnourished children/adults and make observations of shape Collaborate and Effects of lack/excessive intake of and size of parts of the body, condition and colour of skin and food correctly identified Communicate hair. Discuss the effects of lack/excessive intake of food from Art piece depicting malnourished particular food groups. Write a descriptive paragraph or create Write descriptive individual well designed an art work depicting someone who has had either too much, or paragraph too little food from a particular food group. Create art piece Run on the spot for 30 seconds, and then do some jumping jacks. Talk about how they feel (sweaty, thirsty) and how the effects can be remedied. Common religious dietary practices View video(s) online /offline sources in which persons from accurately identified and explained Christian and Jewish religious groups explain/describe some of Record information Menu card contains foods their common dietary religious practices, giving simple Create menu card appropriate for religious groups explanations for the reasons for these practices. Record information in their class journal. In groups, prepare a menu card for each of the religious groups. Share menus with the class giving reasons for the choices made. Bar graph accurately presents data Collect data Conduct a survey to find out the types of food consumed at Construct graphs on foods consumed by class school each day by students in their class. Use information Rhythm and pitch in performance of Analyse data collected to construct a bar graph. Discuss the findings and the **Draw conclusions** jingles appropriately promote nutritive value of each food identified and state how it helps in Create jingle healthy eating habits making the body healthy. Draw conclusions about the nutritive rhythm and pitch value of the foods eaten. Create a jingle encouraging students at school to eat healthy foods.

Discuss the types of food eaten at different times of the day.	Estimate cost	Menu appropriately developed	
Then develop a menu for a particular time of day. Estimate then	Calculate cost	Cost of ingredients correctly	
calculate the cost of the ingredients for the meal(s) menu.		calculated	

- ✓ Name the food groups and state ways in which food can keep our bodies healthy
- ✓ Identify religious dietary laws that give guidance on how to keep our bodies healthy
- ✓ Appreciate that the food choices that we make impact on our health and growth
- ✓ Conduct survey and record information accurately
- ✓ Construct bar graph to present information about nutrition
- ✓ Effectively communicate the results of their research findings and analysis in an oral presentation
- ✓ Demonstrate understanding that all the foods we eat contain nutrients that our bodies need to make us healthy
- ✓ Calcualte the cost of the items for a meal/menu
- ✓ Adhere to proper hygiene while preparing a meal

Points to Note Extended Learning	
 Ensure that meals incorporate at least two groups, one of 	Examine restaurant menu cards
which must be from the staples food group	Find out what is the composition of a three couse meal

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 INTEGRATED STUDIES TERM1 - UNIT2

UNITS OF WORK GRADE 3 TERM 1 UNIT 2 Satisfying Other Needs

Prior Learning

Check that students can:

Explain some of the ways in which having a good education helps in satisfying needs.

Attainment Target(s):	Objective(s):
Mathematics Explore paths, and/or shapes in the environment and relate basic mathematical shapes to everyday life.	Identify the line of symmetry in objects and shapes
Religious Education	
Recognize that religion contributes to shaping our identity and guides our understanding of the meaning and purpose of life	 Explore how religion plays a key role in helping others and providing for their needs
	 Recognize that all persons, regardless of nationality, ethnic background, religious affiliation etc. have the same desire of fulfilment of the basic needs and other needs.
Drama Express a range of feelings and emotions through the enactment of dramatic scenarios (Drama)	Use drama modes to differentiate between basic and other needs
Visual Art Explore a variety of methods, materials, tools and techniques including digital art in the making of art	Use drawing to depict aspects of a song or poem relating to basic needs
Social Studies Develop an understanding of the interdependent relationship between man and his environment	 Distinguish between basic needs and other needs Investigate how persons satisfy basic and other needs
Physical Education Develop an understanding of how our bodies move, why we move our bodies in particular ways and what happens to our bodies when they move	Produce creative pieces in response to stimuli in or outside the classroom
ICT	Communicate information about needs using Word

Use technology to communicate ideas and information and work collaboratively to support individual needs and contribute to the learning of others	processing software to compose sentences
Language Arts Write well-constructed paragraphs which have linking sentences within and between them	Identify and use appropriately adjectives and adverbs when reading a variety of literature and composing simple sentences

Suggested Teaching and Learning Activities – Focus Question 1. What is the difference between basic needs and other needs?	Key Skills	Assessment
Students will:		
As a class, discuss the difference between needs and wants. Talk freely about needs then categorise identified needs into basic needs and other needs. Compose an email or write a letter to their parents/teachers expressing their understanding of basic needs and other needs.	Communicate ideas Compose emails Categorise wants and needs	Difference between needs and wants correctly identified Letters and emails accurately composed
Take a tour of the school yard, identify things in the environment that they consider useful in satisfying basic and other needs. Where possible illustrate these things. Create a flier about how the environment satisfies our needs. Write a well-constructed paragraph about each item mentioned and place it beside its corresponding illustration in the flier.	Make Observation Classify objects/things Write paragraphs Design flier	Flier displays accurate information about satisfying needs Paragraphs well-constructed
Use blank sheets of paper and fold them to create origami of things useful in satisfying basic and other needs Identify the shapes from the origami and highlight the lines of symmetry seen in the objects created. Place designs in a portfolio.	Make origami Make justifications Create portfolios	Basic and other needs satisfactorily represented in the origami Lines of symmetry accurately identified
Examine and discuss pictures from a variety of online/offline sources that portray other needs that people have. (Needs may include giving and receiving love and forgiveness, trusting others and being trusted, accepting others and being accepted, giving and receiving comfort, worshipping, keeping safe). Write a paragraph about the needs identified and how they are being/can be addressed. Write or use	Write paragraphs Communicate ideas Make observation Create paragraph	Paragraphs well- constructed Needs identified and appropriately addressed Sentences composed with correct use of adjectives and adverbs Presentations accurately display

appropriate Word Processing software to compose sentences other needs expressing their needs. Using a teacher selected topic sentence; choose words from a word bank/wall on needs. Use these words to develop a paragraph including sentences about basic and other needs. Present and read their paragraphs identifying adjectives and adverbs used. Express themselves creatively (e.g. in song, dance, painting, poem, Perform drama piece Drama piece correctly depicts the story, picture collage) in a portrayal of other needs (e.g. friendship, Evaluate needs identified from story safety, love). Perform or display the piece for the class. Plan and Drawings satisfactorily depicts Collaborate dramatize biblical stories that portray needs eg. the story of Esau and specified needs express creatively Jacob. Discuss the needs that were portrayed and evaluate the characters actions. Make a journal entry telling what they would like a particular family create journal entry member to do to fill a need they have. Make a drawing to depict the make drawing satisfaction of this need. Examples of needs the Creator Give examples of references from sacred texts of some of the needs Classify needs satisfies correctly identified that the creator fulfills. Classify these needs into two groups-basic Needs correctly classified into basic Role play needs and other needs. needs and other needs Discuss promises made in the Bible and other sacred texts about Role play appropriately depicts how satisfying our needs. For example: my God will meet all your needs the conflict was resolved according to the riches of his glory in Christ Jesus (Phil 4:19). Role play someone who was in doubt about a promise and show how the conflict was resolved. Include the use of thought tracking and tableau Create movements in in the presentation. response to stimuli Movement sequences and patterns Transfer files between Create and perform movement sequences to retell any story of their appropriately convey needs and devices choice which depicts the main character's needs and wants as Record presentation wants

critique performance

experienced in the story. Record the performances using any digital

tool of their choice and use presentation software to present the recorded information in a creative way. Critique performances viewed to ascertain if they depicted the characters needs and wants.		
Create a sound scape of environmental sounds and use it to set the mood/tone for a story/ drama which will be done to highlight their understanding of how basic and other needs are satisfied. Use found materials to create a backdrop to be used in the presentation of the drama.	Create sound scape Make portfolios	Story/ drama satisfactorily highlights how basic and other needs are met

By the end of the unit students should be able to:

- ✓ Recognise the difference between needs and wants
- ✓ Recognise how religions play a key role in helping others to provide for their needs
- ✓ Identify pictures displaying basic and other needs
- ✓ Use new words and compose sentences relating to basic needs
- ✓ Communicate safely with parents and teachers through email
- ✓ Create a movement sequence utilizing a combination of patterns
- ✓ Identify and list a range of equipment and apparatus used for physical activities.
- ✓ Observe rules and regulations which govern behaviour in the playing field

✓ Identify lines of symmetry	
Points to Note:	Extended Learning
 Teacher should ensure that if technology is available it is accessible to each student Teacher should point out that the creator satisfies the needs of the created. Ensure that the students understand how thought tracking and tableaux are used. 	Create a web/tree to depict basic and other needs

Check that students can:

Distinguish between basic needs and other needs

Focus Question 2: How do we satisfy other needs?			
Attainment Target(s):	Objective(s):		
Language Arts Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively	Share their own experiences in which friends/other persons/ organizations, helped them in satisfying needs		
Religious Education Recognize that religion contributes to shaping our identity and guides our understanding of the meaning and purpose of life	 Relate how religions play a key role in satisfying other needs Explain the meaning of morals in sacred and other stories Recognise the importance of moral values in satisfying other needs 		
Drama Explore and create, exercising critical thinking skills throughout the dramatic process Express a range of feelings and emotions through the enactment of dramatic scenarios Visual Arts Explore a variety of methods, materials, tools and techniques, including digital art in the making of art	 Evaluate the actions of characters in a story in satisfying other needs Use various creative expressions to show how needs may be satisfied Use a variety of materials and methods to create art pieces about the satisfaction of other needs 		
Social Studies Develop an understanding of the interdependent relationship between man and his environment	 Recognise the role of key agencies in satisfying our needs 		

Know and value the contributions of communities and institutions in fostering national, regional and international integration		
Use appropriate digital tools to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions. Recognise human, social, ethical cultural and legal issues and implications surrounding the use of technology and practice online safety and ethical behaviour	 use digital tools to develop a database of organizations with their logos and emergency numbers Cite online sources correctly 	
Music Create musical compositions exploring varied elements of music Perform varied repertoire of music for an audience	Express themselves creatively in song to indicate the importance of satisfying other needs.	
Physical Education Develop an understanding about how our bodies move, why we move our bodies in particular ways, and what happens to our bodies when they move	Create movement sequences from recorded music	
Suggested Teaching and Learning Activities – Focus Question 2: How do we satisfy other needs?	Key Skills	Assessment
Students will: Relate stories from their own experiences which friends/organizations/ other persons assisted them in satisfying needs. Write a letter thanking the friend/organization/other persons for the help rendered.	Relate stories Write letter	Letter correctly constructed
Use online/offline sources to collect information on groups or organizations that offer help. Create an information booklet of these agencies and persons include logos, addresses and telephone numbers which they can access in cases of emergency. Note the exact type of assistance which the agency/person can respond to. E.g. fire, flood, sudden illness, getting lost etc.	Research information Collect data Create booklet	Completed booklet correctly documents details on organisations
Invite to the class resource persons from agencies to talk about the role they (agencies) play in satisfying needs. Write an advertisement for the organization with a jingle to capture the attention of the audience about the role of the organization.	create jingle write in journals	Creativity of advertisement with jingle appropriately reflects role of organization

With teacher's assistance, post advertisement on class web page. Write in Journals, a short report on the speech given by the representative from the Agency/Organisation/Department.	Write advertisement	Journal entries appropriately made Sentence correctly constructed
As a whole group, share ideas as to how religion plays a key role in satisfying other needs. Listen to/read sacred and other stories that relate to needs e.g. the good Samaritan/Cinderella. Identify the need and how they were satisfied. State the importance of holding moral values when satisfying these needs. Create a collage to illustrate part of the story.	Listen to stories Read stories Create collage	Collage appropriately illustrates section of story selected
Work in groups of 4-6 and using a known tune, produce simple songs from rhyme/jingles to depict how other needs are satisfied. Perform their song for the class.	Compose songs Perform songs	Song/jingle appropriately produced
Identify and perform cultural songs that tell about satisfying other needs. (Colon Man, under de coconut tree, Jane and Louisa, Dis long time gal, Brown girl in de ring. Identify the needs expressed and say how the needs are satisfied.	Perform songs	Song appropriately depicts satisfying other needs

- ✓ Identify ways in which our other needs may be satisfied
- ✓ Use a creative expression to show how other needs may be satisfied
- ✓ Create a picture collage to illustrate their own experiences in which friends/other persons/ organizations, helped them in satisfying other needs.
- ✓ Write a report in their journals
- ✓ Produce songs and jingles depicting how other needs are met.
- ✓ Discuss the needs mentioned in the song they had listened to
- \checkmark Compile an information booklet of agencies that help to satisfy other needs

Points to Note

- o Teacher should ensure that contact is made with resource person/s
- o Ensure that appropriate technology is available for class use
- o Ensure students cite online sources correctly

Extended Learning

Write in their journals poems, verse and songs about ways in which they could love, respect, and forgive their friends Research customs associated with sports in Jamaica

Attainment Target(s):	Objective(s):		
Language Arts Use and adopt a range of sentence structures according to context, distinguishing between JE and JC Write sentences which are grammatically accurate and correctly punctuated, using SJE and JC appropriately Use a range of punctuation correctly	Develop simple sentences stating how other needs are satisfied		
Religious Education			
Recognize that religion contributes to an understanding of human needs and other needs	• Explain specific ways in which people satisfy their need for love, trust, worship, friendship, etc.		
Drama	Demonstrate ways by which individuals are dependent on		
Express a range of feelings and emotions through the enactment of dramatic scenarios	each other especially during life threatening situations		
Social Studies	Explore the expressed attributes of people and objects in		
Develop an understanding of the interdependent relationship	order to satisfy other needs		
between man and his environment	 Explain the positive and negative ways in satisfying other needs 		
Music	Use call and response techniques to create simple musical		
Create musical compositions exploring various elements of music	compositions about satisfying other needs		
ICT	Use appropriate presentation software to create and		
 Use technology to design and produce multimedia products to 	record presentation		
demonstrate their creative thinking			
Physical Education	Use movement skills – locomotor, non-locomotor,		
Explore simple locomotor, non-locomotor actions pathways and levels	manipulation of equipment, space, and qualities of		
with basic control and coordination	movement, to communicate ideas and feelings		

Suggested Teaching and Learning Activities – Focus Question 3: How does satisfying other needs make a difference to life?	Key Skills	Assessment
Students will:		
Identify organisations on which individuals can depend in order to cope with life-threatening situations. List the names of these organisations under the headings of Governmental/Non-Governmental. Discuss the role each organisation plays in satisfying a particular need that has made a difference to life. Relate experiences about life-threatening situations and how they or others were helped by any of these organizations. Use ICT tools, to voice record their experiences and save for playback.	Categorise organisation Discuss roles Relate experiences Record experiences	Organizations correctly categorised Content/information correctly relayed with clarity
Use tableau/thought tracking to depict situations in which the needs of love, trust, respect and friendship were met. Use digital tool to record drama presentation and playback for class discussion. Create a lyrical composition informing the class of how satisfying other needs makes a difference to life. Use the call and response technique, clapping of hands and stomping of feet to accompany the composition.	Dramatize situations Discuss ideas Create rhythmic patterns	Needs met accurately presented Rhythmic patterns appropriately created Performance of composition appropriately executed
Read sacred stories about how satisfying other needs made a difference in people's lives e.g the Biblical account of the man at Gate Beautiful. Perform movement sequence to demonstrate how the reaction of the character/s involved in the meeting of these needs made a difference to their lives. Create various art pieces that express and convey these messages about how satisfying other needs made a difference to people's lives.	Read stories Create art pieces Perform movement sequence	

Work in groups to discuss how individuals depend on each other
during crises/life threatening situation such as fire, accident,
crossing a flooded river, lightning, water lock off in a nearby
community. Use drama modes to depict their group
presentations.

Conduct a survey to identify a need within their community that needs addressing. Plan a community based project to address the need. Strategize a way of solving the problem to make a significant difference to the lives of the people in that community. Create a display highlighting the plan in its entirety.

Collaborate
Dramatize presentation

Conduct survey
Strategize to solve
problems
Create display

Scenarios correctly reflect interdependence
Display satisfactorily highlights the need and plan to resolve it

Learning Outcomes

- ✓ Identify organisations on which individuals can depend to make a difference to life
- ✓ Dramatize various scenes effectively conveying the intended message
- ✓ Recognise the need to work together to address needs
- ✓ Identify and explain the positive and negative ways in satisfying others needs
- ✓ Recognise how art can be used to express emotions and feelings
- √ Recognise that some life-threatening situations can be alleviated by planning and cooperation

Points to Note:

- Teacher could use a telephone directory to aid in the process of identifying non-governmental and governmental organizations that assist in times of crisis
- Teacher should make available appropriate digital devices for recording presentations
- Teacher should seek permission and make all necessary arrangements for the execution of class project

Extended Learning

Do further research on any Agency or group that helps in times of crises. Use word processing software to type report and share with the class.

Class Project: Allow students to identify one person in the community that impacted their life. Students will create a story with illustrations representing ways in which this person made a difference. Use a publishing software/drawing books to publish the story. Share with class.

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 INTEGRATED STUDIES TERM2 – UNIT1

UNITS OF WORK GRADE 3 TERM 2 UNIT 1

Providers of Goods and Services

Prior Learning

Check that students can:

• Identify workers in the community

Attainment Target(s):	Objective(s):	
Social Studies Develop an understanding of the interdependent relationship between man and his environment	 Classify different workers in the community Classify services as essential and non-essential Differentiate between goods and services provided 	
Mathematics Collect, organize and interpret information in practical situations and use simple probability language	Read and interpret information given in a table or on a picture graph/bar chart	
Religious Education Demonstrate an awareness of some of the ways in which religion influences changes in the lifestyle within society	 Discuss the types of services provided by religious institutions within the community and the impact of these on the community 	
Visual Art Demonstrate the creation of art through the use of tools themes and materials	 Explore a variety of methods, materials, tools and techniques including digital art in the making of art Create/design 2D and 3D models of goods provided in the community 	
Drama Appreciate and critique dramatic works Explore a range of feelings and emotions through the enactment of dramatic scenarios	 Perform creative pieces in response to stimuli given by the teacher about the community 	
Language Arts Write sentences which are grammatically accurate and correctly punctuated, using SJE and JC appropriately	Create sentences using correct grammatical structure which tells of the importance of services	
Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including, layout, sections and paragraphs	Create well constructed letters	

Attainment Target(s):	Obj	Objective(s):	
Use technology to communicate ideas and information and work collaboratively to support individual needs and contribute to the learning of others		Use ICT tools to communicate information about different category of workers	
Use digital tools to design and produce create multimedia products to demonstrate their learning and understanding of basic technology operations	•	Use digital devices appro	opriately to prepare posters
Music Listen and appraise music to develop an understanding of musical elements	•	Identify elements of mu	sic heard in a varied number of sounds
Create musical compositions exploring varied elements of music	 Create simple lyrical compositions about the providers of goods and services 		
Perform varied repertoire of music for an audience	 Create and perform songs and jingles which give information about providers of goods and services 		
Physical Education Explore basic movement skills and concepts in simple group activities		·	nent sequences incorporating basic skills to g their occupational activities
Suggested Teaching and Learning Activities – Focus Question 1 Who are the providers of goods and services that we need?		Key Skills	Assessment Criteria
Students will:			
Listen to teacher- in- role as storyteller, tell story about types of workers in a community and the different goods or services they provide. Discuss the providers of goods and services mentioned in the story and the types of goods or services provided.		Listen to storyteller Discuss ideas	Workers and goods accurately identified from the story.
Make a table of the workers in their school and community and the various goods and/services they provide. Create a 2 dimensional/ 3 dimensional composition using play-dough to depicting worker(s) engaged in their		Classify workers Create models Construct table	Models appropriately display the workers engaged in their occupational activity

	ed Teaching and Learning Activities – Focus Question 1 the providers of goods and services that we need?	Key Skills	Assessment Criteria
Use a tal i) ii) Group th table in t reasons law, e.g.	ble to categorize these things into: those provided within the community (including those done by workers coming into the community), those that are accessed outside the community e.g. Airport, hotel services, etc. and name the different workers who provide them. nings identified into goods and services. Group the workers from the the previous activity (Activity 1), into different categories, giving for each grouping. Discuss the terms 'essential services' as defined by Emergency services, and other services'. Group workers as providers sential services, b) Other services c) goods.		Workers accurately categorized as providers of essential services, other services and goods. Sentences accurately constructed to reflect the importance of services provided Type of community accurately identified
	ell-constructed sentences on the importance of the services provided vorkers in the essential services.	Write sentences	
member different informat and repr a rural/u categoric	n information table to be used to collect data from community rs. Plan a field trip with their teacher to identify and interview to categories of workers and their functions. Working in groups, use tion gathered determine the type of community in which they live resent on a bar graph e.g. (farming, fishing). Email grade 3 students in urban community to share and compare and contrast the different es of workers found there. Create a digital story to present to the resentation—should include the different categories of workers).	Create table plan field trip communicate work in groups Create digital stories	Categories of workers appropriately captured in the digital story
religious which th commun	It research to determine what types of services religious institutions/ is leaders/ faiths provide in their community. Identify the ways in the services provided contribute towards the development of the mity and the people within. Identify how they feel about the services id. Discuss and share their findings in a creative way.	Conduct research Draw conclusions Discuss ideas Share findings	Findings appropriately show the types of religious services provided in the community

Suggested Teaching and Learning Activities – Focus Question 1 Who are the providers of goods and services that we need?	Key Skills	Assessment Criteria
Think of the different sounds that various workers' tools/equipment make e.g. carpenter banging/ tapping on wood - talk about the sequence of sounds that are made and choose instruments to replicate the type of sounds workers' tools/equipment make. Talk about the duration of the sounds and the effect that they create. Define the terminology of timbre, tempo and dynamics within the music. Begin to create words for a song about a worker-and the work he/she does- to a familiar tune paying attention to the duration of the sounds and the timbre, tempo and dynamics that they create. Use the beats and rhythms to create movement sequences – twisting, turning, balancing etc. to represent workers in the community doing their occupational activity.	Write rhythmical lyrics Create movement sequence Communicate ideas	Instrument sounds accurately identified Sound produced by workers' tools/equipment appropriately replicated with instruments correctly defined Movement sequence appropriately represents workers doing their tasks
Create an advertisement showcasing their community; include the type of community it is and the types of goods and services that are predominant in that community. Create a jingle and use classroom instruments to accompany the advertisement. Use design software to design posters to place in their portfolios or on school's bulletin board.	Create advertisements Create jingle Design poster	Advertisements correctly identify the types of communities
Collect pictures of goods and places that provide services and give descriptions of the goods and services offered. Use pictures in creating a panorama for class display. Make 2D and 3D models of goods and places that provide services. Write a well-constructed letter inviting other teachers and students in the school to view a museum they will create. Transform the classroom into a museum of artefacts. Take on the role of tour guides for the museum and give information about the artefacts displayed. Provide entertainment for the visitors in the form of songs they created about the providers of goods and services that we need.	Create panorama Make models Write letters Share information Compose songs	Pictures appropriately showcase goods and places which provides service Models satisfactorily completed Letters appropriately constructed to satisfy given tasks Tour guides provide accurate information Content of songs appropriately developed

Students will be able to:

- Describe the goods and services that are available in their community
- Classify the workers who provide goods and services
- Recognise that the needs and wants of people in communities are mostly satisfied by workers who provide goods and services
- Recognise duration of sounds in music heard and begin to appreciate and understand the terminology of timbre, tempo and dynamics
- Identify the types of services provided by religious institutions within the community and the impact of these on the community
- Demonstrate skills of balancing, twisting, turning etc to create movement sequences
- Manipulate play dough to create 2D and 3D models
- Critique each other's' performance depicting the role different categories of workers
- Communicate and collaborate safely online with others outside of class to gain information about categories of workers

Points to Note

- The providers of goods and services are important, but some are not classified under the law as essential.
- Assist students in formulating questions for the interview on field trip prior to the trip.
- Allow students to do mock interviews with peers.
- See glossary for explanation of terms used in Music.
- Assist students in preparing their museum.
- Ensure that all materials are provided for students to manipulate.

Check that students can:

- Identify various workers in the community
- Differentiate between goods and services

UNITS OF WORK GRADE 3 TERM 2 UNIT 1

Focus Question 2: How Do Workers Contribute To The Development Of My Community?				
Attainment Target(s):	Objective(s):			
Social Studies Know and value the contributions of communities and institutions in fostering national, regional and international integration	 Define the terms interdependence and resource Explain the importance of interdependence in community development Explain why people work Compare occupations and tools of the past to what exists today 			
Religious Education Recognise that religion contributes to shaping our identity and guides our understanding of the meaning and purpose of life	Relate the religious story 'The Great Catch' to contributing to the development of the community			
Demonstrate an awareness of some of the ways in which religion influences changes in the life styles of persons within society				
Visual Art Demonstrate the creation of art through the use of tools themes and materials Appreciate and respond critically to art	 Demonstrate an appreciation for the art works produced by various visual arts practitioners in the community Show that they value the works of art in the community Develop an understanding of some ways in which art can produce different moods in individuals through discussion of art samples brought into school 			
Resource & Technology Discuss materials and tools that may be necessary for the execution of specific tasks	 Use a variety of materials, tools or equipment to create designs in the making of different products 			
Mathematics Collect, organise, interpret information in practical situations and use simple probability language	 Read and Interpret numerical and pictorial data Used table to classify occupations 			

Attainment Target(s):	Object	ive(s):	
Drama Explore and create, exercising critical thinking skills throughout the dramatic process	• Cr	se a variety of drama modes to dep ecupations in the community ritique each other's presentation ab etegories of workers play	
Language Arts Use and adapt a range of sentence structures according to context, distinguishing between SJE and JC	• Cr	reate well-constructed letter, parage reate sentences that are grammation ontributions of workers to the comm	ally correct about
Physical Education Develop an understanding about how our bodies move		plore basic movement skills and contributions	ncepts in simple group
Music Create musical compositions exploring varied elements of music	 Identify different sounds made by workers in the community Create and imitate sounds from tools used by workers in the community 		
Use technology to communicate ideas and information and work collaboratively to support individual needs and contribute to the learning of others Use appropriate digital tools and resources to plan and conduct research, aid critical thinking manage projects, solve problem and make informed decision	m	xplore the use of ICT tools to comm ajor occupations in their communit onduct research for information on	У
Suggested Teaching And Learning Activities – Focus Question 2: How Downworkers Contribute To The Development Of My Community?	0	Key Skills	Assessment Criteria
Students will: Review the categories of workers in the community, e.g. Health and san security, education, utilities. Discuss the role of each in contributing development of the community. Create fact sheets on each category, how the workers contribute to the development and maintenance community.	to the stating	Communicate information Categorise workers Identify contributions	Fact sheets accurately reflect categories of workers, their roles and contribution to community development

Suggested Teaching and Learning Activities – Focus Question 2: How Do Workers Contribute To The Development Of My Community?	Key Skills	Assessment Criteria
Select a community and plan a field trip. Develop questionnaire to gather information from the field trip on the types of occupations done by workers in the community presently as well as in the past fifty years. Identify, discuss and then categorize the main occupations performed by workers in this community giving reasons for the variety identified. Write or email a letter to a friend telling him/her about the major occupations in your community and invite them to do the same.	Use sound words Write sentences Formulate questions Conduct interview Discuss occupations Identify and list main occupations Write letter Categorize occupations	Questionnaire appropriately developed List of workers correctly categorized Letter or email appropriately constructed
Make a list of the occupations people did fifty years ago. Use a table to classify the occupations looking at jobs performed by men, women and both men and women. Discuss the information in the table. Write a paragraph, giving reasons for some jobs that are not being performed today. List five occupations you think will be needed in the future.	Classify and tabulate occupations Communicate ideas Analyse table Write paragraph	Occupations in table correctly classified Paragraph appropriately constructed with relevant content
Discuss, then draw or use computer images to depict occupations predicted for the future. Note new/unusual words and use these words to write on a topic relating to an occupation for future. Present and read their composition. Critique each other's presentation.	Conduct research Critique presentations	Drawings/images appropriately depict-future occupations
Identify and sing songs / instrumental pieces / dances related to past occupation e.g. "Manuel Road", "Carry Mi Ackee","Day Oh". Discuss the occupations mentioned in the songs. How have these changed over the last fifty years?	Research information Communicate ideas	
Read or watch video about "The Great Catch". (Peter and other disciples fishing in the Sea of Galilee) Discuss how fishermen like Peter contribute to the development of the community. Identify fishing communities in Jamaica and say how these communities contribute to Jamaica. Write in their notebooks at	View video Identify fishing communities Discuss ideas Write sentences	Sentences correctly constructed. Drawing appropriately depicts fishermen

Suggested Teaching and Learning Activities – Focus Question 2: How Do Workers Contribute To The Development Of My Community?	Key Skills	Assessment Criteria
least five sentences on the contribution of these workers to the community. Draw a picture showing a fisherman at work.	Draw picture	
Create and perform sound collage comprising the changing sounds of the work environments. Make an audio recording of the sounds and play for the class. Make a list of words that can be associated with sounds. Write sentences using those words.	Create sound collage Make recording Write sentences	Sound collage adequately reflects sounds in the workplace Sound words appropriately used in sentences Composition and performance of sound collage appropriately done sentences correctly constructed
Collect pictures, photographs, artifacts from online/offline sources or make drawings/ models representing tools used in past and present occupations and display as class exhibition. Make comparisons with tools used today in occupations – in what way have they changed? Why do you think these changes have been made?	Collect pictures and artefacts Sort occupations	Models or drawing correctly represent tools used in the past and pr Comparison of changes appropriately done Explanation of interdependence is adequate
Listen to story (teacher-made or otherwise) on how workers and community members depend on each other. Explain how workers in the story showed interdependence. Write your own story showing how workers in your community work together to perform a task.	Listen to story Communicate ideas Write creatively	Story appropriately reflects community members working together.

Suggested Teaching and Learning Activities – Focus Question 2: How Do Workers Contribute To The Development Of My Community?	Key Skills	Assessment Criteria
Conduct a survey of twenty (20) Grade three students to ascertain their occupational choice when they become an adult. Develop a tally chart of the different occupational choices of the children in the Grade. Use this information to develop a bar graph or pictograph. Write at least five questions you would ask about the graph you have created. Exchange graph with another member of the class and allow them to respond to the questions composed. Display completed work on class display board.	Gather data Tally information Analyse data Draw conclusion Compose questions	Paragraphs correctly constructed Graphs correctly show data gathered Questions appropriately constructed Response to questions accurately given
Identify and discuss the importance of the visual arts in their community, or other communities e.g., Billboards giving information; carvings and paintings preserving our heritage. Invite resource persons such as artists/craftsmen to display samples of their work in the school and talk about them. Say how art can produce different moods in individuals. Draw pictures depicting how workers contribute to their community.	Communicate ideas Observe art work Draw pictures	
Research online/offline pictures of national honours given to citizens. Label and write about each picture and display on Class Bulletin board or Class web page. Select from the community, a citizen who they perceive to have contributed to its development. Write/use word processing software to construct a letter to the relevant agency stating reasons he/she should be awarded.	Conduct research Write letter Enter text Label pictures	Letter correctly constructed Pictures correctly labelled
In groups, create jingles about how workers in their community depend on each other, paying attention to correct pitch, rhythm, phrasing and expression.	Create jingles Collaborate in groups	Jingles appropriately depict workers dependence on each other

Students will be able to:

- ✓ Recognize that most jobs today can be done by both men and women and together they contribute to the development of the community
- ✓ Effectively communicate the results of their research findings and analyse in any form of presentation
- ✓ Make comparisons of occupations of the past and the types of tools that were used in relation to those of today
- ✓ Understand the meaning of the Bible Story of 'The Great Catch' in relation to contributing to the development of the community
- ✓ Perform sound collage created with changing sounds of the work environment
- ✓ Make an exhibition with pictures and models depicting tools used in past occupations
- ✓ Communicate information about changes in occupation over the last fifty years via email
- ✓ Navigate digital content on websites and or storage devices to collect pictures representing changes in occupation over the last fifty years
- ✓ Recognise what we mean by interdependence and how this effects workers and what they are able to produce
- ✓ Gather relevant information and effectively communicate to audience
- ✓ Recognise the importance of working together as a team when playing games

Points To Note

- Teacher should assist students with technological tools where possible.
- Teacher should pre-select websites for students to use in conducting researches.
- Remind students about the safe and healthy use if ICT tools

Extended Learning

Go on field trip to a Fishing village to get first-hand knowledge of the activities of the village. Write a report on what was observed.

Check that students can:

• Identify rules in their home, school

UNITS OF WORK GRADE 3 TERM 2 UNIT 1

Focus Question 3: How Do Rules Help Workers at the Workplace?	
Attainment Target(s):	Objective(s):
Social Studies Know and value the contributions of communities and institutions in fostering national, regional and international integration	 Recognise the importance of rules in the work place. Identify rules and regulations that govern behaviour in the school/team/workplace etc. Understand that workers who obey rules and behave responsibly contribute to the development of their workplace, community and country
Drama Explore and create, exercising critical thinking skills throughout the dramatic process	Use drama modes to demonstrate the importance of rules
Religious Education Demonstrate an awareness of some of the ways in which religion influences changes in the lifestyles of persons within society	 Use varying drama modes to demonstrate the impact of religious principles on the society Recognise how disobedience and breaking of rules can have adverse effects on how we live our lives
Visual Arts Plan and design visual arts expressions	Apply knowledge of artistic methods, materials, tools and techniques to produce the different visual effects
Music Create musical compositions exploring varied elements of music Perform varied repertoire of music for an audience	Apply the rules in Music to maintain rhythm, beat, and singing in harmony

Focus Question 3: How Do Rules Help Workers at the Workplace?	
Attainment Target(s):	Objective(s):
Use digital tools to design and produce creative multimedia products to demonstrate their learning and understanding of basic technology operations Recognise the human, ethical, social, cultural and legal issues and implications surrounding the use of technology and practice online safety and ethical behaviour	Produce documents with text and images using word processing software and other available software
Use language and text forms appropriately and with imagination to create vibrant and engaging texts Write to narrate, to persuade and for a range of transactional purposes, using SJE and JC appropriately and incorporating multi -media approaches to their writing Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including, layout, sections and paragraphs	 Express language creatively in giving their views about rules and laws Create appropriate stories to encourage classmates to respect rules Formulate well-constructed business letters
Physical Education Develop the understanding and skills that support healthy, safe, and active individuals	 Apply and obey rules when playing games Develop rules for selected games

Suggested Teaching and Learning Activities –	Key Skills	Assessment Criteria
Focus Question 3 How Do Rules Help Workers at the Workplace?		
Students will:		
In groups of 4-6, play a game of their choice. After 10-15 minutes, discuss the	Collaborate in groups	Rules satisfactorily
rules of the game. Answer questions such as -	Make comparisons	developed
Why are rules needed?	Communicate information	
Who makes rules and laws?	Conduct survey	Presentation appropriately
What happens when rules are broken?		reflects the rules developed
What would happen if there were no rules?		
Brainstorm to develop their own rules for the game and present these to the class.		Paragraph adequately
Use their rules to play the game for another 10 minutes then compare the two		explains why rules are
sessions.		needed
Talk about and list rules that they follow in different situations at home, e.g.	Present data	Pictorial presentation
watching TV, at bedtime and doing chores. Discuss and compare these. Interview 5	Write paragraphs	accurately captures relevant
selected classmates to find out the rules they follow at home. Make a pictorial		information
presentation to summarise the findings.		Paragrapgh adequately
As a group, list other kinds of rules they follow, e.g. at school, church, playing		addresses reasons rules/
sport. Write a paragraph explaining why these rules and laws are needed.		laws are needed
In groups create a chart with rules for the class. Place charts on board / wall. As a	Plan election	Classroom rules adequately
class, select the most appropriate rules from each chart to compile the class rules.	Create charts	discussed and recorded
Plan and carry out an election for offices/positions of responsibility in the class.	Design name tags	
Use word processing software or other available materials to design and produce	Enter text	
name tags for the elected officers/class representatives.		
Listen to the beginning of a story relating to 'respect for rules'. Then complete the	Listen to story	Story completed with
story with illustrations. Present / read the story. Watch video (online or offline)	Create Illustrations	appropriate illustrations
that focuses attention on the importance of compliance with rules, e.g. PALS video	Communicate ideas	Scenario satisfactorily
re conflict resolution, JIS videos. Discuss how conflict can be avoided by obeying	Dramatize scenario	depicts conflict resolution
rules. Dramatize a scenario about conflict resolution in an appropriate manner.		

Suggested Teaching and Learning Activities –	Key Skills	Assessment
Focus Question 3 How Do Rules Help Workers at the Workplace?		
Develop a checklist to be used in observing practices for a guided tour within their communities. Construct a letter to businesses within the community seeking permission to visit the company. Ensure that they ask that someone in authority be made available to talk with them about some of the rules that govern their places of work. Do a 'walking tour' of workplaces in the community to observe and report on rules, and look for evidence that rules are either being kept or broken.	Create checklist Write letter Make observations	Checklist completed satisfactorily Letter appropriately constructed Report correctly conveys whether rules where kept or broken
Create tableaux from headlines from local or national newspapers (online or offline) about rules that were broken. Class will guess what the headline they received was about. They will say what rules were broken, whether there were any victims, and the effect on others. Brainstorm to identify alternative outcomes. Write words for a rap or dub poem encouraging others to obey rules. Perform creative piece for the class.	Create tableaux Write poems/rap	Tableaux give a clear representation of headlines Rap or poem appropriately encourages obedience
Identify positive and negative influences and discuss when an influence becomes a pressure. Discuss how possible pressure from peers can influence the breaking of rules. Research online/offline passages from main sacred texts about breaking rules and their consequences. Compare the consequences meted out for wrong doing by any three of the major religions. In groups use storytelling to highlight how consequences for wrong doings are dealt with in our Jamaican society.	Communicate information Conduct research Make comparison Collaborate in groups	Passages from scared texts appropriately selected Stories clearly show consequences for wrong doings
Carry out research on their favourite sport. Collect pictures of various segments of the game in play. Write the rules that govern each segment of the sport and explain what happens if these rules are broken. Research information/seek interesting items and design a portfolio to showcase it for class display. In groups choose one sport and teach the class how it is done, ensure that the rules are followed.	Conduct research Design portfolio Create display Share information	Rules and consequences correctly stated Portfolio appropriately designed
Play the game "Simon Says." Observe and tell what happened when the rules were not obeyed. Create simple board games and formulate rules to follow when	Make observations Create board games	Rules and instructions clearly stated.

Suggested Teaching and Learning Activities –	Key Skills	Assessment
Focus Question 3 How Do Rules Help Workers at the Workplace?		
playing the game.		
Sing a favourite song in rounds. Discuss what rules were maintained in order to perform the song successfully. Discuss the different rules in Music such as singing together in harmony, keeping in time, using the correct beat, rhythm, compose a song about maintaining rules and employ the rules of harmony, time, rhythm and beat in presenting it .	Sing in round Sing in harmony Maintain steady beat/rhythm/time	Elements of music correctly identified and maintained
Work in groups, to create a poster that communicates what they have learnt about rules and laws. The poster could focus on a particular issue or could be a campaign to change a rule or a law that affects children. Display the posters in the classroom or around the school.	Collaborate in groups Communicate information Create posters	Posters clearly depict information about laws

- ✓ Appreciate the importance of rules and laws and know how they help protect rights
- ✓ Understand why rules are important in simple games
- \checkmark Appreciate what compliance and non-compliance means in relation to following rules and the law
- ✓ Recognise how disobedience and breaking of rules has an adverse effect on how we live our lives
- ✓ Follow instructions correctly when playing game of 'Simple Simon Says'
- ✓ Follow /maintain the rules in Music such as using correct rhythm/ beat/ singing in harmony etc.
- ✓ Communicate and collaborate safely online with others outside of class to post information about their religious rules

Points to note	Extended learning
 ✓ Assist students in formulating a checklist prior to tour. ✓ Set up tape recorder prior to lessons. 	Draw on examples of vandalism in the school and local community to explore why vandalism happens and what can be done about it.
	Practice to observe all rules for acceptable behaviours.

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 INTEGRATED STUDIES TERM2 - UNIT2

Check that students can:

• Identify the types of relationships that exist between themselves, their families, the school and the community.

UNITS OF WORK GRADE 3 TERM 2 UNITS 2

Relating to Others Outside of Jamaica

Focus Question 1: What Types Of Relations Do We Have With People Of Other Countries?	
Attainment Target(s):	Objective(s):
Social Studies Know and value the contributions of communities and institutions in fostering national, regional and international integration	 Explore the type of relationships that Jamaica share with other countries Define and use correctly the terms: relationship, interdependence, trade, import, export and tourist.
Language Arts Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including, layout, sections and paragraphs Write well-constructed paragraphs which have linking sentences within and between them	 Generate their own sentences using he/she/it/singular noun + base verb + s. Spell high frequency words, recognize sight words appropriate to grade and words encountered across subject areas. Predict outcomes. Draw inferences. Respond critically to information read. Write neatly and legibly in cursive Construct paragraphs
Religious Education Demonstrate an awareness of some of the ways in which religion influences changes in the lifestyles of persons within society	Discuss how religions in Jamaica have been influenced by religions from other countries

Attainment Target(s):	Objective(s):
Music Perform varied repertoire of music for an audience	 Use elements of music to create and perform simple ostinato patterns incorporating genres of music from various countries. Compose poems/songs/jingles that depicts types of relations with other countries Sings local and international songs of different genre
Physical Education Perform a variety of physical activities in general and personal space	Explore dances steps associated with dances from different cultures
Visual Art Respond critically and aesthetically to works of art in galleries and museums. Apply knowledge of artistic methods, materials, tools and techniques to the produce different visual effects	 Investigate how artists contribute to the development of Jamaica in the local and global context Plan, design and create models of Jamaica and countries with which it relates
Drama Explore and create, exercising critical thinking skills throughout the dramatic process	 Use drama modes to convey Jamaica's relationships with other countries Use aspects of the performing arts to highlight Jamaica's relationships with other countries
Mathematics Estimate, compare and use various types of measurements	Measure and/or compute the perimeter of an object (DO NOT use a formula)
Social Studies	Identify careers that are related to how we relates to others

Focus Question 1: What Types Of Relations Do We Have With People Of Other Countries?		
Attainment Target(s):	Objective(s):	
Understand the relationship between personal attributes and interest and how these could be connected with various careers	outside of Jamaica	

Suggested Teaching and Learning Activities – Focus Question 1: What types of relations do we have with people of other countries?	Key Skills	Assessment Criteria
Student will:		
Observe pictures showing animals co-habiting, people working and sharing together etc. Tell what they understand by the term 'relationship'. Make and present a 'Thank You' card to a friend with whom they have a good relationship. Calculate the perimeter of 'Thank You' card made. Establish a letter writing relationship with another peer (across grade, shift, and school) and or via email with Grade 3 students from another country.	Observe pictures Define relationship Calculate perimeter Create card Write letter	Card created with appropriate words Calculate perimeter accurately
Observe a video/news clipping/teacher-created multimedia presentation showing countries assisting another during a time of need. Engage in discussion about how countries relate to each other, bringing out the meaning of 'interdependence'. Write sentences about interdependent relationships/relations, paying special attention to the following: - use of singular noun and base verb + s - spelling - legibility of handwriting.	Write sentences Use singular and plural verbs	active participation Plausible ideas
Compose jingles/ rhymes/poems/songs, etc. about interdependence.		
Be placed in groups to sort pictures according to the relations they depict between Jamaica and other countries through trade, sports, visual arts, music, health, tourism, education, religion and governance. Read and spell the names of relations and place each picture under the correct heading on a chart. Discuss possible careers related to each heading identified. Write a paragraph about one of the pictures paying attention to correct letter formation.	Sort pictures Read and spell words Discuss careers Write paragraph	Pictures sorted and placed under the correct heading Paragraph has appropriate content and legibly written
Conduct brainstorming activity to define the terms 'trade', 'import' and 'export'. Role play scenarios to depict the term 'trade' 'import' and 'export'. Collect labels/ tags of items around the home and discuss the origin of these goods. Identify the countries of origin. Shade these countries on a map and place in scrapbook	Define terms Role play scenarios Collect labels Identify and shade	Role play adequately depicts terms Countries identified and shaded correctly on map

Suggested Teaching and Learning Activities – Focus Question 1: What types of relations do we have with people of other countries?	Key Skills	Assessment Criteria
'Jamaica's relations with other Countries' .	countries	
Talk about some of the various sports Jamaicans participate in with other countries e.g. cricket, football, netball. Collect and display cut outs and clippings of local sport personalities from newspaper/magazines e.g. Veronica Campbell-Brown showing their representation at the Olympics and other world sporting events. Conduct a research using online/offline resources on any athlete and role play the athlete during a press release.	Collect and display cut outs and clippings Conduct research	Class display satisfactory Oral and written presentation appropriately done
Talk about the various musical events that are hosted in Jamaica e.g. Sting, Jazz and Blues and Fun in the Sun etc. Tell some of the artists that perform at these events. Discuss how Jamaican artists collaborate with other international artists. E.g. New York In groups conduct research on a teacher-selected artists from different musical genre (local or international). Write/type a short biography on the artist and perform a song from their favorite artist by performing simple ostinato patterns incorporating genres of music from various countries. Dance while performing.		
Watch videos/view pictures of people disembarking aeroplanes and cruise ships. Talk about the persons seen, infer where they are coming from and predict where they are going. Define the term 'tourist'. Write sentences about the pictures using the correct tense. Compose a poem/song/jingle about being a tourist in Jamaica. Record and play back for class critique. Listen to resource person talk about tourism in Jamaica. Write sentences about what they have learnt in their journal.	Define tourist Write sentences Compose poem/song/jingle Listen to resource person Record audio	Definition of tourist appropriate Sentences constructed using correct tense Poem/song/jingle has suitably content
Communicate via email/class blog/letter with peers in another Caribbean country to ascertain the type of relationship which exists between Jamaica and their		Comments posted are appropriate

Suggested Teaching and Learning Activities – Focus Question 1: What types of relations do we have with people of other countries?	Key Skills	Assessment Criteria
country in regards to: education, religion, health and governance etc. In small groups, write a newspaper article based on information gathered and share with epals.	Communicate online/offline Post comments Write article	Newspaper article adequately covers content
Create art pieces depicting a specific area of relation of Jamaica with other countries using a variety of materials. Write freely describing their work. Create an in-class gallery with the pieces view and critique the pieces -discuss the texture, patterns, colours, and message/s conveyed. Go on a field trip to a local museum to view work of Jamaican artists E.g. Edna Manley. Conduct research to gather information on the contribution of a specific artist to the development of Jamaica context locally and internationally. Share findings with class using different modes.	Construct art pieces Write sentences Create gallery Conduct research Share findings	Art pieces appropriately depict relations Presentation of findings adequately displays content

- ✓ Calculate perimeter from cards created depicting relationships
- ✓ Understand the different types of relationships that exist between Jamaica and other countries
- ✓ Sorted and placed pictures about types of relations Jamaica has with other countries under the correct heading and write paragraphs legibly
- ✓ Role play scenarios to depict terms 'trade', 'import' and 'export'
- ✓ Shade a map to indicate countries that imports products to Jamaica
- ✓ Display cut-outs and clippings of various Jamaican sports personalities and perform oral and written presentations about them
- ✓ Define the term 'tourist' and write sentences using correct tense from tourist related pictures
- ✓ Compose and record poem/song/jingle about being a tourist in Jamaica
- ✓ Communicate and collaborate with e-pals via email, letter in other Caribbean country to ascertain the types relationships which exists between Jamaica and their country
- ✓ Create newspaper articles about Jamaica's relations with other Caribbean country and share with e-pals

- ✓ Create art-pieces that depicts Jamaica's relations with other Caribbean countries
- ✓ Make presentations from research using different modes

Points To Note

For each type of relation identified student should paste pictures and write sentences about it.

During oral presentation teacher should assist students with pronunciation and the correct posture giving a report.

Extended Learning

Students could work in small groups to create a class book entitled 'Promoting Brand Jamaica'.

Examine the 2030 Vision statement and create a logo.

Check that students can:

Understand the concept 'relationship.'
Identify other countries with which we relate.
Identify the types of relationships that exist between Jamaica and other countries.

UNITS OF WORK GRADE 3 TERM 2 UNIT 2

Focus Question 2: Why is it important that we relate to other countries of the world?			
Attainment Target(s):	Objective(s):		
Social Studies Know and value the contributions of communities and institutions in fostering national, regional and international integration	 Explain the benefits to be derived from relationships with other countries Recognise the importance of trade in Jamaica's relationship with other countries State the benefits to be derived from tourism Explain why particular relationships/relations exist between Jamaica and other countries of the world State the advantages and disadvantages of Jamaica's relations with other countries of the region and the world Discuss the opportunities tourism provides for us to relate to peoples from other countries and cultures Identify and discuss factors that attract tourists to Jamaica Define and use correctly the concepts: tourist, tourism, foreign exchange 		
	 Identify career/employment opportunities in the tourist sector Discuss negative and positive effects of tourism on Jamaica 		
Music Perform varied repertoire of music for an audience	Pitch accurately and use singing voice to express characterization		

Focus Question 2: Why is it important that we relate to other countries of the world?		
Attainment Target(s): Objective(s):		
	and mood	
Religious Education Demonstrate an awareness of the impact of religion on both the local and international platforms	Explain how people of different faiths in Jamaica relate to others of like faiths in other parts of the world	
Language Arts	Sustain expression in SJE	
Recognise, value and make distinctions between home language and SJE to improve/acquire language and literacy competencies.	Ask and answer questions	
Use deduction and inference to interpret information and ideas and to predict outcomes.	Predict outcomes Locate, without teacher support, specific information from class	
Use language and text forms appropriately and with imagination to create vibrant and engaging texts.	reader and other sources.write to share ideas and feelings (showing sensitivity to language)	
	Write independently in response to stimuli: objects, pictures, stories	
	Write for practical purposes, e.g. Letter to persuade, inform	
 Explore and create, exercising critical thinking skills throughout the dramatic process 	 Use the creative arts to explore the possible effects of trade between Jamaica and other countries Use drama modes to show possible ways Jamaica could foster relations with countries they do not have a close relation 	
• Use technology to communicate ideas, information and	Use ICT tools to relate to others outside of the country to	

Focus Question 2: Why is it important that we relate to other countries of the world?		
Attainment Target(s):	Objective(s):	
understanding for a variety of purposes	 exchange accurate cultural information Use ICT tools to depict the importance of relating to people of other countries Conduct online and offline research about the importance of the relationship between Jamaica and other countries 	
Physical Education Develop an understanding of how our bodies' move, why we move our bodies in particular ways and what happens to our bodies when we move	Practice individual techniques and team tactics to improve aesthetical performances	
Mathematics Read and interpret information presented in tables and on graphs	Read and interpret horizontal and vertical bar charts Present information on tables, graphs, etc.	

Suggested Teaching and Learning Activities – Focus Question 2 Why is it important that we relate to other countries of the world?	Key Skills	Assessment Criteria
Pupils will: In pairs, discuss the importance of the international relationships Jamaica share with other countries and the benefits to be derived from the relationships we share with other countries. Make a list of five benefits for any two countries with which Jamaica relates.	Discuss, identify, distinguish	Level of participation in discussion List of five benefits
Analyse a chart showing goods and services that Jamaican people export e.g. banana, bauxite, coffee education, health, agriculture etc. Discuss the benefits from exporting these. Further assess the chart to identify at least three goods and services imported to Jamaica. Discuss the possible advantages and or disadvantages of importing these. Connect the outcome of their learning to how and why these exports and imports connect us to other countries in the world- the global community.	Brainstorm, define, record, create, cooperate, analyse information	Correctly defined terms Correctly completed table
Establish a communication relationship with a peer/school from another parish/country via email/Skype. Discuss the type of relation shared with Jamaica and the importance of those relationships. Discuss in details relationship through trade and tourism. Write a letter and email to their peers/schoolmates you are in communication with, telling them what you have learnt and thanking them for sharing the information with you.	Collect, sort, classify, record Discuss, listen, ask relevant questions, responding, infer, record, write, collaborate	Relevance of questions and responses received Letter properly written
Collect pictures of tourist resorts and tourist participating in various activities. Using appropriate ICT tool, create a collage for class display. Do a class presentation, explaining the importance of tourism to Jamaica.	Collect, sort, select, create, clarity of explanation	Completed collage Oral presentation
Working in groups of 5/7, use appropriate drama mode to depict the	Collaborate, dramatize, record,	Dramatization

Suggested Teaching and Learning Activities – Focus Question 2 Why is it important that we relate to other countries of the world?	Key Skills	Assessment Criteria
importance of tourism to Jamaica. Use appropriate ICT tool to record the presentation then share recording with peer/schoolmate you have been communicating with locally or abroad.	compose, communicate	Recording and presentation of dramatization
Use online and offline resource to research aspects of Jamaica's relationship with other countries (sports, education, health, music, politics/governance, religion, transportation, diaspora). Use the information gathered to write a story. Use Readers' Theatre or Author's Chair to share story with class.	Research, analyse, write, create, perform	Quality of the content of the written story Performance/presentation of the story
Develop athletic skills by practising the correct procedures for baton change and for running short and longer distances. Refine and develop their individual and team techniques to improve their performance.	Running, correct passing of the baton, collaborating	Correct techniques in running and baton passing

- ✓ Conduct a simple debate to make comparison
- ✓ Draw conclusions on the advantages and disadvantages of athletics to Jamaica
- ✓ Analyse information on simple charts
- ✓ Write simple letters/emails to friends
 ✓ Demonstrate an understanding of Jamaca's relationship with other countries

Extended Learning
Maintain contact with the peer/school for further collaboration and information sharing.
View online videos on the CARIFITA Games and give informal feedback.

Check that students can:

- Understand the concept 'relationship.'
- Identify the types of relationships that exist between themselves, their families, the school and the community.
- Identify other countries with which we relate.

UNITS OF WORK GRADE 3 TERM 2 UNIT 2

Attainment Targets	Objectives
Religious Education Learning about religions Display an appreciation for some of the beliefs, practices and expressions of persons from different religious faiths	 Talk about ways by which our religious practices and beliefs are similar or different to others around the world Discuss how Jamaicans are alike or different from the peoples of other countries, in terms of religion, clothing, leisure activities/entertainment, etc.
Learning from religion Recognize that religion contributes to shaping our identity and guides our understanding of the meaning and purpose of life	Cite evidence that tourists enjoy Jamaican culture
Learning how religion influences change Demonstrate an awareness of some of the ways in which religion influences changes in the lifestyles of persons within society	

Mathematics AT1b. Use the basic operations, number relationships, patterns, number facts, calculators and appropriate software to compute and estimate in order to solve real world problems involving fractions, percentages and decimals. AT2.Use the correct units, tools and attributes to estimate, compare and carry out the processes of measurement to given degree of accuracy	Adding and subtracting numbers including money
Music • Listen and appraise music to develop an understanding of musical elements	Compare, contrast and make connections between music from different parts of the world to Jamaican music
Visual Arts AT1 Design AT2 Art Creation AT3 Aesthetics AT4 History and Culture AT 5 Critiquing	Critique art pieces and recognise how they can use this information to enhance and improve their own art and design creations
 Physical Education AT1 Motor Control AT2 Movement and Dance AT3 Individual techniques AT4 Team Tactics AT5 Health, safety and welling being 	Perform movement sequences from the countries studied and recognise differences and similarities to their own cultural dances
Civics AT2: Display an understanding & appreciation of own heritage, and of the culture and heritage of selected groups AT4:Demonstrate an awareness of and respect for significant symbols AT5:Understand rituals and celebrations in specified contexts	Compare and contrast cultural heritage with other countries
Drama	Dramatize understandings from selected folklores

* /	Appreciating and critiquing		
	 Use technology to communicate ideas and information, and work collaboratively to support individual needs and contribute to the learning of others Use digital tools to design and produce creative multimedia products to demonstrate their learning and understanding of basic technology operations Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions 	•	Conduct research , create invitation cards and labels for display using appropriate tools
_	Communication ❖ Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including, layout, sections and paragraphs	•	Compose meaningful paragraph based on their understanding of material read or heard

Suggested Teaching and Learning Activities – Focus Question 3 What Ways am I Like or Different from the People Outside of Jamaica with whom I Relate?	Key Skills	Assessment Criteria
List information about themselves in notebooks, e.g. name, sex, birth date, favourite foods, hobbies, etc., use this information to make comparisons with their classmates, using the categories above as headings. Share their information with e-pals via a class blog - 'Exploring our Likes or Differences with other Countries'/email/letter. Request similar information from e-pals/pen pals for the purpose of making further comparisons.	 Compare and contrast information Describe self 	Information provided adequately describes self and comparisons satisfactorily made with peers Information effectively shared

Suggested Teaching and Learning Activities – Focus Question 3 What Ways am I Like or Different from the People Outside of Jamaica with whom I Relate?	Key Skills	Assessment Criteria
In groups/pairs, be assigned a country with which Jamaica shares some kind of relationship and conduct research to learn about that country's language, main religion and special holidays. Create and paste a map outline of that country with the information in their scrapbooks. Identify similarities and differences detected between Jamaica and the country studied. Make presentation to class using different modes.	 Conduct research Create map outline Make comparisons Present information 	Information on selected country accurately represented Map outline properly drawn Comparisons accurately made Appropriate presentation mode effectively used
In groups and for country assigned, prepare a display using the theme 'Exploring our Likes or Differences with other Countries'. Areas for display include the national symbols, currency, religion, special foods, traditional dress, sporting events and customs/events for selected country. Use scrapbook /charts/technology tools to create multimedia presentations to highlight similarities and differences with Jamaica. Make and send invitation cards asking members of the school community to view the display.	 Set up displays Create invitation cards Create multimedia presentations 	Display booth properly prepared and managed Invitation cards depict accurate information
Compare the value of the currency of the country studied with the value of the Jamaican dollar. Convert the currencies. Compare the cost of items in both countries.	Compare currencyCalculate currency value	Rates properly compared
Listen to folktales being read to them/ Use Reader's Theatre to present folktale to their peers. In groups dramatize their understanding of a folktale. Answer questions suggested by the teacher in SJE. Examine likes and differences among characters. Draw characters from their favourite folktale and describe them in a paragraph. Collaborate and share with e-pals/pen pals about some of the folktales that they have in their country.	 Listen for information Dramatize stories Sketch and describe characters Share information 	Paragraphs adequately describe selected characters Dramatic pieces reflect adequate grasp of story SJE appropriately used to answer questions

Suggested Teaching and Learning Activities – Focus Question 3 What Ways am I Like or Different from the People Outside of Jamaica with whom I Relate?	Key Skills	Assessment Criteria
Listen to/sing the national anthem of the country they have researched, paying special attention to pitch and tempo. Adapt the proper posture for that country's national anthem. Listen to traditional music and dances about the countries being researched. In groups, dance to the traditional music for the country they have researched. Class will compare how these music and dances are alike or different from that of Jamaica. Research and play children games from these countries.	 Listen for information Compare and contrast Research 	Pitch and tempo accurately produced Dance moves are an accurate representation of selected country Comparisons accurately made with Jamaica and other countries Research adequately reflects information about games in other countries
Make journal entries about the ways in which understanding the similarities/differences between countries can help people of the world to live in harmony.	Record information	Benefits of understanding similarities and differences accurately noted

- ✓ Relate basic information about self
- ✓ Note differences and similarities between self and others
- ✓ Identify similarities and differences between Jamaica and the selected country of choice
- ✓ Create and manage display booth
- ✓ Create invitation cards
- ✓ Compare and calculate currencies
- ✓ Relate to the folklore of other countries
- ✓ Examine national anthems of the selected country
- ✓ Play games related to other countries

Points to Note Country select	e: ted may be from the following	:		Extended Learning Compare the colours of the flags of the selected countries.
Caribbean	North America	<u>Africa</u>	<u>Asia</u>	
Trinidad	Canada	Nigeria	Japan	Dolls could be made depicting national dress of each country for
Barbados	United States of America	Ghana	India	the display.
Guyana		South Africa	China	

Check that students can:

Understand the concept 'relationship.' Identify the types of relationships that exist between themselves, their families, the school and the community.

Identify other countries with which we relate.

UNITS OF WORK GRADE 3 TERM 2 UNIT 2

l	Focus Question 4: How can	I ensure that Jamaica ma	aintains good rela	ations with other countries?
п	LOCAS QUESTION IN HOU CAN	. ciisai c tiiat saiiiaica iiic	annianno poda nen	acionis tricii otilici coulitilico.

Attainment Target(s):

Social Studies

Know and value the contributions of communities and institutions fostering national, regional and international integration

Objective(s):

- Discuss ways that, as a country, we can nurture good relations with other countries
- Identify factors that can lead to the breaking off of ties between countries
- Describe some of the possible consequences of the breaking off of ties between countries
- Identify and discuss ways in which shared values and skills help in fostering good relations among countries

	 and peoples Discuss and give reasons why Jamaica should maintain its relationships with other organisations and within the global context Learn about the benefits that are derived from maintaining relationships with other countries
Language Arts Write to narrate, to persuade and for a range of transactional purposes, using SJE and JC appropriately and incorporating multi-media approaches to their writing	Write for practical purposes, e.g. Letter to persuade, inform
Visual Arts AT 1 - Create and innovate AT 2 - Plan and design	Use art and design techniques to create a poster encouraging Jamaica to maintain its relationships with other countries
Drama Explore and create, exercising critical thinking skills throughout the dramatic process	Dramatize possible ways Jamaica can foster relations with other countries with whom they do not have a close relationship
Music Listen and appraise music to develop an understanding of musical elements	Explore the contribution of artiste in enhancing Jamaica's relationship with people of other countries
Physical Education Develop the understanding and skills that support healthy, safe and active individuals	Identify Jamaican sports personalities and their influence in enhancing Jamaica's relationship with other countries

Suggested Teaching and Learning Activities – Focus Question 1	Key Skills	Assessment Criteria
Role play scenarios depicting conflict resolutions. Discuss some of the things that they do to maintain good relationships with each or among themselves as a class. Recall some ways in which Jamaica relates to other countries e.g sports, tourism etc. Be guided by teacher establish factors that lead to poor relationships and the importance/benefits of maintaining good relations among countries. Create a poster using lines, shapes, graphics, and colours to encourage Jamaica to maintain its relationship with other countries. Display the posters created in class and critique.	Role play scenarios Recall areas of relations Create poster Critique posters	Role play adequately depicts conflict resolution. Importance/benefits of maintaining good relations satisfactorily established Poster creatively done
Watch video clippings or view pictures relating to tourist harassment in Jamaica. Tell what they observed from the video/pictures and what could have been done differently to prevent what occurred. Talk the benefits of tourism to our country. Through guided discussion explain what they think could happen to Jamaica's image when tourists are harassed and its impact on the country's tourism industry. compose then perform and record a rap/song/jingle about how we can promote good relationships between Jamaicans and our visitor. Utilise musical elements and skills learnt in previous lessons when creating the rap/song / jingle.	View video clippings/pictures Discuss ideas Write and record rap/song/jingle	Composition and recording satisfactorily shows how to promote good relations
Talk about how Jamaican artists and sports personalities foster good relations with other countries through music and participation in sporting activities. Explain how these shared values and skills can help in maintaining good relations among countries and people. Write a letter of at least two paragraphs, to a friend telling him/her how their favourite artist or sports personality help to foster good relationships between Jamaica and other countries.	Discuss ideas Write letter	Letter correctly done to show how artists and sports personalities help to foster good relations

Students will be able to:

- ✓ Give reasons why Jamaica should maintain its relationships with other organisations and within the global context
- ✓ Recognise the benefits that are derived from maintaining relationships with other countries
- ✓ Use drama modes to effectively convey Jamaica's relationships with other countries
- ✓ Recognise musical elements when creating jingle convincing Jamaican's to capitalize on benefits derived from relationships with other countries
- ✓ Use Art and Design techniques to create a poster encouraging Jamaica to maintain its relationships with other countries.
- Recognise how people artists and sports personalities helps to foster good relations

Points to Note

Teacher should also engage students in discussions about possible consequences for breaking off relations with other countries in other areas e.g trading, health etc.

Extended Learning

In their journal, write a letter (a) telling a friend what they learnt in class about maintaining good relationships with other countries. (b) What is likely to happen if these ties are broken?

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 INTEGRATED STUDIES TERM2 – UNIT3

Check that students can:

- Identify their nationality
- Know the national symbols

UNITS OF WORK GRADE 3 TERM 2 UNIT 3 ASPECTS OF JAMAICAN CULTURE

Focus Question 1: What Is the Jamaican Culture?		
Attainment Target(s):	Objective(s):	
SOCIAL STUDIES Know and value the contributions of communities and institutions in fostering national, regional and international integration	 Understand the concept of culture Discuss the key aspects and features of the Jamaican culture Learn about the different types of food that represent Jamaica's culture. Describe special activities they participate in, to celebrate national days and events. Develop an interest in learning the words of the National Anthem, the National Pledge and the National Song. Understand what is meant by the phrase 'Out of Many One People' 	
 LANGUAGE Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Listen to, recall, understand and respond to speakers' messages, whether implicit or explicit Write to narrate, to persuade and for a range of transactional purposes, using SJE and JC appropriately and incorporating multimedia approaches to their writing Use a range of punctuation correctly 	 Recite poems and stories that depict Jamaican culture, paying attention to expression Distinguish between Creole and SJE, recognizing that language changes according to situation Listen to and retell Jamaican stories Write sentences using capital letters, comma and an appropriate end mark 	
RELIGIOUS EDUCATION Demonstrate an awareness of some of the ways in which religion	Research and discuss the religion of the Maroons and how it influences their way of life	

Focus Question 1: What Is the Jamaican Culture?	
Attainment Target(s):	Objective(s):
influences changes in the lifestyles of persons within society.	Research and discuss the Christian religion and how it influences our culture
Resource & Technology Explore Methods and Procedures- Use simple materials, tools and equipment to develop skills in cutting, assembling and decorating.	Design and make different types of kites as a demonstration of our Jamaican cultural tradition
Physical Education Explore basic movement skills and concepts in simple group activities	 Create a variety of different movement sequences from a selection of traditional cultural music Demonstrate the use of elements of movement in dances created Be aware of their safety and that of others when doing cultural/traditional dances/steps in class
Mathematics Collect, organise, interpret and represent data and make inferences by applying knowledge of statistics and probability	 Identify dates and special national events on a calendar Use the correct units, tools and attributes to estimate, compare and carry out the processes of measurement to given degree of accuracy
Visual Art Demonstrate the creation of art through the use of tools, themes and materials	 Use pictures or three dimensional forms to depict aspects of the Jamaican culture Discuss the role that art plays in the culture of Jamaica Create a collage depicting the cultural aspects of Jamaican food
Music Perform varied repertoire of music for an audience	Identify unique features of Jamaican traditional and cultural music Perform dances to Jamaican traditional and cultural popular music
Use digital tools to design and produce creative multimedia products to demonstrate their learning and understanding of basic technology operations Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions	Design and create documents relating to Jamaican food Use digital tools to conduct research of various aspect of the Jamaican culture
 Drama Explore and create, exercising critical thinking skills throughout the 	Use dramatic presentations to highlight aspects of the Jamaican

Focus Question 1: What Is the Jamaican Culture?		
Attainment Target(s):	Objective(s):	
dramatic process	 culture Listen to and perform folk songs using appropriate cultural costumes. Dramatize aspects of the Jamaican culture using appropriate costumes. 	

Suggested Teaching And Learning Activities – Focus Question 1: What Is Jamaican Culture?	Key Skills	Assessment Criteria
Students will:		
View short video clips/teacher-created multimedia presentation/pictures of food, music, dances, mode of dress, folktales etc and tell the cultural aspect/s of life portrayed. Through discussion get an understanding of the concept of culture. Collect pictures of the various aspect of culture discussed, paste in scrap book/journal and write a sentence for each picture.	Discuss concept Collect pictures Write sentences	Pictures collected are suitable for the cultural aspect identified Write sentences properly using correct punctuation marks
Talk about foods that they like to eat and how they are prepared. E.g. ackee and salt fish, rice and peas, run down, duckunoo, cornmeal pudding etc. through guided research investigate the origins of these dishes. In groups collect/search for pictures online/offline sources and make collage depicting aspects of Jamaican food. Compile responses and transfer to a word processing software. Print and place in class cultural display area.	Research origin of food Type sentences	Sentences are typed correctly and displayed in classroom
Create a picture profile depicting a musician representing five genres of Jamaican music: Mento, Ska, Rock Steady, Reggae and Dancehall. Write three sentences about each genre.	Create picture profile	Picture profiles are created appropriately for each musician
In groups, learn and perform traditional, cultural dances, as well as dances associated with any four of the five musical genres. Traditional: Quadrille, Bruckins, Dinki Mini, Maypole; Musical genre: Mento, Ska,	Perform dances	Dance movements are performed correctly for each genre

Suggested Teaching And Learning Activities – Focus Question 1: What Is the Jamaican Culture?	Key Skills	Assessment Criteria
Rock Steady, Reggae and Dancehall.		
Listen to various Jamaican proverbs/sayings. Talk about their meaning and listen to the correct meaning. Discuss application to daily living.	Listen to Proverbs Discuss applications	Listen attentively and repeat proverbs correctly
Listen to folk tales/stories (religious), e.g. 'Anancy and the Porridge' and sing songs e.g. 'Carry Mi Ackee Guh A Linstead Market'. Discuss lessons learnt from storries/songs. Tell folk tales of their own choosing. Identify and talk about the moral of their stories.	Listen to folk tales Tell folk tales Talk about moral of the story	Ability to identify and adequately discuss the moral of folk tales
Identify the various festivals and cultural celebrations on a calendar. For example, National Heritage Week, Jamaica Day, Jamaica Independence Celebration, Maroon New Year's Celebration etc. Talk about the activities related to national events and national symbols. For example, The National Anthem, the National Pledge, The National Song and The National Coat of Arms. Rehearse one aspect of any festival of their choice. Wear the appropriate dress for the depicted festival.	Use a calendar Identify celebrations Learn the national symbols Rehearse festival activity Wear appropriate dress	Use the calendar correctly Wear the appropriate dress for the festival chosen
Attend a field trip and take pictures of important buildings, heritage sites, herbs for folk medicine and those used for Jamaican dishes. Take pictures of various murals. Talk about the many uses of art in our culture and create art work of their own. Mount a display in the classroom and answer questions about their work.	Capture images Create art work Mount display	Displays are mounted and pictures posted properly
In collaboration with their teacher, organize an Open Day displaying various aspects of the Jamaican culture, for example the beliefs of the Maroons and the Christian church. Mount pictures taken in previous activity, perform ring games, dramatize an aspect of Jamaica's Independence Day Celebrations, exhibit paintings depicting Jamaican Heroes and perform speeches by The Honourable Louise Bennett-	Organize an Open Day	Open day is organized properly and all events are appropriate for the theme

Suggested Teaching And Learning Activities – Focus Question 1: What Is the Jamaican Culture?	Key Skills	Assessment Criteria
Coverley and Joan Andrea Hutchinson. Display various kinds of kites		
and demonstrate their useful.		

Students will be able to:

- Collect pictures that are suitable for the cultural aspect identified
- Write sentences using correct punctuation marks
- Type sentences using a word processing soft
- Create picture profiles for Jamaican musicians
- Perform dance movements for each genre
- Listen and repeat proverbs correctly
- Identify and talk about the moral of folk tales listened
- Use the calendar correctly
- Wear the appropriate dress for a Jamaican festival
- Display and mounted pictures properly
- Organize an Open Day

Points to Note:	Extended Learning
 The National Symbols should be memorized to maintain their national identity. Proverbs should be learnt and the lessons applied to daily living 	Students could conduct further research in the origin of the Jamaican Proverbs and Folk stories.
Students should be guided with specific measurements in the making of kites.	

Prior Learning

Check that students can define aspects of the Jamaican culture

UNITS OF WORK GRADE 3 TERM 2 UNIT 3 ASPECTS OF JAMAICAN CULTURE

Focus Question 2: Why Is the Jamaican Culture Valuable to Me?		
Attainment Target(s):	Objective(s):	
 Social Studies Know and value the contributions of communities and institutions in fostering national, regional and international integration Recognize the contribution of individuals who have helped to shape Jamaica's development over time 	 Explain why the Jamaican culture should be valuable to them Identify ways in which the Jamaican culture has promoted international understanding Explain how culture helps to promote national unity and identity Identify the major occupations relating to the Jamaican culture e.g. musicians, athletes, artists, sculptors Describe ways in which people can earn a living from marketing culture 	
Music • Perform varied repertoire of music for an audience	Perform simple Jamaican folk songs and music suited for a variety of events and occasions	
 Drama Express a range of feelings and emotions through the enactment of dramatic scenarios Appreciate and critique dramatic works 	 Use a range of drama modes to present their views on the Jamaican culture Critique and evaluate dramatic performances depicting the value of the Jamaican culture 	
 Science Begin to appreciate the variety of living things and how they are supported by the environment 	 Explain the importance of protecting endangered indigenous Jamaican plants and animals Identify the various uses of some indigenous Jamaican plants, herbs and spices 	

Attainment Target(s):	Objective(s):
	Collect and display indigenous Jamaican plants, herbs and spices
Physical Education Explore basic movement skills and concepts in simple group activities	Create movement sequences through the use of their favourite cultural steps
Religious Education Recognize that religion contributes to shaping our identity and guides our understanding of the meaning and purpose of life	Identify ways in which cultural religious practices help people to develop moral values and live in unity
 Use digital tools to design and produce creative multimedia products to demonstrate their learning and understanding of 	Use selected tools effectively to produce multimedia presentation with text, images and narration
 Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions 	 Use appropriate digital tools to conduct research on Jamaican authors, poets and endangered indigenous plants and animals Recognise and demonstrate safe, respectful and responsible
 Recognise the human, ethical, social, cultural and legal issues and implications surrounding the use of technology and practice online safety and ethical behavior 	online communication
 Mathematics Collect, organise, interpret and represent data and make inferences by applying knowledge of statistics and probability 	Use data collected to construct picture bar graph
 Language Arts Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including, layout, sections and paragraphs 	 Explain the value of various aspects of the Jamaican culture Formulate properly constructed sentences for journal entries Arrange sentences in sequential order

Suggested Teaching and Learning Activities – Focus Question 2: Why Is the Jamaican Culture Valuable to Me?	Key Skills	Assessment Criteria
Students will:		
Identify an item that is very valuable to them. Explain to the class why it is valuable and discuss what they understand by the word 'valuable'. Give synonyms for valuable. Identify some cultural practices that they value, for example Jamaican food, music, dance etc. Work in groups to use the information to complete word web(s). From the information in the web write a paragraph about why one aspect of the Jamaican culture is valuable to them.	Identify cultural practice Work in groups Create word webs Write a paragraph	Word webs are created that with suitable words. Paragraphs are properly constructed to reflect the aspect of culture valuable to them
Take their favourite "Jamaican" food to class for a project called "Jamaican Nyamins" or "I eat Jamaican" and explain to the class one reason why they like this food, e.g. curried chicken, gizzardas, duckonoo etc. Talk about how it is prepared and identify the nutritional value. Create a food display table with these foods in the different food groups. Conduct a class/grade survey on the food that students like. Tally pupil's response and use the information to make a picture bar graph. In groups prepare and perform cultural songs relating to food e.g. Dip and Fall Back, Linstead Market. Critique and do peer-evaluation of presentations.	Explain about food Create food display table Collect data Construct graph	Graph constructed accurately
Collect and display labels of Jamaican foods, spices, drinks which we export (e.g. Walkerswood spices and sauces; liquor, ginger products; blue mountain coffee). Explain how the sale of these items abroad helps to promote our culture/brings value to us.	Collect labels Explain sale of Jamaican items aboard	Labels are collected and appropriate explanation given of how items sold aboard are beneficial to them
Go on a field trip to observe art work in their community e.g. murals of national heroes, athletes, sculpted landscaped, homes done with white washed stones and flower gardens surrounded by picket fence, etc. Talk about reasons why these art works are valuable. Use image capturing device to capture pictures and create digital story/drawings of artwork and construct panorama or peep show.	Observe art work Communicate ideas Capture images Create drawing/ panorama/peepshow	Digital story/peepshow/panorama of art work satisfactorily done

Suggested Teaching and Learning Activities –	Key Skills	Assessment
Focus Question 2: Why Is the Jamaican Culture Valuable to Me?		
Create a class mural using photographs of persons who make an income from aspects of Jamaican culture e.g. sports men and women, musicians, artists, sculptors etc. Invite others to view the mural and play songs/music from musicians that are included on the mural. Discuss how they help to attract tourists to our country. Write in journals how these persons promote/ market our culture and share these with e-pals.	Creating mural Write journal entry Post comments online	Sentences are constructed satisfactorily about persons who make an income from aspects of Jamaican culture
Sing songs like "Elena" and talk about what the songs are referencing. Collect various medicinal plants, herbs and spices and talk about the benefits. In groups, use similar rhythm to 'Elena" to create their own folk songs about the value of Jamaican herbs in curing various illnesses . Perform their composition with expression. Use parts of their bodies to add rhythm and movement sequence to their songs. Record the performances with image capturing device. Watch and discuss the recorded performances.	Collect plants, herbs and spices Create folk songs Perform composition	Folk songs created that reflects the value of Jamaican herbs Dance routine performed creatively
Discuss their understanding of the theme "Out of Many, One People". Talk about the different ethnic groups that make up Jamaica's population. Draw a representation of the different ethnic groups. Work in group to organize a fashion show depicting various modes of dress of religious leaders/ethnic groups in Jamaica. e.g. revivalist leader, a catholic priest, Indians, Chinese, Africans, and Europeans etc.	Discuss theme 'Out of Many, One People' Work in groups	Drawings satisfactorily depict the various ethnics groups in Jamaica
View the story of the Good Samaritan. Talk about the value of helpfulness, the vice of cultural prejudice and love for neighbour including their enemies. Create a card for someone who they need to forgive.	Talk about moral values Create card	Card created demonstrate an understanding of the concept forgiveness

Suggested Teaching and Learning Activities –	Key Skills	Assessment
Focus Question 2: Why Is the Jamaican Culture Valuable to Me?		

•Learning Outcomes: Students will be able to:

Create word webs with suitable words

- Construct paragraphs to reflect the aspect of culture that is valuable to them
- Construct picture bar graph constructed accurately
- Collect labels give appropriate explanation of how items sold aboard are beneficial to them
- Create digital story/peepshow/panorama of art work
- Construct sentences relating to persons who make an income from aspects of Jamaican culture
 Create folk songs that reflects the value of Jamaican herbs
- Perform dance routine while singing created folk song
- Complete drawings that depict the various ethnics groups in Jamaica
- Create card to demonstrate an understanding of the concept forgiveness

Points to note

- ✓ No harmful or illegal plants should be collected by students
- ✓ Certain dances like Kumina should not be performed by the students

Extended learning

Go on field trip to Museums, Art Gallery, Heritage Sites etc. to gain extra knowledge about our Jamaican art forms.

•

Prior Learning

Check that students can:

• Apply concepts learnt about culture.

UNITS OF WORK GRADE 3 TERM 2 UNIT 3 ASPECTS OF JAMAICAN CULTURE

Focus Question 3: How Has the Jamaican Culture Evolved?	
Attainment Target(s):	Objective(s):
 Music Listen and appraise music to develop an understanding of musical elements Perform varied repertoire of music for an audience 	 Recognize musical elements such as pitch, timbre and dynamics when learning and performing cultural songs Explore how traditional/cultural music has changed over time Perform music sequence to an audience
 Use technology to design and produce multimedia products to demonstrate their creative thinking 	Use ICT tools to create presentations on various aspects of the Jamaican culture
Social Studies Recognize the contribution of individuals who have helped to shape Jamaica's development over time	 Understand how individuals from Jamaica's culture have contributed to its development over time Examine how the Jamaican culture has evolved Identify ways in which they can individually or collectively influence culture
 Language Arts Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Use deduction and inference to interpret information and ideas and to predict outcomes Write sentences which are grammatically accurate and correctly punctuated, using SJE and JC appropriately 	 Write sentences about the changes in some aspects of our culture over the last fifty years, e.g. dress, dance, food, etc. Draw conclusions from a given series of events about the development of the Jamaican culture
 Science Begin to understand and apply aspects of the scientific method. 	Compare the work of Jamaican scientists in the past with the advances of the present

Focus Question 3: How Has The Jamaican Culture Evolved?		
Attainment Target(s):	Objective(s):	
	Describe how science and technology has made work in the home easier	
Drama	Use creative arts to demonstrate changes within the Jamaican	
 Express a range of feelings and emotions through the enactment of dramatic scenarios 	culture	

Suggested Teaching and Learning Activities – Focus Question3 - How has the	Key Skills	Assessment
Jamaican culture evolved?		
Students will:		
Listen to a song from each set: the traditional set of Mento, Ska, Rock Steady or the more modern set of Reggae and Dancehall. Identify the genre of music and the musical elements (pitch, dynamics and timbre). Compare and list the musical instruments from both sets. Paste pictures of instruments (now and then) in scrap book showing comparisons. Choose one genre and perform a song incorporating these elements. Teacher will use hand signals to indicate high/low, loud/soft. Record both sets and playback for class discussion.	Compare musical instruments Perform a song	Musical instruments are sorted correctly Song is performed satisfactorily incorporating appropriate elements
Conduct research to find out the names of persons who have contributed to the development of Jamaica's culture over time. For example, The Honourable Louise Bennett -Coverley -folk tale/folk lore, Edna Manley-Visual Arts, Mervin Morris-Poetry, Bob Marley-Reggae Music etc. Talk about each aspect and what happened before and the changes that have taken place since. Paste a picture of the person and write a sentence about their contribution.	Conduct research Write sentences	Research conducted on given person and his/her contribution correctly matched Sentences are written correctly and properly punctuated
Listen to a recording of the poem, "If yu bright den yuh got de rightto Education" by The Honourable Louise Bennett -Coverley. Discuss what the poem means to them and write a sentence about their understanding. Interview older persons in the community to find out how they were educated. Include the materials/resources used then and compare their findings with how they are being educated today.	Discuss meaning of poem Conduct interview Write sentence	Write a sentence about their understanding of the poem

Suggested Teaching and Learning Activities – Focus Question3 - How has the Jamaican culture evolved?	Key Skills	Assessment
Discuss the importance of education and how they can influence culture by being educated. Talk about other ways that they can influence culture individually or collectively such as getting new ideas and finding new ways to solve problems/doing things. Be made aware that when people are educated they will find solutions to problems that will ensure that they do not break laws, hurt people or take away people's rights. Create a poster depicting a cultural change that has occurred or one that they would like to see in their community.	Create poster	Poster created depicts cultural change in community
Discuss the type of medicinal plants used in the home as a remedy for certain illnesses, such as cerasee - belly ache; castor oil – toothache; tamarind leavesmeasles, fever grass – cough and cold etc. Describe situations in which they have to be taken to the doctor/clinic/hospital when these plants do not work to get antibiotics and other types of medications. Write a story about themselves a doctor/herbalist.	Discuss Write story	Story written reflects their understanding of who is a doctor/herbalist
Listen to a resource person talk about how families had to cooperate with each other to get things done in the home. Observe pictures of various activities that contributed to this. For example, cleaning the house, watching a movie, listening to the radio, cooking, eating together, washing etc. Talk about how their family cooperate with each other to get things done in the home. Talk about the advantages and disadvantages of the evolution of science and technology on family life. For example, communicating via text message instead of face to face contact.	Listen to resource person Observe pictures Talk about activities done in the family	Report orally two things that they have learnt about how families cooperate with each other in the past
Listen to poem "Tan-up Seat" by The Honourable Louise Bennett -Coverley. Discuss the type of transportation mentioned in the poem and say what replaces it today for example tramcar – train. Work in groups to write poems, songs, skits depicting the evolution of transportation in Jamaica. Rehearse pieces and perform for recording and class critique.	Compose poems/songs/skits	Poems/songs/skits composed are appropriate to the topic

- ✓ Sort musical instruments
- ✓ Perform song satisfactorily incorporating appropriate elements
- ✓ Conduct research on given person and his/her contribution to the Jamaican culture
- ✓ Construct proper sentences with appropriate punctuation marks
- ✓ Write a sentence about their understanding of the poem 'If yuh bright den yuh got de right--to Education' by The Honourable Louise Bennett -Coverley
- ✓ Create Poster depicting cultural change in community
- ✓ Write story to reflect their understanding of who is a doctor/herbalist
- ✓ Give an oral report about two things that they have learnt about how families cooperate with each other in the past
- ✓ Compose poems/songs/skits appropriate to the topic

Points to Note

Teacher will explain the following terms to students:

 pitch (high or low), dynamics (loud or soft) and timbre (describing the timbre by naming the instruments used in the song).

Incorporate the following during explanations of things done in the home back then:

coal/tailor iron, coal stove, radio, television, coconut brush.
 Talk about the pictures and say what is used to replace them now.

Extended Learning

Interview older persons in their family or community about life in the past

Research the life of Ranny Williams

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 INTEGRATED STUDIES TERM3 - UNIT1

Prior learning

Check that students can: Tell that they are living beings

UNITS OF WORK GRADE 3 TERM 3 UNIT 1

Living and Non-Living Things in my Environment

Focus Question 1: How can I tell if something in my environment is living?		
Attainment target(s):	Objective(s):	
• Science	 Differentiate between/categorize living and non-living things Identify the basic characteristics of living things (move, grow, reproduce, breathe) 	
Explore the environment in order to relate everyday experiences to simple scientific concepts and processes	 Observe changes that occur to a seed as it germinates over a period of time Make inferences and draw conclusions about the requirements for the survival of plants and animals 	
Religious Education Demonstrate an awareness of some of the ways in which religion influences changes in the lifestyles of persons within society	Discuss sacred stories that depict how living and non-living things were affected by changes in the environment - The Creation Story, Noah and the Ark	
Math Interpret data presented in simple tables,	Estimate, measure and compare units of measure of plants and other living things in the environment	
pictographs and bar graphs using horizontal or	Present information using graphics	
vertical representation.	Use tally marks to record data (where appropriate)	
Represent and interpret numerical/pictorial data	Present information about living things using simple charts and graphs.	
Social Studies	Identify and know the basic needs of living things	
Develop an understanding of the	Prove that plants and animals are living things	
interdependent relationship between man		
and his environment		

• Music	Select the appropriate instrument, concentrating on pitch and rhythm to illustrate the
Identify, create, and respond to sounds of living	character of the animals of their choice in song composed
things in the environment	Use classroom instruments and voice to reproduce the sounds made by some living things
Physical Education	
Successfully demonstrate motor movements	Move their bodies in response to different environmental stimuli, e.g. a light breeze, flowing
appropriate to the grade level	water (like a flowing stream/river), loud thunder, a
• Change rhythm, speed, direction of movements and develop spatial awareness	flash of lightning, sound
Language Arts	Talk freely about observations.
	Read fiction and nonfiction books about living and nonliving things
• Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively	Generate own sentences using techniques that show the relation between sentences
 Apply relevant decoding skills to the reading process 	 Develop paragraphs that show the relationship between the sentences, conveying meaningful and relevant ideas Select and use appropriate punctuation marks
Write well-constructed paragraphs or	
sentences which have linking sentences within and between them	
 Develop approaches to the writing process 	
to enable them to organize their ideas into a coherent structure , including layout, sections and paragraphs	
Use a range of punctuation correctly	

Visual arts Plan and design	Create monoprints of living things found in the environment
Resource & Technology AT 2: Explore Methods and Procedures- Use simple materials, tools and equipment to develop skills in cutting, assembling and decorating.	Use a variety of artistic forms to represent relationships between people, animals and plants
• ICT	Use software applications to create digital stories about living and non-living things in their environment
 Communication & Collaboration Use selected ICT tools (e.g., drawing tool, word processor, presentation software, graphic organizers) to communicate information Designing & Producing Use selected ICT tools effectively to produce multimedia presentations to include text, images, shapes and narrations, e.g., create stories, poems, cartoon strips, etc. Digital Citizenship Demonstrate safe, respectful, and responsible online communication when using class email and social media 	Collect pictures using an image capturing device
• Drama	Perform piece to effectively portray three main characteristics of living things
Respond critically and aesthetically to a variety of stimuli through dramatic presentations	

Suggested Teaching and Learning Activities – Focus Question 1	Key Skills	Assessment
Students will: Go on a field trip in groups to observe the various	Observe living things	
living or non-living things (insects, lizards, plants/ stones, dead leaves, twigs) in the environment/	Use device	
school yard. Use an image capturing device to capture pictures of living and non-living things being	Brainstorm	
observed. Brainstorm what is a living and non-living thing, categorize into plants animals. Write	Categorize living/non-living	Definition correctly written
definition of what is a living thing. Share definition with class.	things	Objects/pictures sorted correctly
Construct a poster with two columns living non-living. Examine various items/pictures (non-living; living). Sort objects or pictures into living and non-living. Post pictures under correct heading Living	Construct chart Examine pictures Sort objects	
/Non- living.		Characteristics identified correctly
View video clip / Listen to/Read the story "The Greedy Dog" and list the characteristic/s that shows the basic characteristics of living/non-living things.	Listen for information List characteristics	Performance clearly demonstrates characteristics
Discuss and list the characteristics that indicate that something is alive or living. Perform a creative piece	Perform creative	Four common characteristics accurately described
that depicts the characteristics of a living thing.	piece	Measurement accurately recorded
Write in their journals a brief description of	Write	Journal entries accurately recorded
the four common characteristics of the things in each category.	descriptions	Journal entries accurately recorded
Select three peas or corn seeds, and place in a transparent container with moistened paper. Make	Investigate	Data accurately represented

predictions about how tall / high they think their peas	Record	
or corn seeds will grow and how long it will take to		
reach this height. Record the changes in the seeds	Predict	
over the next 10-14 days by measuring the		
roots/height. Or use image capturing device to	Measure	
capture images of each change. Measure the growth		
of the plant every two days. Record measurements	Write a Journal entry	
in log book. Make journal entries (manual or	Discuss	
electronic) about observations. Once peas or corn	Compare	
seeds have grown to the required height, discuss their	Construct	
findings and make comparisons between actual	bar/pictograph	
growth rate and their predictions. Represent data		
from observation of plant growth on a		
pictograph/bar graph.		
Interpret data and draw conclusion and share with	Interpret data	Data interpreted correctly
class	Draw conclusion	
Write sentences using SJE /answer questions in	Write sentences	Sentences constructed correctly
relation to their specific graph		Questions answered correctly
Using appropriate device/tools, create a sound	Create sound picture	Picture sounds satisfactorily created
picture depicting environmental sounds that		
describe living things e.g. animals/insects. Compare		Songs adequately depict sounds of living things
the living things described in the music with the		
sounds used.		
	_	
Respond to questions such as: How does the music	Perform movements	Pupils respond satisfactorily to questions
help us imagine its size, how it moves, what it looks		
like, how it behaves?		
Perform an increasing variety of simple songs and	Perform simple songs	
sound pieces with attention to correct rhythm, pitch,		
phrasing, articulation and expression. They sing in		
tune with a sense of expression.		

Perform various movements in response to different sounds. Discuss with the teacher what they need to do in response to the different sounds and the movement made.	Perform movements	Movement adequately represent sounds
Working in small groups manipulate playdough, scissors and paper- mache. Plan, design and create 3D models showing the environment with living and non-living things. Share models with the class.	Manipulate learning materials Create 3D model	3D models satisfactorily created to represent models of non-living things
Discuss the creation story in class. In groups, make a diorama of the creation story in sequential order. View and critique diorama.	Discuss stories Create diorama Sequence events Critique diorama	Diorama adequately represents the sequence of story events

Students will be able to:

- ✓ Distinguish between living and non-living things
- ✓ Categorize and classify living things
- ✓ Conduct experiment, make predictions, record observation draw conclusion on the growth of seeds.
- ✓ Perform movements that show how living things move
- ✓ Construct graph and interpret data on the graph
- ✓ Write properly constructed sentences and paragraphs in their journals

D	air	+-	+~	NI.	ote:
М	nır	ITS	TO	IV	Te:

Students must be made aware that all living things are created for a purpose. Therefore, they should take care of living things in the environment.

Extended Learning

Create a Science Digital story entitled "Living Things in my Environment"

Research who are botanists and zoologists.

Read books or watch videos based on living things

Prior Learning:

Check that children can:

Distinguish between living and non-living things

UNITS OF WORK GRADE 3 TERM 3 UNIT 1

Living and Non-Living Things in my Environment

Focus Question 2: Why do living things need specific habitats?		
Attainment Target(s):	Objective(s):	
• Science	Compare and contrast a given group of animals and their habitats.	
Explore selected life processes in humans, the		
interdependence between living things in the	Collect information from a variety of sources about special habitats of living things	
environment, and how lifestyles determine health		
and well-being in humans.		
Religious Education	Outline the responsibilities of humans to have dominion and make provisions for habitats for	
Learning how religion influences change	animals	
Demonstrate an awareness of some of the ways in	Respond to characters or situations in religious stories to living things and their habitats	
which religion influences changes in the lifestyles	 Identify that animals and plants were created by God to survive in specific habitats 	
of persons within society		
Mathematics	 Identify geometric shapes in natural and man-made objects 	
Collect, organize, interpret and represent data and	 Collect and record attributesdata, relating to living things in their different habitats. 	
make inferences by applying knowledge of	Use different units of measure, estimate, measure and compare living things in their	
statistics and probability	environment	
	Construct simple charts or graphs to illustrate which geometric shapes are prevalent in	
	the habitats of living things	

Social Studies	Differentiate between plants and animals of different habitats.
Develop an understanding of the interdependent	 Explain why we need to preserve the natural habitats of living things in the environment.
relationship between man and his environment	Participate in ways and make suggestions to mitigate against harm and neglect to their
relationship between man and his environment	immediate environment at school
	Collect information from a variety of sources (about special habitats of living things).
• Civics	
	• Appreciate that the habitats of living things in the environment must be cared for and given
Demonstrate awareness of the ways in which the	respect in order to preserve them.
Jamaican identity is shown through interactions	• Learn that in order to successfully thrive, living things need to live in their natural / normal
with, and responses to, the environment and	habitat
natural hazards	
• Music	Utilize rhythm and melody to create a song about animals and their habitats
Create musical compositions exploring varied	Select the appropriate instrument, concentrating on pitch and rhythm to illustrate the
elements of music	character of the animals of their choice in song composed
Physical Education	Practice individual techniques in ball skills
Develop the understanding and skills that support	Demonstrate the importance of following rules and working collaboratively when
healthy, safe, and active individuals	playing games
Language Arts	Spell words appropriate to grade, related to habitats
	Share ideas and feelings about situations related to animals and their habitats.
Communicate with confidence and competence	Research information from a variety of sources about specific habitats of living things and
for different purposes and audiences, using SJE	document in a journal.
and JC appropriately and creatively	Sustain expression in SJE.
,	Use structural analysis, to understand vocabulary and communicate ideas relating to living
Research activities on issues and interests by	things and their habitats
generating ideas and exploring texts using a range	Make factual statements about the physical environment (e.g. Pollution, natural and man-
of strategies	made resources, habitats)
	Write to share ideas and feelings on what they have observed (on the habitats of some
Develop approaches to the writing process to	animals).
enable them to organize their ideas into a	
coherent structure, including layout, sections and	
paragraphs	
Visual Arts	Identify basic shapes, forms, colours and textures observed in the physical environment.
AT1 – Create and innovate	 Design and create displays depicting how they care and protect habitats
AT2 – Plan and design	200.5.1 and dicate displays depleting now they care and protect habitats
AT3 – Appreciate and respond	
ICT	Incorporate the use of image-capturing devices to create a photo journal of habitats of living
Use appropriate digital tools and resources to plan	
	thing
and conduct research, aid critical thinking, manage	
projects, solve problems and make informed	

decisions.	
• Drama	Demonstrate how to use facial expression and body gestures to convey how an animal would
Explore and create, exercising critical thinking skills	feel if removed from its natural habitat
throughout the dramatic process	
• R&T	Use the principles of line, shapes, colours and textures in nature to produce models of
Use simple materials, tools and equipment to	different habitats
develop skills in cutting, assembling and	Plan, design and create a habitat for an animal of their choice
decorating.	

Suggested Teaching and Learning Activities –	Key Skills	Assessment
Focus Question 2	,	
Pupils will: Make 3D models depicting living things and their habitats. Utilize discarded materials to create the habitats. Discuss the use of lines, shapes, colours, textures in their models and suggest ways in which the designs could be adapted to suit the available materials and the type of habitat to be created for the model.	Create 3D models Discuss elements cart	Models satisfactorily created and disscussed
Participate in the game "Bull in the Pen". Discuss the various types of materials needed to build a pen to keep in a ferocious bull.	Discuss materials needed	Materials for building adequately disscussed
Select three or four living things and investigate the habitats that they live in. (eg. lizards, human, worms, crocodiles, ants, dogs, butterflies, fish, etc.) Use any image-capturing device to document what the habitat looks like. These habitats may be found in trees, on leaves, in soil or in houses. Pupils will write and share their findings on the habitats through their photo journal in a class display.	 Manipulate image capturing device Write information in journal 	Images captured and displayed creatively in a photo journal Written findings reflect accurate knowledge of relevant habitats
Go on a field trip (nature walk) and count animals found on vegetation. Tally numbers of the different types of animals and record where they were found (on trees, grass, holes or water, etc.). Discuss why particular animals are found in specific locations (indigenous) and write a brief description using SJE (1 - 3 paragraphs) on why a particular location was beneficial to the named animal.	CountingTally different types of animalsDiscuss	Animals successfully tallied and paragraphs proficiently written

Suggested Teaching and Learning Activities – Focus Question 2	Key Skills	Assessment
Create and perform a dramatic piece to convey how a selected animal would behave if removed from its habitat and placed in an unsuitable area. Include in the dramatic piece an original song that depicts the plight of the animal that is removed from its habitat, its feelings, and mannerism, etc. Also, the piece should explain why it is necessary for that particular animal to remain in its habitat. Emphasis should be given to the fact that the habitats were created for a particular reason by the Creator. In groups, discuss how animals would react if removed from their particular habitats. (eg. a fish taken from the sea and put in a tank)	Communicate ideas through performance piece • Create song	Song included was appropriate and relevant Group disscussion accurately depict animal behaviour
In groups, do a project on how the habitats of people in different parts of the world are different from their own, and report findings to the class in a display. Choose countries such as Botswana, Alaska, India etc. Pupils will create a 3D model of that habitat. A narrative should accompany the display, which will speak to the country that the habitat is found in, the number of persons that can live in the habitat, the kind of climate experienced in that country as well as the kind of material used to build the habitat. (eg. Alaska – igloo – made of ice).Incorporate the vocabulary words and appropriate structures of grammar in writing the narrative.	 Research habitats of the world Create 3D model Report findings 	Creativity was evident in the creation of the models Report adequately reflects an ubderstanding of a variety of habitats and utilises appropriate grammatical structures Models satisfactorily represent the habitat being depicted
Talk about humans as living creature and how they need to have exercise to balance their lifestyles and for healthy living. Use the playground to demonstrate an adaptation of the game "Blue bird, blue bird in and out the	Manipulate ball Work cooperatively	Game creatively adapted to reflect an understanding of a variety of habitats

window"using the different animals and their habitats. Eg. "Lizard, lizard on and off the tree limb" etc. Pupils will work cooperatively in groups to play the game and incorporate the use of a ball as they sing and move to the game.	Disscuss information	
Pupils will be given the opportunity to investigate habitats in and around their community. They will then construct simple charts or graphs to illustrate which geometric shapes are prevalent in the habitats they have investigated. (Eg. dog kennel has rectangles and squares, a beehive has hexagon shapes). Each child will do a sketch of their favourite habitat.	 Investigate habitats Construct charts or graphs Sketch habitats 	Geometric shapes were well documented on charts/graphs Habitats appropriately selected Sketches satisfactorily represent favourite habitat
Listen to and discuss the story the "Bermen Town Musicians" or other suitable story. Disscuss and describe the habitats of these animals and why their habitats are ideal for them. Create a sound collage of the sounds of the animals in the story.	ListeningCreating.sounds	Sound collage creatively done

Students will be able to:

- ✓ Understand that in order to successfully thrive, living things need to live in their natural / normal habitat
- ✓ Use the principles of line, shapes, colours and textures in nature to produce a mobile of different habitats
- ✓ Use facial expression and body gestures to convey how an animal would feel if removed from its natural habitat
- ✓ Recognize the meaning of the word in relation to indigenous animals that are only found in specific parts of the world.
- ✓ Appreciate that animals and plants were created by God to survive in specific habitats
- ✓ Plan, design and create a habitat for an animal of their choice
- ✓ Recognize that animals and plants adapt to their different life / climatic zones
- ✓ Develop individual techniques and team tactics to direct the ball towards the target area and away from their opponent.
- ✓ Use untuned and tuned instruments to recreate the sounds made by specific living things
- ✓ Communicate and collaborate safely and responsibly online via class/school page

Points to Note

Ensure all safety rules are observed when dealing with plants and animals.

Discuss both natural and man-made homes of animals.

Different type of homes around the world: igloo, tepee, wigwam, loghouse, chickee, log cabin, stilt house, mud hut, castle, houseboat, lighthouse, mobile home, cave, penthouse.

Extended Learning

Reading great literature books and watching animal documentaries are great ways of promoting self learning.

Research the various types of habitats there are, freshwater, marine, terrestrial etc Research houses in Jamaica and around the world.

Prior Learning:

Check that students can readily identify living things around them and in literature. Ensure that they are familiar with some of the habitats of living things that they have explored

UNITS OF WORK GRADE 3 TERM 3 UNIT 1

Living and Nonliving Things in my Environment

Attainment Target(s)	Objective(s):
Explore the environment in order to relate everyday experiences to simple scientific concepts and processes Religious Education	 Identify ways in which the physical environment has changed over time with different places (locally, nationally and internationally) Identify the effects that changes in time and seasons have on living and on non-living things Make inferences/draw conclusion about the effects of various environmental changes on living and non-living things Discuss the importance of proper disposal of waste. Discuss Biblical stories of how living and non-living things were affected by changes in
Recognize that Religion contributes to shaping our identity and guiding our understanding of the meaning and purpose of life	the environment.
Mathematics: Collect, organize, interpret and represent data and make inferences by applying knowledge of statistics and probability Demonstrate an awareness of time in relation to occasions or events	 Use tally marks to record data (where appropriate) Use bar/line/picture graph to present data. Read a calendar and match seasonal changes to time of year.

Focus Question 3:

 Develop an understanding of the interdependent relationship between human beings and their environment. Demonstrate an understanding of the need to care for the environment. 	 Illustrate using drawings and/or models, ways in which humans benefit from living and non-living things in their environment. Roleplay scenarios that show how the environment is impacted positively and negatively by humans. Explore to find evidence to support the need to care for living and non-living things in the environment.
Civics: • Cultivate and maintain a sense of social responsibility	 Explore the meaning of social responsibility Interpret evidence gathered from observing the environment based on an agreed meaning of social responsibility Reflect on personal behaviours that support caring for the environment as a member of a group or community. Demonstrate with increasing ease/fluency, responsible ways of using non-living materials in their community/parish. Practice with increasing consistency, behaviours that are associated with social responsibility.
 Create musical compositions exploring varied elements of music 	Use elements of music to perform simple musical stories that are based on the effects of environmental changes.
Develop an understanding about how our bodies move, why we move our bodies, in particular ways and what happens to our bodies when we move.	 Alter movement of the body in response to various simulations of environmental stimuli (e.g. Fast moving cricket ball, musical sounds, a hurricane, an earthquake, rain falling, howling wind, sweltering heat of the sun etc.)
 Communicate with confidence and competence for different purposes and audience, using SJE and JC appropriately and creatively. Use deduction and inference to interpret information and ideas to predict outcomes Research activities on issues and interests by generating ideas and exploring texts using a range of strategies. Write to narrate, to persuade and for a range 	 Talk freely about observations Generate own sentences using plurals Interpret key ideas and words in text. Collect information from a variety of sources about changes that take place in the environment Write to share ideas and feelings and their observations Read and respond to characters or situations in class reader or astory.

of transactional purposes, using SJE and JC appropriately and incorporating multimedia approaches in their writing. Develop approaches to the writing process to enable them to organize their ideas into a coherent structure, including layout, sections and Paragraphs Write sentences which are grammatically accurate and correctly punctuated, using SJE and JC appropriately. Develop phonemic awareness and use knowledge of letter-sound correspondences in order to decode unfamiliar words	
Plan and design	 Plan, design and create 3D models from items that show environmental changes Use Art as a medium for personal creative expression, communication and emotional release.
 Use appropriate digital tools and resources to plan and Conduct research, aid critical thinking, manage projects, solve problems and make informed decisions. 	 Use technology to communicate ideas and information and work collaboratively to support individual needs and contribute to the learning of others. With teacher's assistance, conduct on-line research to aid in class presentations. Choose from various software applications and create poems with images, design commercials, etc. related to content
Use simple materials, tools and equipment to develop skills in cutting, assembling and decorating	Cut, paste and assemble items that show environmental changes
 Express a range of feelings and emotions through the enactment of dramatic scenarios Appreciate and critique dramatic works 	 Create and perform an aesthetic piece to depict the effect of environmental changes on lives Critique and respond to group presentations

Suggested Teaching and Learning	Key Skills	Assessment
Activities – Focus Question 3		
Students will: Individually or in groups, discuss the changes they have observed in their surroundings (home & school) that have affected them negatively or positively. Using SJE give reasons in a paragraph, as to whether they think these changes were caused by living and/or non-living things.	Observe changes Infer reason for changes Write paragraph	Inferences made satisfactorily
Do an online/offline research on specific environmental changes, the causes of these changes and their effects. Share information with class in ways of their choice.	Research Communicate Information	Cause and effect of changes identified Satisfactorily
In groups, construct tables showing time/seasonal changes that affect living/non-living things in the environment. E.g. June to November – hurricane/storm. Share information in variety of ways.	Construct tables Communicate information	Tables present information accurately
Select a site that has experienced some physical change (e.g. area damaged by a fire, or by flooding), use image capturing	Observe site Record observation Write report Label pictures	Information reported accurately Pictures labelled correctly
device to record changes observed. In groups, write or use ICT tools to make reports on observations. Share reports and discuss how the change might have affected living/non -living things at the site visited. Label and display pictures and reports on display board.	Label pictures	Infrences about the impact of change logically made
Collect objects from the site that show the effect of changes in the environment e. g. A burnt stone, wood, toy. In groups, use objects collected to construct a 3D assemblage	Collect objects Construct and display Assemblage	Assemblage constructed creatively and represents a logical presentation of facts

Key Skills	Assessment
Compose musical story Perform composition Evaluate composition	Musical story arranged creatively Composition performed satisfactorily
Read and discuss Bible story Dramatize Bible story	Dramatic presentation was satisfactorily done and represents an accurate understanding of the impact of environmental changes
Write fictional/non-fictional pieces Communicate ideas	Poem/story adequately details the impact of change on the chosen animal
Perform movements	Movements performed satisfactorily and represent chosen stimuli
	Compose musical story Perform composition Evaluate composition Read and discuss Bible story Dramatize Bible story Write fictional/non-fictional pieces Communicate ideas

Suggested Teaching and Learning	Key Skills	Assessment
Activities – Focus Question 3		
In groups, choose an animal/plant. Write an expository piece, explain why it is important to protect the animal/plant. Post to class page their views about the need to protect living things. Design logo, create posters and fliers to get their point across to the school community. Create and hold an advertising campaign for the protection of the specific plant/animal. Create advertisement using appropriate software. Present /perform advertisement dressed as the particular animal	Write expository piece Design logo Create poster and fliers Develop advertisement	Important information stated clearly Logo designed creatively Posters/ fliers message presented clearly Performance adequately treats with the intended message
or plant that they are advocating for. Use musical instruments to enhance performance. Select an area in the school yard or community and tally the numbers and types	Record types of garbage seen	Tally done accurately
of garbage (e.g. juice boxes, plastic containers or bags, old cans) seen, and report this information using a bar/line/pictograph. Create posters to convey the negative implications of disposing garbage improperly. When creating the posters concentrate on types of graphics used to convey meaning and use of lines, shapes and colours for best effect.	Design and create poster	Poster used graphics to convey ideas effectively
In groups, discuss and then record what effect littering and other improper disposal practices, have on living and non-living things. Compose jingles / poems about proper garbage disposal. Perform and evaluate jingles/ poems.	Discuss and record ideas Compose jingles and poems Perform and evaluate jingles and poems	Jingle/poems composed satisfactorily

.....

Students will be able to:

- identify changes in the environment
- Infer that environmental changes affect living things
- Understand the importance of proper waste disposal
- Use tally marks to record data
- Construct graph using data collected
- Use lines, shapes, colours and graphics for best effect when creating a poster on how and why we need to dispose of litter correctly
- Select the appropriate instrument, concentrating on pitch and rhythm to illustrate the character of the animals of their choice in musical story
- Understand links between and among the months of the year and seasonal changes
- Create and perform a musical story
- Understand how living/non- living things were affected by environmental changes in Bible times.
- Create 3D models using materials collected.
- Use art to express ideas
- Use digital tools to do research, communicate and design posters
- Create dramatic presentations
- Critique peers' presentations

Points to Note:

Safety of pupils should be ensured when visiting sites
Other appropriate Bible stories can be used e.g.Noah and the
Ark, Crossing of the Red Sea, Jesus Walking on the Sea, Jonah.
Also other stories such the Wind and the Sun

Extended Learning

Do a research/ project on the occurrence of hurricanes in Jamaica over a ten year period and their impact on living and non-living things in the environment

Research the development of hot springs in selected parishes

Prior learning:

Be aware of the negative and or positive impact living and non living things can have on the environment

UNITS OF WORK GRADE 3 TERM 3 UNIT 1

Living and Non-Living Things in my Environment

Focus Question 4: In what ways are living things dependent on non-living things?		
Attainment Target(s):	Objective(s):	
• Science Explore selected life processes in humans, the interdependence between living things in the environment, and how lifestyles determine health and well-being in humans	 Draw conclusions about the requirements for the survival of plants and animals Explain how the physical environment affects the ways in which people meet their basic needs Discuss how and why non-living things are important to other living things. 	
Religious Education Demonstrate an awareness of some of the ways in which religion influences changes in the lifestyles of persons within society	 Examine biblical stories and parables that show us how to live in ways acceptable by society Compare the story of The Rich Man and Lazarus to identify changes that will lead to a better society Reflect on scriptures and popular sayings that they have memorized to promote healthy lifestyles 	
 Mathematics Collect, organise, interpret and represent data and make inferences by applying knowledge of statistics and probability 	 Collect and record attribute data Use tally marks to record data where appropriate 	
Social Studies Develop an understanding of the interdependent relationship between man and his environment	 Explore the food, shelter and clothing of various culture in relation to the physical environment Understand the term dependence in relation to living and non living things Make inferences/ draw conclusions about the effects of various environmental changes on living things 	

Civics Demonstrate awareness of the ways in which the Jamaican identity is shown through interactions with, and responses to, the environment	 Discuss the concept of Jamaica, the Land of wood and water and its impact on how we live and conduct business Identify the four basic elements and their impact on how we live as Jamaicans Cite evidence of the importance of the way Jamaicans view given situations
• Music	
 Listen and appraise music to develop an understanding of musical elements Create musical compositions exploring varied elements of music 	 Analyse selected songs to conclude how our songs depict the way we view life Discuss a current issue and compose lyrics to show their feelings on the matter Perform a medley of folk songs that show depndent Jamaicans are on non living things
Perform varied repertoire of music for an audience	
Physical Education Develop the understanding and skills that support healthy, safe, and active individuals	 Explain how non-living things can be used to enhance physical Activities Develop/construct improvised equipment from non-living things
 Language Arts Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively 	 Generate own sentences using plurals. Compose their own song Interpret key ideas and words in text.
Research activities on issues and interests by generating ideas and exploring texts using a range of strategies	
• Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including layout, sections and paragraphs	
 Visual Arts Create and innovate Plan and design Appreciate and respond 	Use a variety of artistic forms to represent relationships between living and non living things

ICT Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions.	Use selected ICT tools (e.g. image capturing devices, word processor, presentation software,) to communicate information
Drama Explore and create, exercising critical thinking skills throughout the dramatic process	Identify and play a medley of Jamaican games
R&T Use simple materials, tools and equipment to develop skills in cutting, assembling and decorating	Use a variety of materials, to create two-and three-dimensional images representing relationships

Suggested Teaching Learning Activities- Focus Question 4	Key Skills	Assesment
Plan, design and create a cartoon bubble. in which each animal explains how it depends on non-living and other livings things to survive.	Design cartoon, collaborate in group setting	Cartoon accurately depicts dependent relationship between named living thing and non-living
In groups, create a story, an aesthetic piece, performance.piece(.dance,.drama,.music) to express their ideas on how their lives would be affected if non-living things were removed from the environment.	Collaborate in group and create performance pieces	Aesthetic piece conveys correct information that accurately depicts their ideas, and which makes an impact on the audience
In groups, using a variety of texts and other multi-media materials, identify and record ways in which non-living things are important to living things. Report on these.	Work cooperatively Share information	Reports produced contain valid stated relationships between living and non-living things
Read the miracle of the Feeding of the Five Thousand (Mathew 14: 14 - 21). Discuss the meaning of the Bible story and how the people in that day were dependent on the miracle from God to feed them. Write sentences in Standard Jamaican English to explain how God has made living things to be dependent on other living things and on non-living things.	Discuss information Use Standard Jamaican English	SJE appropriately used to discuss the relationship between living and non-living things in the context of the Biblical account
Go on a field trip or nature walk at home/ school and use image capturing device to capture examples of how living things depend on non-living things.	Manipulate image capturing device Organise information Classify things	Relationship between named living and non-living things clearly demonstrated in images captured Report findings accurately Use tally appropriately

Students will be able to:

- ✓ Explain how non-living things are important to living things.
- ✓ Understand the term dependence.
- ✓ Write creatively to inform audience about how their lives would be affected if when non-living things are removed from the environment.
- ✓ Explain the account of the miracle of the feeding of the five thousand and relate the same to their everyday living.

Points to Note

Ensure students operate within a safe environment when they are exploring.

The students should be supported to develop an appreciation for who they are and what they have .

Extended Learning:

Do an extensive research on Hurricane Gilbert/ Robin's Bay Flooding New Market/ Portland Cottage /Port Royal/Cave Valley / Rio Grande Valley/ Bog Walk Gorge noting the effects and lessons learnt .

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 INTEGRATED STUDIES TERM3 - UNIT2

Prior Learning

Check that students can:

Use with increasing competence the skill of observation in exploring things in the environment

UNITS OF WORK GRADE 3 TERM 3 UNIT 2 Caring for my Environment

Focus Question 1: What Is My Physical Environment?		
Social Studies Demonstrate awareness of the ways in which the Jamaican identity is shown through interactions with, and responses to, the environment and natural hazards	 Objective(s): Infer what is meant by the physical environment. Explain why it is important to protect the physical environment. Identify ways in which the physical environment has changed over time, in different places (locally). Explain how the physical environment affects the ways in which people meet their basic needs. 	
Religious Education Display an appreciation of some of the beliefs, practices and expressions of persons from different religious faiths Recognize that religion contributes to shaping our identity and guides our understanding of the meaning and purpose of life	 Research and identify Biblical references that speaks about the physical environment Respond to characters or situations in religious stories relating to living things Identify the Creator of living and non living things Identify the Creator of the physical environment 	
MusicPerform varied repertoire of music for an audience	Create sound picture depicting environmental sounds	

Focus Question 1: What Is My Physical Environment?		
	 Describe the physical environment using dub poetry format Sing and perform songs related to the environment Appreciate that the difference in pitched sounds creates a variety of moods and feelings in music 	
Physical Education Apply strategies appropriately; demonstrating an understanding of the different components of a variety of physical activities in order to enhance their ability to participate successfully in a game	 Design and create 3D models of playing surfaces (netball court and football field Demonstrate awareness of personal and shared space in the physical environment Be aware of their own safety and that of others during physical activity 	
Language Arts Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively	 Spell words appropriate to grade, related to the physical environment Use structural analysis, to understand vocabulary and communicate ideas relating to the environment. 	
Visual Arts Create and develop	 Create three-dimensional models to depict living things in their environment Illustrate pictorially, examples of scenes from the environment. Use shapes and colours to describe features of the physical 	

Focus Question 1: What Is My Physical Environment?		
Plan and design	environment	
Drama Explore and create, exercising critical thinking skills throughout the dramatic process	 Use movement to depict life processes Use a variety of artistic forms to represent relationships between people, animals and plants Appreciate how sound and colour can act as a stimulus for creativity of dance and drama 	
Mathematics Explore ideas of points, paths, lines, shapes and relate these to objects in the environment	 Measure the dimensions of different kinds of shapes in the classroom. Make sketches and record measure of each shape Compare shapes to identify differences and similarities in terms of height, width and angles. Identify circles, squares, rectangles and triangles in the environment. Identify and create simple patterns found in the environment 	
• ICT Use appropriate digital tools and resources to plan and conduct research to aid critical thinking, manage projects, solve problems and make informed decisons	Use image taking device to record scenes and objects which reflect organic and geometric shapes in the environment.	
Science Explore the environment in order to relate everyday experiences to simple scientific concepts and processes.	 Make factual statements about the physical environment (e.g.pollution, natural and man made resources, habitats) Demonstrate an awareness of the harmful effects of land,air,and water pollution. Classify things in the physical environment (natural, manmade, etc.) 	

•	Discuss the role of the senses in detecting the condition of the physical environment
	physical environment

Focus Question 1: What Is My Physical Environment?	Key Skills	Assessment Criteria
Suggested Teaching and Learning Activities		
Students will: Research using online or offline sources about 'physical environment' from the resource centre. Make journal entry (electronic/ non-electronic) with sentences about the physical environment. Generate a definition for the physical environment. Identify five things that they see, hear, smell and feel in particular places in their home, school or community and discuss how their senses help them to detect the condition of the physical environment. Collect pictures showing the physical environment and make a flip book to display them.	 Research online and offline Make observations Collect pictures Make flip book Discuss ideas 	The physical environment satisfactorly explained in online/offline research. The role of the senses in detecting the condition of the physical environment discussed adequately
Classify things around them as natural and man-made. Write sentences about the natural and man-made objects in the physical environment. Discuss (using SJE) how these are different /similar, and make a table stating the comparisons. Read text, research online, etc. to find information on what is a resource (persons, places, things). Create 'resource' word bank. List six things in the environment that can be classified as resources.	 Classify objects Make comparisons Create tables Create word bank 	Natural and man-made objects listed, classified and compared satisfactorly "Resource" word bank accurately compiled Resources correctly identified

Focus Question 1: What Is My Physical Environment?	Key Skills	Assessment Criteria
Suggested Teaching and Learning Activities		
Use a series of moving pictures or mime to tell a story about the life of either a plant or an animal, paying keen attention to the challenges the life forms may experience from man-made or natural disasters. Create an improvisation about their physical environment using one word and a coloured object as a prop. As a major class project help in improving the physical environment of their school by enlisting assistance to plan, design and construct a fish pond. Use recycled bottles, sand, stones and cement /board, wire as construction materials.	 Create moving pictures or mime Improvise in making props Construct fish pond 	Story about plants and animals in disaster adequately related through mime/moving pictures Improvisation creatively presented. Assistance willingly provided in construction of fish pond. Projects creatively executed
Work in groups to select a resource from the natural environment (sand, beads, coconut shell etc). Design a plan on how to develop a product from the selected natural resource. Develop a simple proposal to generate funding for their product (transportation, materials etc). Design a persuasive advertisement/poster to sell the product. Focus on use of lines, shapes, colours and graphics to convey key messages.	Develop proposalDesign graphics	Proposal satisfactorily developed
Work in groups on a project to find as many examples in the Bible as they can, of ways in which the Bible tells us how to take care of the environment. Share their findings with the class. Examine stories, pictures and other visual materials on life in different physical environments (various climatic types), as well as their own, and note the similarities and differences in the way people satisfy their need for food, shelter, clothing (basic needs). Draw conclusions about how the physical environment affects the ways in which people meet their basic needs and report these in a brief description. Create digital slideshow showing ways in which people meet their basic needs, or use teacher generated web quest to explore and gather information	 Research (using the Bible, pictures and other visual material) Create-digital slide shows 	Basic needs correctly identified in Bible research. Meeting of basic needs in different climatic zones correctly identified in/through stories, visual materials, and digital slide show or web quest.

Focus Question 1: What Is My Physical Environment?	Key Skills	Assessment Criteria
Suggested Teaching and Learning Activities		
about how the climatic type affects the way they meet their physical needs.		
Work in groups to play the following or similar games to enhance their understanding of the physical environment. Students can assist the teacher in preparing the classroom beforehand. Game 1: Follow a trail marked by arrows, or a long piece of string that goes round the classroom. Find an object, picture or shape on the trail, that matches the pictures on the check sheet. Classify/describe each object/picture found as living or non-living, man-made or natural, resource or product. Name the shape (s) found (triangle, square, rectangle, circle, etc.). Measure and record the sides of the shapes (circumference of the circles) and for each, name an object/structure in the physical environment that has the same shape.	 Work in groups Match objects Classify objects Match shapes Measure shapes 	Objects in trail correctly matched with pictures on check sheet Objects correctly classified Shapes correctly named, measured and matched with an object/structure in the physical environment
Game 2: Work in groups to see how many things you can rescue from an imaginary 'river' without putting any part of their body, including their hands, into the 'river 'area. The river is marked by two lines (rope or benches). Only use the equipment found on the river bank to help in the rescue, <i>e.g. skipping ropes, cricket bats,tennis racket, etc.</i> Work as a team to get everything out. The winning team is the one that gets the items out in the shortest time.	Work in groupsSolve a challengeManipulate objects	Teamwork satisfactorily shown
Discuss the effects of a high incidence of solid objects in the river and other ways the river could be polluted. Suggest ways in which water, air and land pollution can be prevented.	Discuss causes and effects	Ideas on pollution satisfactorily presented

Focus Question 1: What Is My Physical Environment?	Key Skills	Assessment Criteria
Suggested Teaching and Learning Activities		
Create a dance depicting a fish in a polluted river and another dance of a fish in a river that is not polluted. Discuss why it is very important to protect the physical environment.	Create a dance	Dance adequately portrays behavior of the fish in the favourable and unfavourable environments
Create a sound collage/picture depicting environmental sounds. Change the pitch of the sounds to depict a change from a healthy to an unhealthy environment. Create dub poetry to capture the events and compose a song to tell the story.	Create sound collageCompose a songCreate dub poetry	Sound collage adequately depicts environmenmtal sounds Dub poetry and song adequately portray change in the environment
Discuss ways in which the physical environment is altered by humans for housing, manufacturing, recreation, etc. Design and create a 3D model of a house or complex.	• Create 3D models	Discussion adequately describes adjustments Model of house/ complex satisfactorily created

Students will be able to:

- ✓ Research facts about the physical environment using on-line and offline sources
- ✓ Discuss the role of the senses in detecting the conditions in the physical environment
- ✓ Set up displays using visual representations of the physical environment
- ✓ Classify objects in the physical environment (man-made, natural, living, non-living, etc.)
- ✓ Create a resource word bank
- ✓ Use moving pictures/mime to simulate the life of a plant or animal
- ✓ Develop a product from the natural environment
- ✓ Cite Biblical examples of the care of the environment and satisfaction of basic needs
- ✓ Explore how climatic conditions affect how people meet their basic needs

- ✓ Use a game to identify shapes in the physical environment and measure dimensions of samples of shaped materials
- ✓ Discuss the effects of water, air and land pollution
- ✓ Create a dance to depict aquatic life in clean and polluted environments
- ✓ Create a sound collage, dub poetry and song to depict environmental sounds and change in environmental conditions
- ✓ Discuss ways in which the physical environment is adjusted by humans
- ✓ Design a 3-D model of a football/netball field

Points to Note:

The ability of students to work in groups should be nurtured as they explore concepts about the physical environment

Encourage creativity and originality in the artistic pieces the students produce

Extended Learning

Organise and execute plans for a school wide project to create and mount posters encouraging responsible environmental behavior

Children read stories about caring for the environment

Prior Learning

Check that students can:

Tell where different things live/occur in the environment.

Differentiate between good and bad practices in the environment

UNITS OF WORK GRADE 3 TERM 3 UNIT 1

Caring for my Environment

Focus Question 2: Why and how should we care for our environment?		
Attainment Target(s):	Objective(s):	
• Science Explore selected life processes in humans, the interdependence between living things in the environment, and how lifestyles determine health and well-being in humans.	 Demonstrate an awareness of the harmful effects of land, air and water pollution Discuss and practise conservation of resources, e.g. water and electricity. Understand why recycling of products can help the environment. 	
• Religious Ed Demonstrate an awareness of some of the ways in which religion influences changes in the lifestyles of persons within society	Explain the role of mankind towards his Creator(s) in caring for the physical environment	
Math Collect, organise, interpret and represent data and make inferences by applying knowledge of statistics and probability	Construct graphs to represent data eg. bar graph	
Social Studies Develop an understanding of the interdependent relationship between man and his environment	 State the importance of protecting/caring for the environment. Explain how the care of the physical environment affects the ways in which people meet their basic needs Identify ways in which people can improve their immediate environment 	

Attainment Target(s):	Objective(s):
• Civics Demonstrate awareness of the ways in which the Jamaican identity is shown through interactions with, and responses to, the environment and natural hazards	Appreciate ways in which we can take care of the environment within the school and community.
• Music Listen and appraise music to develop an understanding of musical elements	Use varied music expressions to convey emotions and creations
 ◆ PE Develop the understanding and skills that support healthy, safe, and active individuals 	 Demonstrate awareness of the safety of self and that of others during physical activity
Language Arts Use and adapt a range of sentence structures according to context, distinguishing between SJE and JC Use deduction and inference to interpret information and ideas and to predict outcomes	 Develop and use relevant vocabulary to describe, discuss or evaluate aesthetic pieces, informational material and other material. Make inferences based on background knowledge and clues from the text
Visual Arts Create and Innovate Plan and Design	 Design and create displays depicting care and protection for the environment (classroom based project). Use drawings and paintings to highlight the harmful effects of the different forms of pollution in our environment.
• ICT Use digital tools to design and produce creative multimedia products to demonstrate their learning and understanding of basic technology operations.	 Communicate ideas and information about care and protection of the physical environment, using information and picture from the internet. Use online and offline sources to conduct research on, importance of reuse, recycle, reduce; and types of pollution.

Focus Question 2: Why and how should we care for our environment?				
Attainment Target(s):	Objective(s):			
Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions.	Use class email/text to communicate views about caring for the environment			
Use technology to communicate ideas and information, and work collaboratively to support individual needs and contribute to the learning of others.				
Drama Express a range of feelings and emotions through the enactment of dramatic scenarios	Role play to demonstrate ways in which we can care for the environment			

Focus Question 2: Why And How Should We Care For Our Environment?	Key Skills	Assessment
Students will: Listen to and read the stories, "The Boy and the Dyke", "Crossing Over the Gully" or other stories relating to caring for the environment. Discuss the lessons taught by each story, and list ways in which the characters in each story cared for the environment. Create checklist on possible ways of caring for the environment. In groups, select a character and use the checklist to rate how the character cared for the environment. Share with e-pals, via class email/school web page, their views about caring for the physical environment. Talk about how people in their community care for the environment and how they can help.	Read stories Discuss views Create checklist Write emails/texts	Views expressed satisfactorily Checklist created satisfactorily

Focus Question 2: Why And How Should We Care For Our Environment?	Key Skills	Assessment
Discuss, using SJE, words and concepts relating to caring for the environment, and add words about the environment to the class word bank. Have a hat debate about measures that can be put in place to reduce the effects of a flood, pollution or other preventable disaster e.g. keeping drains and gullies clear. Compose song/poems/ jingles about ways to reduce the effect of disasters And present to class. Record and play back for class discussion and share with school and external e-pals via school page. Create drawings/pictures that depict the effects of not caring for the environment. Focus on use of lines, shapes, colour and graphics to convey key messages.	Write word cards Build word bank Discuss measures Compose songs/poems/jingles record presentations Create drawings	Relevant words added to the word bank Drawings satisfactorily reflect effects of caring for the environment Relevant ideas raised in discussions Songs/poems/jingles/drawings satisfactorily Depict effects of caring/not caring for the environment
Observe pictures (image or video), and read stories about the consequences of not caring for the environment. From the readings make inferences from clues in the text. Share deductions with class then make a list of the consequences read in the stories., e.g. Landslides (from cutting down of trees), flooding, polluted rivers, diseases, e.g typhoid, a generally unhealthy environment (from improper disposal of waste, smoke from vehicles and factories, etc.).	Observe pictures Read stories List consequences Draw inferences	List of consequences appropriate Clues effectively used to draw inferences from stories read
Work in small groups to create a dramatic improvisation to show the difference between a polluted and unpolluted environment (a beautiful well cared beach, park, school/ "angry" trees being cut down for furniture use etc.) and caring for the environment. Incorporate the jingles/songs/poems previously created.	Create drama improvisations	Drama improvisations reflect polluted and unpolluted environments satisfactorily
In groups, conduct a garbage audit. Present the information on a bar chart. Use the information to suggest ways of reducing garbage. Download pictures using available digital devices to explain the	Conduct garbage audit Explain 3Rs	Garbage audit conducted satisfactorily Tables and flow charts created correctly Items created appropriately

Focus Question 2: Why And How Should We Care For Our Environment?	Key Skills	Assessment
importance of the three 'Rs' (reduce, reuse & recycle). In small groups, create a table to show items which can be categorised under the headings; reduce, reuse and recycle. Select an item (e.g. plastic bottle) from the table to develop a flow chart. Show how the discarded material could be used in another way to reduce the need for disposal. For e.g. (use daily as water bottle), reuse (cut in half to make flower pots, funnel, bird feeder etc) and recycle the item. Prepare (electronic and non-electronic) display to add to class expo.	Create table Create flow chart Download pictures Categorise items Create items Prepare display	
Listen to/read the creation story then discuss the instructions that God gave to Adam and Eve regarding the care of the environment. Tell ways they think that Adam took care of the environment and suggest ways they can take care of their environment. Make leaves to place on an outline of a tree showing ways that plants meet our basic needs. In journals write how caring for the environment affects the ways basic needs are met.	Read/listen to stories Identify ways needs are met Write in journals	Suggestions given were appropriate Notes on "leaves" and journal entries satisfactorily reflect ways basic needs are met
Observe pictures depicting different types of safe/unsafe environments. Discuss why the environments are safe /unsafe. Suggest ways to make the unsafe areas safe. Work in pairs, one pupil will be blindfolded and the other will give instructions to move along an obstacle course. Create a list of ways that they can care for and make their play and play environment safe.	Observe pictures Discuss ideas Follow instructions Give instruction Create list	Discussion satisfactorily reflect ways to make the environment safe Instructions given/followed were appropriate

Students will be able to:

- ✓ Discern lessons from stories about caring for the environment
- ✓ Appreciate ways in which they can improve their immediate environment

- ✓ Continue to build a word bank on the environment
- ✓ Conduct a garbage audit
- ✓ Make suggestions on ways to actively participte in mitigating against harm and neglect to their environment
- ✓ Appreciate how sound and colour can act as a stimuli for creativity in expressing views about the environment
- ✓ Use reasoning and problem solving skills to solve environmental challenges
- ✓ Use journals to express views about the environment
- ✓ Create bar charts to reflect collected data
- ✓ Explain the responsibility of mankind to the Creator to take care of the physical environment
- ✓ Explain how caring for the environment relates to meeting basic needs
- ✓ Follow and give instructions
- ✓ Work collaboratively

Points to Note:

Products made from the three Rs activities can be used in the beautification of the classroom or school as well as form part of the class/school display.

Extended Learning

Make plans to sensitize citizens to participate in community/beach/park clean up.

Create environmental parks.

Write to the editor of the Childrens' Own highlighting an outstanding green park or the need for one in your community.

Find out how poisonous waste is disposed of by National Solid Waste Management Authority (NSWMA) and the National Water Commission (NWC).

Explore the types of activities carried out on Labour Day.

Read stories or articles based on caring for the environment

Prior Learning

Check that students can:
Gather information on the environment from

electronic and non-electronic sources

UNITS OF WORK GRADE 3 TERM 3 UNIT 2

Caring for the Environment

Focus Question 3: How Can I Persuade Others To Care For The Environment?			
Attainment Target(s):	Objective(s):		
RE Display an appreciation of some of the beliefs, practices and expressions of persons from different religious faith	Use religious teachings and beliefs to persuade others to take care of the environment		
Math Collect, organize, interpret and represent data and make inferences by applying knowledge of statistics and probability.	Measure amounts (volume and weight)of waste materials produced in an area in order to promote care of the environment		
Science Develop an understanding of the interdependent relationship between man and his environment	Explain the effects of land, air and water pollution on humans and other living things		
Civics Demonstrate an awareness of individual and collective rights, their application and attendant responsibility	 Demonstrate an awareness of ways to practice personal responsibilities in groups Follow rules and guidelines Discuss proper and improper use of the environment and its resources 		

Attainment Target(s):	Objective(s):
Music Create varied repertoire of music for an audience	 Create commercials using own lyric set to a familiar tune Perform original compositions of commercials/songs /jingles for different audiences. Learn that the difference in pitched sounds creates a variety of moods and feelings in music Sing songs with varied pictch, paying attention to accuracy and rhythm
HFLE Develop the understanding and skills that support healthy, safe, and active individuals	 Discuss the role of each person in caring for the environment Explain the consequences of land, air and water pollution
• Language Arts Listen to, recall understand and respond to speakers' messages, whether implicit or explicit. Reflect and critically respond to literature and other texts on paper and on screen Develop approaches to the writing process to enable them to organize their ideas into a coherent structure including layout, sections and paragraphs.	 Write letters /emails to persuade others to care for the environment. Compose a poem to influence classmates to care for the environment Gather information on the environment from visual sources
Visual Arts Create and develop Plan and design Appreciate and respond	 Use lines, shapes, colour and graphics to convey key messages in production of poster Construct models to exemplify care of the environment

Attainment Target(s):	Objective(s):
Use appropriate digital tools and resources to plan and conduct research, aid critical thinking, manage projects, solve problems and make informed decisions. Drama Explore and create, exercising critical thinking skills throughout the dramatic process	 Create digital story about climate change using appropriate software application. Use online and offline sources to conduct research on physical environment, natural and man-made resources, importance of reuse, recycle, reduce; and global environmental problems. Participate in campaigns through drama to raise awareness of how they can take care of their environment Use expression, voice control and body gestures to convey meaning when dramatizing Create and depict ways of influencing others to appreciate the
Social Studies Develop an understanding of the interdependent relationship between man and his environment	 Demonstrate values and attitudes which demonstrate respect for self and others in their immediate environment. Encourage others to take an active role in protecting and preserving their environment Appreciate ways in which they can take care of their environment within their school and community Participate in ways and make suggestions to mitigate against harm and neglect to their immediate environment at school Identify agencies and resources available to promote care of the environment

Focus Question 3: How Can I Persuade Others To Care For The Environment?			
Attainment Target(s):	Objective(s):		
R & T Use simple materials tools and equipment to develop skills in cutting,	Develop visual materials to promote care for the environment (Charts, etc.)		
assembling and decorating. Understand the relationship between personal attributes and interest	 Conduct interviews with personnel for the solid waste management authorities 		
and how these could be connected with various careers.			

Focus Question 3: How Can I Persuade Others To Care For The Environment? Suggested Teaching and Learning Activities	Key Skills	Assessment Criteria	
Students will: Work in cooperative learning groups to observe pictures, read scenarios or watch videos offline or online addressing environmental issues related to air, land and water pollution. Use home language/SJE to report to the class what they have learnt. Write at least three sentences to explain some consequences of air, land and water pollution. Use the information on the consequences of one type of pollution (land, water or air) to compose a poem urging classmates to take steps to prevent pollution, and care for the environment.	Work cooperatively Glean information from visual sources (Videos, pictures, scenarios)	Reports adequately reflect information gathered Consequences of pollution correctly identified Poems present adequate information to urge classmates to prevent pollution	
In groups discuss ways in which each person can play his or her part in caring for the environment (e.g. practise proper garbage disposal, recycling, using materials without poisons, plant trees, etc.) and present a speech persuading the class to practise the measures discussed in caring for the environment. Use the information shared to write a letter to a family/community member convincing him/her to take care of the environment.	Creative writing Present report Discuss ideas Present speech	Speech satisfactorily outlines measures for caring for the environment Letter satisfactorily convinces family/community member to care for the environment	

Focus Question 3: How Can I Persuade Others To Care For The Environment?	Focus Question 3: How Can I Persuade Others To Care For The Environment?				
Suggested Teaching and Learning Activities	Key Skills	Assessment Criteria			
Work collaboratively to compose a musical (voice and instruments) commercial with a familiar tune, that encourages others to care for the environment. Perform the commercial for the class (live or recorded version) using varied pitch and paying attention to accuracy of rhythm.	Compose commercial Perform commercial	Commercial satisfactorily convinces others to care for the environment			
Read and discuss articles and letters about environmental issues submitted to newspapers online and in print. Write letters to a newspaper editor giving information on the effects of the various types of pollution encouraging others to care for the environment. Letters could be typed and emailed to the editor of a newspaper using the class email. Read and discuss with class information from e-newspapers about care for the environment	Read and discuss articles Write letters	Letters give adequate information about the types of pollution Letters adequately encourage others to care for the environment			
Conduct a clean-up project in a designated area (e.g. section of school yard or beach). Create a table and record the weight of the types of garbage collected. Use the information in the table to create a graph. Use the information to answer the following questions: What is the total weight of the garbage collected? What fraction of the weight of the garbage is plastic bottles? What fraction of the weight is wood/paperExplain the pattern of consumption of the occupants of the area cleaned up? Explain how the composition of the garbage would change if measures such as composting, recycling, reusing were practised.	Conduct clean-up project Perform mathematical calculations Make deductions Explain changes	Types of garbage correctly recorded Questions on the composition of garbage answered correctly Explanation on changes in composition of garbage satisfactorily given Information recorded on table/ chart accurately reflects findings Information used accurately to answer given questions			
Work in groups to design a poster under the theme "Save the Environment". Use an appropriate slogan and guidelines to motivate persons to care for the environment. Posters can be created non-electronically or by using digital drawing tools to create and then print for class display in the Environmental	Design poster Create model of a community	Poster carries practical guidelines for			
arawing tools to create and their print for class display in the Environmental	Dramatize story				

Focus Question 3: How Can I Persuade Others To Care For The Environment? Suggested Teaching and Learning Activities	Key Skills	Assessment Criteria
Corner. Investigate the type of environmental neglect seen in their neighbourhood and use available waste materials to create a model community that could be used to motivate community members to care for their environment.		caring for the environment Model community effectively inspires care for the environment
Listen to/watch video about environmental care e.g. The Feeding of the Five Thousand/ Feeding of the four thousand. Dramatize the story emphasizing the appropriate disposal of garbage. Draw a picture/sketch persons removing the refuse and write sentences to describe what is happening in the drawing. Make a model from play dough/paper mache of something God created. Talk about their creation and explain how they would feel if their creation was not treated with care.	Dramatize story Make drawing Write sentences Create model Explain feelings	Dramatisation effectively portrays appropriate disposal of garbage Sentences give adequate descriptions of the garbage disposal Model correctly portrays a creation by God Explanation adequately describes feelings
Conduct a research using interviews of personnel responsible for management of solid waste. Include questions about the process that the waste undergoes when it is taken to the disposal site, the measures taken to ensure that there is no negative effect on the environment and the health and well being persons living in the vicinity of the site. Write a report summarizing the interview.	Conduct interview Write report	Interview contains appropriate questions Report adequately reflects the information from the interview.

Students will be able to:

- ✓ Gather information on the environment from visual sources (videos, still pictures, etc.)
- ✓ Explain consequences of land, air and water pollution
- ✓ Compose a poem urging classmates to prevent pollution
- ✓ Discuss each person's role in caring for the environment
- ✓ Read and write letters to community persons and others about environmental issues

- ✓ Work collaboratively to compose a commercial to encourage classmates to care for the environment
- ✓ Conduct a clean-up project
- ✓ Design a poster to motivate persons to care for the environment
- ✓ Create a model community from discarded materials
- ✓ Dramatize the story of the Feeding of the Five /Four Thousand
- ✓ Construct a model of one of God's creations
- ✓ Conduct an interview with personnel from the solid waste management authorities

Points to Note:

The interview with the management of the solid waste authorities can be done on-site with the class as a field trip. All the rules and procedures (including parental permission) for taking students on trips, will apply.

Extended Learning

Organise and execute plans for a school wide project to create and mount posters encouraging responsible environmental behavior

Find factual situations where individuals took the initiative to clean up their own communities.



PHILOSOPHICAL STATEMENT

The Language Arts/English Language programme developed for the National Standards Curriculum (NSC) is underpinned by the general theory of learner-centredness which is specified in the National Education Strategic Plan (2011-2020). This plan clearly outlines the following objective: "Develop learner-centred and competency-based curricula at all levels." (pg. 44). The learner is, therefore, at the core of all teaching/learning experiences and the objectives, skills, activities, assessment criteria and learning outcomes of all units are written from the learner's perspective. The learner's full engagement and differences are taken into account and the dimensions of ability levels, interests, learning styles and gender are critical factors that were given great consideration during the development of the teaching units. This means that the traditional text-centred and teacher-centred approaches to English Language teaching/learning are now given far less focus (aspects of which are not totally eliminated) and learning through authentic real life contexts is being promoted. Learners now, for example, will engage in simulations in order to develop targeted skills; analyze and respond critically to literature; use different language/literature media to respond to given scenarios; create original products and use a replicable process to develop written pieces.

Language Arts teaching in the NSC embraces the integration of learning which is promoted by the existing primary and secondary curricula. As students learn Language skills related to the various strands and sub-strands, they will interface with content and methodologies from a range of disciplines including Science, Social Studies, Information Technology, Drama, Food and Nutrition, Guidance and Counselling to name a few. These disciplines, which are termed 'cross-curricula links,' are the avenues through which the Language content/skills are learnt and applied in authentic contexts.

The 21st century skills of communication, collaboration, critical thinking and creativity are also fully embraced and are promoted through the methodologies of simulations, group/peer-work, problem-based tasks and adequate allowance for exploration and innovation. The affective dimension is also foregrounded through specific objectives which when met, will help to facilitate the development of the aforementioned 21st century skills. Other values and attitudes, besides those exemplified through effective communication and cooperativeness in collaboration, are also developed through the inclusion of the affective dimension. Additionally, the themes selected, especially at the grades 7-9 level, are meant to help in shaping students to face the 21st century as rounded individuals. It is the hoped that students will benefit from the learning contexts of these themes as they learn language and literature skills that will shape/guide them in becoming life-long learners who will make intelligent and wise choices.

Aspects of the Science, Technology, Engineering and Mathematics (STEM) methodology are embedded within the language programme but will not be explicitly reflected as in other disciplines which are the pillars of the methodology, such as Science, Mathematics and Technology. In Language Arts, STEM is reflected through the processes of learning and manipulating the language, such as the writing process; the communication and collaboration which help to drive processes and the responses of the Language learner to real-life issues through effective oral and written communication. It is also that aspect of creativity that enriches life's experiences and solves problems. The STEM methodology is used as the general approach to language application. It provides opportunities for learners to use their knowledge of the English Language to solve problems and function as valuable citizens.

In an attempt to achieve the objectives of true integration, the STEM methodology and foster the development of skills necessary for the 21st century learner, the Progressive Language Teaching model was used as the basis for the development of the Language programme from Grades 1-9. Progressive language teaching is task oriented, student-centred and provides opportunities for students to negotiate meaning and interact meaningfully with the language, rather than participating in activities that demand accurate repetition and memorization of sentences and grammatical patterns. It is believed that with this underpinning philosophy, learners will become more rounded users of the language and will be better able to negotiate meaning, expand their language resources, analyse how language is used, and take part in meaningful social interactions.

Guidelines to Using the Programme

Use of the Language Programme

The Grade 3 Language Programme is expected to be delivered during the Language Arts Window. The programme does not utilise a thematic approach and as such, teachers are expected to use available resources and desired content as the context within which the language skills will be developed. The content from the Integrated Studies curriculum may be incorporated where possible.

Coverage of the Strands

It is expected that the Grade Three teacher will teach at least one strand per day AND OR twin strands where necessary and applicable during the one hour Language Arts Window. By the end of the week, the students must be exposed to all five strands. Additionally, the teacher must make a deliberate attempt to guide students in the holistic development of Language Arts as a communicative skill. As such, they will be better able to manipulate the English Language. As teachers plan to implement the Language Arts curriculum on a weekly basis, the table below may be used as a guide to plan for the week and ensure full coverage of the strands.

Grade Three – September 11-15						
Days:	Monday	Tuesday	Wednesday	Thursday	Friday	
Strand:	Writing	Word Recognition and Fluency	Comprehension	Grammar & Conventions	Listening and Speaking	
Objectives:	Use story maps to plan story	Classify words into categories	Use context clues to clarify understanding	 Identify and use irregular singular and plural nouns 	Listen and follow oral instructions accurately	
Topic:	Story Writing	Word Categories	Context clues	Irregular Plural Nouns	Listen to follow instructions	

Please note that the above spread of strands and objectives is **just an example**. This may be the spread employed by one particular Grade Three teacher. Another teacher may choose to teach the strands on different days, teach different objectives and or twin strands to achieve integration of concepts and transfer of learning for the week mentioned. The process of selecting strands and objectives to be taught on particular dates will be dependent on the context in which individual teachers operate. This context will be influenced by the school culture, the needs of the students, the teaching style employed by the teacher etc.

Supporting Model – Literacy 1-2-3 Programme

It is expected that teachers work as best as possible to implement/teach the programme using the Literacy 1-2-3 model and materials as well as other supplemental reading materials.

Structure of the Literacy 1-2-3 Lesson

The Literacy 1-2-3 lesson comprises whole class and groups sessions (which may be independent or teacher guided) during the one- hour Language Arts Window period. Time must be effectively utilized to facilitate the sequential development of the lesson. The plans should therefore provide opportunities for the teacher to transmit content, skills and/or strategies using explicit instruction and modelling. Time should be allocated for students to use their new knowledge/ skills, through guided and independent practice.

Breakdown of Language Arts Window

1. The First Whole Class Session

The teacher explicitly instructs and models the target skills/ strategies and content. The recommended time for this segment of the lesson is 15-20 minutes. This is an appropriate time to pique the interest of the learner and prepare them for upcoming learning experiences.

2. Group Sessions- Teacher Guided and Independent

At this point in the lesson the teacher divides the class into groups (ability, interest etc.) The number of students in the class will determine the number of groups needed. This session will last for approximately 30-40 minutes. It is in this session that students will explore concepts/ideas, explain concepts/ideas and extend their knowledge/competence through guided/independent practice.

Example of How Groupings Work

Group 1	Group 2	Group 3	Group 4
Teacher Guided (Rotation 1) 15 mins			Independent 15 mins
Independent 15 mins	Independent 30 mins	Independent 30 mins	Teacher Guided Rotation 2 15 minutes

3. The Final Whole Class Session

The final session of the lesson should be about 15 mins. During this session students will share the ideas/ concepts learnt/products that they have developed with the whole class. Students can evaluate their peers and provide feedback, while the teacher may reinforce/clarify rules, tips or other pertinent information.

USAID/ MoEYI Partnership for Improved Reading Outcomes, Lesson Plan Booklet- Grade 2, n.d.

NATIONAL STANDARDS CURRICULUM GUIDE

LANGUAGE ARTS OVERVIEW

GRADE 3

GRADE 3
STRAND: LISTENING AND SPEAKING

	TERM ONE (1)			TERM TWO (2)				TERM THREE (3)	
	UNIT 1		UNIT 2		UNIT 1		UNIT 2		UNIT 1
•	Observe rules for listening and speaking in different settings/ context	•	Explain their views/ observations to small groups and to the class using SJE	•	Plan and deliver a speech to an audience Ask and answer questions to gain/ clarity information	•	Communicate in different contexts for a variety of purposes	•	Ask and answer questions with sensitivity to audience. Reflect on discussions and talk about how they feel about what was said Make relevant contributions/ suggestions to discussion
•	Listen and retell short stories using SJE	•	Identify and sequence main ideas in a story	•	Listen and follow instructions accurately	•	Ask and answer questions about information received	•	Ask and answer questions to clarify information received
•	Listen to stories from various media	•	Paraphrase/ summarize stories used in Read Aloud activities	•	Listen to story summaries then respond sharing opinions and interpretations of the same story	•	Respond to story summaries of classmates Talk about how they feel about an event and characters in the story	•	Ask and answer clarifying questions about information presented by peers/teacher
•	Listen and follow instructions accurately	•	Give, receive and act on information/instructions	•	Ask and answer questions to clarify information/instructions	•	Use answers/questions to reflect on the actions taken in response to various instructions/information	•	Justify response to instruction/information Practice speaking SJE when asking and responding to questions in class
•	Report on an incident observed or discussed	•	Question the speaker to gain clarity or to confirm what is						

GRADE 3
STRAND: FLUENCY AND RECOGNITION (WORD RECOGNITIONA ND VOCABULARY DEVELOPMENT)

TERM OI	NE (1)	TERM T	TERM THREE (3)	
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1
Phonics				
 Identify long vowel sounds and blend these with consonant sounds to read words Read words with consonant blends in the initial and final positions Review and practice the proper pronunciation of 'r- controlled' vowels 	 Blend consonant and vowel sounds to read grade level words Read words with clusters in the initial and final positions Read words with the 'r' controlled vowels 	 Identify and accurately pronounce vowel digraphs and diphthongs in isolation and in context Read words with the 'r' controlled vowels 	 Produce the different sounds associated with targeted graphemes Read words with vowel digraphs and diphthongs in context 	 Practise the correct pronunciation of 'x" Read words with vowel digraphs, diphthongs and vowels controlled by 'I, r and w' Determine the silent letters in targeted words Read words with silent letters w, I, b, t, k, u, and h
Structural Analysis				
 Revise and use syllabication rules to improve vocabulary and spelling Apply the word within word strategy as a means of deciphering unknown words Identify and explore the meaning of inflectional endings as a means of differentiating between words during the 	 Revise and use syllabication rules to improve vocabulary and spelling Apply the word within word strategy as a means of deciphering unknown words Identify and explore the meaning of inflectional endings 	 Revise and use syllabication rules to improve vocabulary and spelling Use knowledge of inflectional ending to read and decipher meaning of unfamiliar words 	 Revise and use syllabication rules to improve vocabulary and spelling Use knowledge of inflectional ending to read and decipher meaning of unfamiliar words 	 Apply rules of syllabication in order to identify and read multisyllabic words Apply knowledge of inflectional endings for the purposes of encoding, decoding and deriving meaning

TERM O	NE (1)	TERM	TERM THREE (3)	
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1
reading process	as a means of differentiating between words during the reading process			
Sight Words				I.
Read in isolation and in context, sight words appropriate to the grade level	Read in isolation and in context, sight words appropriate to the grade level	Read in isolation and in context, sight words appropriate to the grade level	Read in isolation and in context, sight words appropriate to the grade level	Automatically recognise grade level sight words
Spelling				
Review and use spelling/syllabication rules to accurately spell unfamiliar/grade level words	 Spell and practise correct pronunciation of the 'aw', 'au', 'augh', 'ough', 'a' vowels by applying appropriate articulation of the sounds given the words in which the vowels are used Spell and practise correct pronunciation of the 'ear', 'er', 'ar' 		 Spell words using their understanding of the relationship between segmenting & blending phonemes and blending graphemes Develop or use existing mnemonics to learn to spell tricky words or words with irregular grapho-phonic relationships Use different strategies to learn to 	
	vowels by applying appropriate		strategies to learn to spell tricky words or words with irregular	

TERM ONE (1)		TERM T	TWO (2)	TERM THREE (3)	
	UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1
		articulation of the sounds given the words in which the vowels are used		graphophonic relationships	
	Vocabulary Developmen	t			
•	Work cooperatively with peers to build vocabulary	Work cooperatively with peers to build vocabulary	Work cooperatively with peers to build vocabulary	Work cooperatively with peers to build vocabulary	Work cooperatively with peers to build vocabulary
•	Classify words into categories Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Use with greater effectiveness and accuracy context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words
		Use reference sources to confirm word meanings and appropriate use of targeted words in context	Use reference sources to confirm word meanings and appropriate use of targeted words in context	Use reference sources to confirm word meanings and appropriate use of targeted words in context	Use references sources to aid in distinguishing between the multiple meanings of targeted words
			Begin to use the knowledge of roots and affixes to determine the meanings of words	Begin to use the knowledge of roots and affixes to determine the meanings of words	Use knowledge of root words and affixes to determine the meanings of words

TERM ONE (1)		TERM TWO (2)		TERM THREE (3)	
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1	
		Substitute words in context to reflect similar and different meanings through practice with synonyms and antonyms Practise the appropriate use of homonyms and homographs	 Substitute words in context to reflect similar and different meanings through practice with synonyms and antonyms Practise the appropriate use of homonyms and homographs 		

GRADE 3
STRAND: READING FOR MEANING AND ENJOYMENT (COMPREHENSION)

TERM	I ONE (1)	TERN	л TWO (2)	TERM THREE (3)
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1
Openly talk about the strategies employed in deciphering meaning	Demonstrate confidence in clarifying and rationalising during class discussion	Willingly contribute to class discussions and decision before, during and after the reading process	Share personal experiences that helps them to connect with and understand written work	Reflect and comment on their own progress during the reading process
Retell a story giving details about specific elements	Make inferences before, during, and after reading.	 Make inferences and reasonable predictions Use information in text to modify predictions and questions. 	Critique text using personal experiences	Make text to text, text to self and text to world connections.
Use context clues to clarify understanding.	Identify main idea and supporting details.	Use main idea and supporting details to summarize text.	 Identify elements of poetry to enhance understanding Discuss meaning in poetry. 	
Demonstrate understanding of structure through the use of graphic organizers and outlines.	Clarify ideas through discussions and activities.			Distinguish between fact and opinion in nonfiction text

TERN	1 ONE (1)	TERM	1 TWO (2)	TERM THREE (3)
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1
Use self-questioning and teacher questioning to promote active reading.	Use information in text to form and refine questions and predictions			Identify text features in textbooks and other nonfiction text (bold-faced print, italics, diagrams, headings, subheadings etc.)

GRADE 3
STRAND: LANGUAGE STRUCTURE (GRAMMAR AND MECHANICS)

	TERM (ONE	(1)		TERM	TWO	O (2)	TERM THREE (3)		
	UNIT 1		UNIT 2		UNIT 1		UNIT 2		UNIT 1	
•	Use negative forms of the verbs "to be" and "to do" i.e. 'am not', 'is not', 'are not', 'do not', 'did not' to write for a variety of purposes	•	Apply the concepts of adding- d, -ed to form the past tense Use the irregular form rules of the simple past tense to build vocabulary and writing skills.	•	Apply basic past tense rules in speech and written work (add-d and -ed) Apply the concept of the regular form (-ied) of the past tense to build vocabulary and writing skills. Identify and use the concept of the past participle to build writing skills	•	Use the negative forms of a verb in a simple sentence (present and past tense) Demonstrate knowledge of the various forms of the verb i.e. present, past and past participle (regular and irregular)	•	Use of the forms of 'to have', 'to do' and 'to be' to construct sentences (present and past) that can be negated using the negative form 'not' e.g. has not, does not, am not Apply various forms of verb tense i.e. present and past tense (regular and irregular) in written and oral work Apply the use of the future tense form of verbs using: Will + verb Am/ Is /Are + going to+ verb	
•	Identify and use irregular plural nouns	•	Apply knowledge of	•	Identify and use common nouns Identify and use proper nouns in a variety of texts Apply the distinction of gender when using nouns					
	apply rules for the use of singular and plural demonstrative		pronouns (personal, possessive, demonstrative) in a variety of written							

TERM (ONE (1)	TERM	TWO (2)	TERM THREE (3)	
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1	
pronouns	and oral tasks.				
Use the conjunction 'but' in a range of contexts to show the opposite or conflicting ideas			 Appropriately use the conjunction 'but' in written and oral work Begin to use conjunctions such as 'while, 'when,' 'where' to expand sentences 	Use the conjunction 'but' to show contrast/differences when constructing simple sentences	
	Choose appropriate verbs to agree with he/she/it and other singular subjects	Construct sentences (orally or written) demonstrating the use of subject verb agreement		Apply the concept of subject verb agreement with we/they and other plural subjects	
Apply appropriate use of capital letters when writing	Use punctuation marks accurately (full stop, comma, and question sign) to compose simple sentences/ paragraphs.	 Use full stops and commas when writing simple sentences Show appropriate use of the apostrophe (') when writing singular possessive nouns 	 Use full stops and commas when writing sentences and paragraphs Use the apostrophe (') to show singular possession Use question marks to construct questions with 'do', 'who', 'where', 'which', 'when' Apply the use of the apostrophe to form 	 Apply correctly the use of question marks, full stops and commas in a range of written work Apply the use of exclamation marks to indicate strong feelings/ emotions when composing sentences e.g. "Stop!" You are going to fall Apply knowledge of the apostrophe (') when writing plural possessive nouns Use speech marks/ quotation 	

TERM	ONE (1)	TERM	TWO (2)	TERM THREE (3)
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1
			contractions e.g.	marks in simple dialogue
 Use a range of adjectives (oral and/or written) when describing size, shape, colour, texture Practice the use of adjectives (regular) when comparing two nouns (-er) and more than two nouns (-est) Use adjectives that do not comply with the regular formation rules 	Use adjectives appropriately in written and oral tasks.		 Practice using comparative adjectives (irregular) Use comparative adjectives to make unequal comparisons i.e. adjective + '-er' 'than' Compare adjectives using the phrase 'morethan' 	
	 Identify and use adverbs appropriately when composing sentences. 	Begin to extend the way they use adverbs in written work		
Use prepositions appropriately and explain their functions in relation to location and directions				

GRADE 3
STRAND: COMMUNICATION (WRITING)

	TERM C	ONE (1)		TERM	TW	O (2)		TERM THREE (3)
	UNIT 1	UNIT 2		UNIT 1		UNIT 2		UNIT 1
•	Write to compare different ideas/concepts	Formulate interview questions using 5Ws -who, what, when, where, why	•	Formulate simple interview questions Pose formulated questions				
•	Record information learnt using own language	 Summarize information or list critical/ essential information 	•	Record information gleaned			•	Record information learnt through real and vicarious experiences
•	Use story maps to plan story	 Develop headings for sets of simple sentences/ paragraphs Compose draft text using a paragraph frame. Extend generated words and phrases into sentences. Record details of an event that had or will happen (state event, what happened, to whom, when, where, why/how) 	•	Use a variety of pre- writing strategies (e.g., webbing, brainstorming, listing, note taking, outlining and drafting) to choose a topic and organize ideas.	•	Use a variety of pre- writing strategies (e.g., webbing, brainstorming, listing, note taking, outlining, drafting, graphic organizers) to choose a topic and organize ideas. Identify and use parts of a friendly letters to generate ideas for writing	•	Use a variety of prewriting strategies (e.g., brainstorming, note taking) to organize ideas for writing
•	Write simple Language Experience Stories using ideas	Expand writing by adding details, and descriptive words	•	Write fully developed paragraphs using	•	Formulate friendly letters to convey ideas related to grade level	•	Modify written pieces to add details

TERM	ONE (1)	TERM	I TWO (2)	TERM THREE (3)	
UNIT 1	UNIT 2	UNIT 1	UNIT 2	UNIT 1	
generated		essential paragraph elements proper form (e.g. topic sentence, details, summary, conclusion sentence)	experiences/interestsUse approved friendly letter format		
With teacher support, Review work done and improve as necessary	With teacher support, Review work done and improve as necessary	Revise and use editing checklist to edit documents for the traits of quality writing (e.g., ideas, organization, word choice, voice, sentence fluency, conventions and presentation)	 Revise and use editing checklist to edit documents for the traits of quality writing (e.g., ideas, organization, word choice, voice, sentence fluency, conventions and presentation Review and revise their own writing 	Revise and use editing checklist to edit documents for the traits of quality writing(e.g., ideas, organization, sentence fluency, conventions and presentation)	
		Prepare and publish a final drafts of informative paragraphs	Prepare and publish final drafts of friendly letters aimed at achieving different purposes – inviting, expressing thanks, requesting	Prepare and publish final drafts of book reports	

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 LANGUAGE ARTS TERM1 – UNIT1 – 6 WEEKS

Grade 3 – Term 1 – Unit 1 – 6 weeks

Introduction to the Unit:

The Grade Three students, having completed Grades One and Two, are being exposed to various strategies and skills of Language Arts, that will further their understanding of how language works. In this unit, the students will be given opportunities to practise their listening and speaking skills through a variety of engaging activities. In reading, they apply previously learnt skills to improve word recognition and vocabulary. As students improve fluency, they apply the strategies learnt to increase their comprehension. They will also demonstrate their understanding through the use of graphic organizers and outlines. They use self-questioning strategies to engage in active reading.

Students incorporate the use of negative forms of the verbs "to be" and "to do", and the use of the conjunction "but" in a range of contexts to show the opposite or conflicting ideas. Their writing incorporates the use of descriptive adjectives to show comparison when comparing two or more things.

Students continue to use the structures of the English Language to write simple Language Experience Stories. They develop their pre-writing skills with the aid of graphic organizers. Their drafts are more detailed and application of skills learnt across strands is evident.

	STRAND: S	SPEAKING AND LISTENING	G	
Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Listen to, recall, understand and respond to speakers' messages, whether implicit or explicit Recognise, value and make distinctions between home language and SJE to improve/acquire language and literacy competencies Explain and comment on speakers' use of language, including use of SJE and JC, and their use of vocabulary, grammar and other features		Listen and retelListen to storiesListen and follow		tely
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT
Observe rules for listening and speaking in different settings/context • Reinforce rules for listening to and others. • Discuss purpose listening. • Talk about setting the environment speaking. Use listening games to provide cognitive contents • Use listening activities to show contents • Wait for me • stand beside the door • put the ball under the tab Participate in guided discussion using standard about self		ment for listening and	Listen attentively	SJE appropriately used in different contexts of classroom discussions.
		table	Respond to instructions	

	 Do controlled talk to scaffold students as they give information about self (teeth, stomach and lungs). Discuss how and why it is important to care for the different parts of our bodies (Use LEA to scaffold or direct talk). Recall the importance of eating healthy foods and daily exercise. Activities retrieved from the following sources: http://busyteacher.org/14387-how-to-improve-listening-skills-8-activities.html	•	Speak clearly and concisely using SJE	
Listen and retell short stories using SJE	Listen to a story to tell the order of events. Use SJE to retell the order of events in the story.	•	Listen attentively	Retold stories adequately expressed in SJE to tell the order of events
		•	Retell events using SJE	
Listen to stories from various media	Listen to stories from various media and identify the conflict (problem) in the story and say how the problem was solved. Suggest other alternatives to solving the problem. In groups students role play their suggestions.	•	Listen attentively Identify problems Solve problems Suggest	Problems identified correctly Suggestions given are relevant to the problems Active listening demonstrated in student's ability to complete given task

		alternati	ves
Listen and follow instructions accurately	Listen to instructions and fold paper to complete making a paper boat/fan/plane/car. Points to note Instructions for simple origami can be found at origami- Instructions.com	Listen attentiveFollow instruction	
Report on an incident observed and discussed	Select from a list an activity that they have never done. They will say "I have never "Other students who have done this activity will share orally with the class. Discuss the challenges they had while they were involved in the paper folding activity. Give an oral report on discussions and observations.	 Report incidents Discuss challenge 	

STRAND: WORD RECOGNITION AND FLUENCY				
ATTAINMENT TARGETS	OBJECTIVES Students should be able to:			
 Read fluently and with appreciation Automatically recognise words (including basic sight word lists) through repeated exposure and mnemonic devices 	 Identify long vowel sounds and blend these with consonant sounds to read words Read words with consonant blends in the initial and final positions Review and practise the proper pronunciation of 'r-controlled' vowels Revise and use syllabication rules to improve vocabulary and spelling 			
 Establish a concept of print and use a range of word recognition clues, re-reading and reading ahead, to identify new words 	 Apply the Word Within Word strategy as a means of deciphering unknown words Identify and explore the meaning of inflectional endings as a means of differentiating between words during the reading process Read in isolation and in context, sight words appropriate to the grade level 			

- Develop phonic awareness and use knowledge of lettersound correspondences in order to decode unfamiliar words
- Review and use spelling/syllabication rules to accurately spell unfamiliar/grade level words
- Work cooperatively with peers to build vocabulary
- Classify words into categories
- Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words

	· · · · · · · · · · · · · · · · · · ·	Jilidililidi WUUS			
OBJECTIVES	SUGGESTED TEACHING AND LEARNING ACTIVITIES	KEY SKILLS	ASSESSMENT		
	STUDENTS WILL:				
PHONICS					
Identify long vowel sounds and blend these with consonant sounds to read words	Revise the following phonics clue and practise it with a peer. Long vowels say their names Read list of words and say which include the long vowel sound of 'a '. Identify where in each word the long 'a' sound occurs. They then practise to read words in which the long vowel sound for the letter 'a' occurs in initial, medial and ending positions. For example, they will blend phonemes and read the following words with the long vowel 'a' in initial and medial positions. Initial Position apron, April, amen, Avon, Medial Position Sail whale	 Identify long vowel sounds Blend sounds 	Long vowel sounds in different word positions are accurately identified, properly pronounced and appropriately blended in order to recognize words		

Read words with consonant blends in the initial position	Revise blends learnt in Grade 2 by listening to recording which presents words which begin with consonant blends, then isolate the blends in each word - separating each sound in the blend, then blending the sounds together. Alternatively, listen to the teacher as she models the steps.	Isolate/segment soundsBlend sounds	Consonant blends in the initial position are accurately isolated, separated into phonemes and then blended together
	e.g. Place P - I /PI/		
	Students then practice the steps with given words and read the tip below: Blends are made up of two		
	sounds but each sound in the blend may be separated from the other.		
	Follow through with other blends (/b/bl/cr/f/pr/gr/sl/st/, etc. in subsequent lessons.		
Read words with consonant blends in the final position	In small groups, examine words on given cards that end with blends; for example, first, think, past, lamp, friend, dusk. Identify the blend in each word and take turns to pronounce the blend in isolation.	 Isolate/Segment sounds Blend sounds Read words/sentences 	Consonant blends in the final position are accurately isolated, separated into phonemes and then blended together
	Manipulate the blend by separating the individual sounds and		Words with consonant blends in

	then blending them back together.	with blends	the final position are accurately
	Individually read the set of words, emphasizing the blend at the end of each word.		read with adequate emphasis on the blend in each word
	Read sentences which include one or more words with blends in final position, being sure to emphasize the blend in each targeted word.		
Review and practise the proper pronunciation of 'r- controlled' vowels	Read the following tip of the day and then listen to the teacher pronouncing examples of r-controlled words:	Read r-controlled words	r-controlled words are accurately read
	When a vowel is followed by 'r', the vowel sound changes.		
	bird, word, corn, smart, sharp, hurt, term, fern		
	In pairs, practise to read the words		
Structural Analysis		1	1

Revise and use syllabication rules to improve vocabulary and spelling	 Use Syllabication Rule Kit (box with set of cards outlining different rules) to revise different syllabication rules. For example, Do not attempt to divide a one-syllable word into syllables - e.g. girl, wall, sell, just Do not separate consonant digraphs and blends into syllables - e.g. think/ing, church/es. When two or more consonants occur between two vowels in a word, the syllable is usually divided between the consonants - e.g. lit/tle, pret/ty, prin/cess. Divide compound words between the words that make up the compound word. Apply rules to spelling in different lessons and include words in written activities. 	Apply syllabication rules	Syllabication rules are appropriately revised and effectively applied in spelling/vocabulary activities
	In small groups, examine words requiring the application of different syllabication rules, then do the following for each word: • Indicate the rule which would best suit the syllabication of the word and give the reason • Divide the word into syllables (or leave as it stands) Count and indicate the number of syllables	Select syllabication rules	Syllabication rules are appropriately determined to suit targeted words

Apply the Word -	With a peer, use steps in the Word-Within-Word Strategy to	Apply Word-Within-	Word-Within-Word Strategy is
Within -Word strategy as a means of deciphering unknown words	decode the following words: intelligent, suitable, passage Steps	Word Strategy	effectively applied to decode targeted words.
	Circle the words you recognize in the word and say them aloud		
	in, tell and gent (informal noun)		
	in tell i gent		
	Pronounce or work out the part of the word that is just a word part/unknown word - 'I' pronounced as short 'I' [I].		
	Put all the different words and the word part together in the correct sequence and use prior knowledge of syllabication rules to pronounce as a whole word.		
Identify and explore the meaning of inflectional endings as a means of differentiating	In small groups, read word pairs aloud, then discuss what makes each word in the pair different from the other. reach reaches	 Identify inflectional endings Differentiate between words 	Inflectional endings accurately used to differentiate between word pairs
between words during the reading process	friend friends walk walking		
	prepare prepares		

	Share in whole group activity aimed at emphasizing that inflectional endings make words different both in pronunciation and the meaning communicated. Read tip Pronounce all inflectional endings when they occur in words because inflectional endings change words and their meanings.		
Sight Words			
Read in isolation and in context, sight words appropriate to the	Review sight words, using Word Wall. Play games such as "I SPY" and take turns in challenging peers to identify words indicated by the leader.	Identify sight words	Sight words accurately identified in different reading contexts
grade level	Play Treasure Hunt game in order to identify sight words. Game	Identify sight words	Sight words are accurately identified in different places
	Words are hidden in different places inside or in a designated area outside – under chairs, in reference books, under stones at the roots of trees, etc. The student who finds the highest number of words, shows each word to the class and accurately reads each word aloud to the class, will be given a prize.		
	Develop sentence strips with sight words learnt over the unit. Take turns in reading the sentences aloud to peers, emphasizing the targeted sight words. Review sentences and	Identify sight wordsTake turns	Sight words accurately identified/read in sentences.

	mount them in class. Read combined set of sentences each		
	morning, paying special attention to the targeted sight words.		
Spelling			
	1	T	
Review and use	In small groups, practise to spell grade level words relating to	 Practise spelling 	Spelling/Syllabication rules
spelling/syllabication	Integrated Studies and taken from Grade level Reader and	rules	accurately applied to spell words
rules to accurately	supplementary texts. Assist peers in using the relevant		
spell unfamiliar/grade	spelling/syllabication rules, where necessary as they practice		
level words	to spell the words. With peer/teacher assistance, refer to		
	online and other sources, where they cannot readily recall		
	rules.		
Vocabulary Developme	nt	<u> </u>	
Work cooperatively	Play 'Tell Me the Word' game to review vocabulary learnt	Use context clues	Context clues effectively used to
with peers to build	over the unit.		determine the meanings of
vocabulary			unfamiliar words
	Game		
	The leader will use word clue cards (word on one side of each		
	card and the clues on the reverse side) to give several clues to		
	a word and a sentence to be completed using the word, while		
	peers try to guess the word. The first person to guess the		
	word based on the clues given will have the chance to give		
	the clues to a different word.		
	e.g.		
	Side 1 of card – intelligent		
	Side 2 of Card Clues		
	Word begins with 'I'		
	Means 'can think through ideas quickly'		
	Means 'can understand points easily'		
	 The synonym for the word is 'smart' 		

	Sentence Someone like this is an person.	Determine antonym/synonym	
Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Pictionary Select a word from a 'Vocabulary Box'. A student draws pictures to give clues for the word so that peers can guess the word. If after three guesses the class is unable to determine the word, the 'artist' should disclose the word and give the meaning. The game continues with another student selecting and drawing.	Use context clues	Vocabulary accurately determined, using game clues
Classify words into categories	In pairs, use assigned word categories to sort word cards, placing relevant words together. For example, Feelings: sadness, joy, thankfulness, regret, pity, anger Students are given a set of words and they will group them in different ways. For example, Baby, bear, boy, carrot, biscuit, bull, banana, cake, Words can be sorted as animals, people, food, words beginning with 'b'/'c'	Classify words	Words appropriately categorized based on their meanings Words appropriately grouped to show connection.

STRAND: COMPREHENSION			
ATTAINMENT TARGETS	OBJECTIVES		

•	Read for meaning, fluency and enjoyment of texts, using a
	variety of clues to gain information and identify ideas and
	events
•	Use deduction and inference to interpret information and ideas
	and to predict outcomes
•	Read fluently and with appreciation

Students should be able to:

- Openly talk about the strategies employed in deciphering meaning
- Retell a story giving details about specific elements
- Use context clues to clarify understanding
- Demonstrate understanding of structure through the use of graphic organizers and outlines
- Use self-questioning and teacher questioning to promote reading skills

OBJECTIVES	SUGGESTED TEACHING AND LEARNING ACTIVITIES STUDENTS WILL:	KEY SKILLS	ASSESSMENT
Openly talk about the strategies employed in deciphering meaning	Select grade level text from class library or reading corner. Work in pairs to read and understand the text. Rewrite the story and share with classmates. Collaborate with their teacher to assess and discuss the strategies used in retellings.	 Rewrite story Utilize story elements Engage in discussion 	Rewritten stories capture story details using the various story elements Discussions focused on the extent to which strategies are used to decipher meaning
Retell a story giving details about specific elements	Review specific elements of a story (character, setting, problem, solution) and present summaries of same on a graphic organizer.	Review story elements	Graphic organizers accurately capture explanations and examples of the story elements reviewed
	Listen to recorded story or story read by their peers and use graphic organizers to capture/record details relating to story elements. Retell the story to the class paying attention to the elements reviewed.	Retell story	Oral retellings properly sequenced and aligned to the elements reviewed and the text read/recorded
	Use the author's chair to recall and retell specific details from a story previously read or listened to OR complete a book report	Recall story detailsRetell story	Information shared through the author's chair reflects students'

	template to retell details of a self-selected story		understanding of the story as well as details extracted from the story Book report template captures correct information from the text
Use context clues to clarify understanding.	Observe as teacher demonstrates using clues within the text to decipher meaning of an unfamiliar word. Engage in a teacher led discussion to reflect on the model by the teacher and identify components of the process.	 Observe teacher model Engage in discussion Identify examples of context clues 	Discussions focused on reflecting on the process engaged in by the teacher and highlighting the steps necessary in using context clues to decipher meaning
	Complete prepared/sourced worksheet requiring them to read riddles to find out the meaning of the crazy, make-believe word that is underlined in each sentence and circle the correct meaning from a list. Then circle at least two clue words that helped them to figure out the meaning of the word.	Identify context cluesUse context clues	Worksheets completed with word meanings and clues accurately identified
	Work in pairs or small groups to read grade level texts. Identify sections of the text that provide clues to decipher the meanings of unfamiliar words. Extract and write those sentences or paragraphs on sticky note pads and share with the class.	Identify context cluesUse context clues	Context clues accurately identified and extracted from texts
	Work in small groups to play a game of context clue detective. Select one group member to be the detective one at a time. Listen as the other members of the group call a word and page number then search to identify clues that can aid understanding of the word within a specified time. Then use the clues to orally explain the meaning of the word or phrase. Take turns until everyone in the group gets a chance.	 Identify context clues Use context clues 	Context clues accurately identified and used to decipher the meaning of the word or phrase identified

Demonstrate understanding of structure through the use of graphic organizers and outlines	Discuss samples of questions that they may ask themselves before, during and after reading. Record questions in a table on chart/hand-out/whiteboard. e.g.		•	Engage in discussion Discuss questions	Table completed with questions relevant to monitoring before, during and after reading	
	Before Mount chart in class t	During For future reference.	After	•		
	Examine and discuss samples of teacher prepared/sourced questions that they can utilise during active reading.			•	Critique questions	Discussion based on highlighting the nature and types of questions asked during active reading
	the use of self-question	er uses think-aloud stra oning during reading to rogress. Students apply	monitor her	•	Use self- questioning Monitor own reading	Think aloud strategy clearly demonstrates processes involved in employing self-questioning during the reading process to monitor own reading
	Collaborate with their Strategy to monitor re	r teacher to use the "Sa eading e.g.	ay Something"	•	Monitor own reading Respond to text	Responses reflect use of the stem starters outlined in the "Say Something" Strategy and show direct alignment to the text read

Stem starters for Say Something comments Ask a Question What's this part about Why did How islike thiss Why What would happen if Who is What does this sectionmean Do you think that Make a Comment	Make a prediction I predict that I bet that I think that Sincehappened, I bet will happen I wonder if Clarify Something Now I understand This makes sense now No, I think it means I agree with you. This means At first I thought, but now I think			
	This seminds me of This part is like The differences are This character is like because I also/never (name something that happened in the book) This character makes me think of This setting reminds me of Kispaces.com/Beers of the stem starters outlined on the			
work in pairs/small groups to so using questions drafted to mon before, during and after reading	itor themselves and their peers	•	Write questions Monitor own reading	Reading exemplifies that of active reading and monitoring of the comprehension process Questions effectively asked and responded to using information from text and experience
Read a set of questions and work text and identify portions of the responding to the questions ask discussion after the reading exe	ked. Participate in teacher-led	•	Read text Identify ideas in text Engage in discussion	Portions of the text identified contain information relevant to answering the questions outlined.

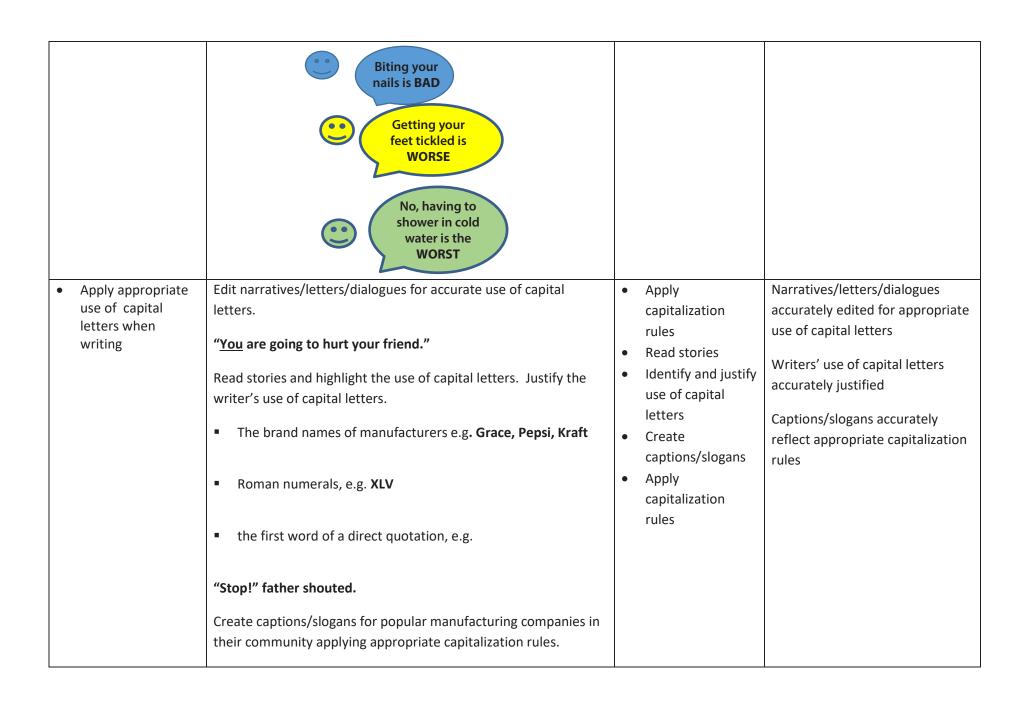
	STRAND: GRA	AMMAR AND CONVENT	IONS			
Write sentences which are grammatically accurate and correctly punctuated, using SJE and JC appropriately Use and adapt a range of sentence structures according to context, distinguishing between SJE and JC						
		 not' 'did not' to write for a variety of purposes Identify and use irregular plural nouns Formulate and apply rules for the use of singular and plural demonstrative pronouns Use the conjunction 'but' in a range of contexts to show the opposite or conflicting ideas Use prepositions appropriately and explain their functions in relation to location and directions Use a range of adjectives (oral and/or written) when describing size, shape, colour, texture Practice the use of adjectives (regular) when comparing two nouns (-er) and more than two nouns (-est) Use adjectives that do not comply with the regular formation rules Apply appropriate use of capital letters when writing 				
OBJECTIVES	SUGGESTED TEACHING AND LEARN STUDENTS WILL:	ING ACTIVITIES	KEY SKILLS	ASSESSMENT		
Identify and use irregular plural nouns	Complete a teacher made crossword puzzle plural form of irregular nouns in the puzzle Create word cards with irregular plural nouthe singular and plural version of each noutreate a suitable label for each category bar pluralization rule. Research to find other wincluded in each category.	ins. In groups, match n. Sort the cards and used on the	 Complete crossword puzzle Use irregular plural nouns Create word cards Match singular and plural nouns Classify noun plurals Determine pluralization rules 	The plural form of irregular nouns appropriately used to solve crossword puzzle Singular nouns accurately		

	Points to Note: Some words with descriptive adjectives and hyphens form the plural by adding the correct affix to the noun portion of the word. father-in-law fathers-in-law mother-in-law mothers-in-law There are a number of animals that have the same singular and plural form: deer – deer moose - moose sheep - sheep swine - swine		Research noun plurals	matched to their plural forms Irregular noun plurals correctly classified based on similar pluralization rule Other irregular plural nouns correctly added to each category
Formulate and apply rules for the use of singular and plural demonstrative pronouns	Analyse given minimal pair sentences and explain the differences in meaning resulting from a change in the demonstrative pronoun. Record the rules for using given demonstrative pronouns. e.g. I want this book. I want that book. May I look at those bags?	Consideration of the consider	Analyse sentences Compare Sentences Discuss meaning of demonstrative Dronouns Record rules dentify demonstrative Discuss and Decord pronoun Usage Use pronouns Create sentences	The meaning associated with various demonstrative pronouns adequately discussed and recorded

	May I look at these bags? Find examples of demonstrative pronouns in a range of texts. Record in each case what the pronoun is being used to represent. Give possible reasons the writer(s) may have used the pronoun. Use the same pronouns to create sentences of their own. Points to Note					Examples of demonstrative pronouns correctly identified. Pronoun usage adequately discussed and recorded. Pronouns satisfactorily used to		
			NEAR	FAR				construct sentences.
		Singular	this	that				
		Plural	these	those				
	 near in dist This feels g These are t Far in dista That is bea Those are f 	ood. peautiful. nce or time utiful. for you.	e.g.				Debate to vice!	Ctata monta a da guata lu
Use the conjunction 'but' in a range of contexts to show the opposite or conflicting ideas	Engage in a who countering the "Yes, but" or " Review sentence Revise sentence	statement of No, but"	of a previou	us speaker u	sing the phrases nction 'but'.	•	Debate topical issues Counter arguments Review and revise sentences	Statements adequately countered using the conjunction 'but'

	Justify their decisions.	•	Use the conjunction 'but' Justify decisions	Sentences satisfactorily reviewed and revised to reflect the correct use of the conjunction 'but' Decisions adequately justified
Use prepositions appropriately and explain their functions in relation to location and directions	In groups write a simple story using 7-10 prepositions. Leave an empty space where a preposition should be. Exchange stories with another group that will complete the stories with appropriate prepositions. Explain their choices of prepositions to the whole group.	•	Write stories Use prepositions Explain choices	Story completed with appropriate use of a variety of prepositions Choices of prepositions adequately justified
	Compete in groups to create a classroom preposition poster with illustrations depicting the meaning of common prepositions. Explain their posters to their peers.	•	Create preposition poster Compete in groups Explain posters	Posters satisfactorily use illustrations to depict the meaning of prepositions Posters adequately explained
Use a range of adjectives (oral and/or written) when describing size, shape, colour, texture	Take an object to class hidden in a bag. Use appropriate adjectives to describe the object for their peers in relation to shape, size, texture, colour etc. Have their peers use the descriptions to guess the name of the item in the bag. Talk about why some adjectives may be more appropriate to describe some nouns.	•	Describe objects Identify objects from descriptions Discuss adjective use	Objects adequately described using a range of adjectives Adjective used adequately discussed
Use negative forms of the verbs "to be" and "to do" i.e. 'am not', 'is not', 'are not', 'do not',	In teams of two students will take turns to create positive and negative sentences. One member of the team will create a positive sentence; the other member will counter by converting it	•	Create positive and negative sentences Unscramble	Negative sentences accurately formed from positive statements Negative sentences correctly

'did not' to write for a variety of purposes	 into a negative sentence. Unscramble a given set of negative sentences. Expand each sentence by creating another related negative sentence. Points to Note: Negatives are formed by placing 'not' after the forms of "to be" and "to do" I am not going to cry. 	negative sentences • Create negative sentences • Expand ideas	unscrambled Negative sentences satisfactorily created to expand given sentences
Practice the use of adjectives (regular) when comparing two nouns (-er) and more than two nouns (-est)	In small groups, use the comparative and superlative forms to write as many true statements comparing themselves with each other. e.g. In our group Paul runs the fastest.	 Work collaboratively Use comparative and superlative adjectives Compare themselves Write sentences 	Comparative and superlative adjectives appropriately used to compare themselves in groups
Use adjectives that do not comply with the regular formation rules	Work in groups of three to create 'silly' three - sentence tales using a form of the given irregular adjective in each sentence.	 Create tales Work collaboratively Use irregular adjectives Create sentences 	Three-sentence tales satisfactorily created using all forms of given irregular adjectives



STRAND: WRITING							
ATTAINMENT TARGETS		OBJECTIVES Students should be able to:					
 organise their ideas into sections and paragraph Write to narrate, to per purposes, using SJE and multi-media approache Use language and text fimagination to create v 	rsuade and for a range of transactional d JC appropriately and incorporating es to their writing forms appropriately and with ibrant and engaging texts paragraphs which have linking	 Record information Use story maps to p Write simple Langua 	age Experience Storie				
OD LECTIVES	CHOOSETED TEACHING AND LEAD		LALLA CIANTIC	A COECCA AFAIT			

OBJECTIVES	SUGGESTED TEACHING AND LEARNING ACTIVITIES STUDENTS WILL:		KEY SKILLS	ASSESSMENT
Write to compare	Compare characters/ideas from different stories of similar genre,	•	Compare	Comparisons satisfactorily made
different	Give comparisons using graphic organizers or other illustrations.		characters/	using graphic
ideas/concepts		•	ideas Give	organizers/illustrations
			comparisons	
		•	Illustrate ideas	
Record information learnt using own	Listen to a presentation from a guest speaker. Make a journal entry describing what was learnt from the presentation.	•	Record	Journals reflect correct information

language		information	from the presentation
Use story maps (characters, setting, problem, ending) to plan story.	Use completed story map to complete a Story Plan graphic organizer. S Genze: Characters: Retting: P Plot: Y complication P Resolution A Diseful words: Counce by Paul Union - Seaching Mass See Printers - Seaching - Insulations and http://www.teachingideeas.co.uk/planning-stories/story-plans-	Complete story plans	Story plans correctly capture information from the story map
Write simple Language Experience Stories using ideas generated	worksheets Observe as the teacher uses think-aloud strategy to model writing language experience stories (taking note of the use of direct speech). Engage in a teacher led discussion to discuss the demonstration observed. Be randomly selected by the teacher to model writing a language experience paragraph to share an experience/idea of their own.	 Write paragraphs Discuss demonstration 	Paragraphs adequately reflect use of the language experience approach

	Collaborate to write a language experience story about a recent event at their school using the shared writing strategy.	•	Generate ideas for writing Compose experience stories	Shared writing strategy effectively used to compose language experience stories
With teacher support, Review work done and improve as necessary	Individually translate the story written in the shared writing activity to Standard Jamaican English (SJE). Share their revised stories with the class. Read and critique for accuracy and meaning	•	Translate to SJE Share stories Critique stories	Stories correctly translated to SJE

RESOURCES:

- Dolch Sight Word List for Grade 3 (basic sight words)
- Fry's Word List- High frequency words he third hundred
- Words from Literacy 1-2-3 Big/Little books (Readers)
- Words from concepts being learnt in Integrated Studies
- Words related to general Language Arts content for Term 1 units.
- Relevant learning websites videos, Power Point presentations and interactive activities, including games
- Pre-recorded stories
- Syllabication rule kit
- Reading games
- Word cards
- Pictures from magazines, newspaper, post cards
- Sentence strips
- Supplementary readers
- Laptop
- Crossword puzzles
- Worksheets
- Multimedia Projector
- Internet
- Voice recording device
- Grade level texts
- Strategy posters comprehension strategies and skills,
- Samples of students' writing (stories. letters, journals)
- Graphic organizers

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 LANGUAGE ARTS TERM1 – UNIT2 – 6 WEEKS

Grade 3 – Term 1 – Unit 2 – 6 weeks

Introduction to the Unit:

In this unit, students continue to use the language skills and content across strands. There are opportunities for twinning strands. As students listen to Read Alouds, they identify main ideas and summarize stories while incorporating the structures of the language to present their summaries orally and in writing. The use of questioning is applied in a more refined manner as they use information from the text to form questions.

Students use the concepts and rules learnt in the language structure and apply them in a variety of authentic written and oral tasks. Students engage in the steps of the writing process with a focus on drafting and revising their writings. Their writings reflect more details and descriptive words. As students review and edit their writings they will participate in and appreciate peer assessment.

	STRAND: S	PEAKING AND LISTENING	G .	
purposes and audience creatively Listen to, recall, under whether implicit or expected and SJE to improve/a Explain and comment	onfidence and competence for different ces, using SJE and JC appropriately and restand and respond to speakers' messages, cplicit make distinctions between home language cquire language and literacy competences to on speakers' use of language, including their use of vocabulary, grammar and	Question the speaker to gain clarity or to confirm what is		
OBJECTIVES Explain their views/observations to small groups and to the class using SJE	Participate in panel discussions or grand concept process. Participate in panel discussions or grand concept process. Describe and give opinions about observed groups. Some examples of items for discussions. Morning messages – current affair persons, plants and animals in our process. Show and Tell – toys, family artefat jewellery.	c (real or imagined) e.g. onversations. d activities in small ssion are: s, cultural events, community	 Speak appropriately to different audiences Give opinions Describe activities 	ASSESSMENT Speech/talk/instructions are accurately structured and information is logically sequenced
Identify and sequence main ideas in a story	Use puppets to retell how events occurred Identify the main ideas in stories. • Sequence the information heard b following statements.		 Recall and sequence information accurately Identify main 	Main ideas are identified and sequenced correctly

	 The first thing that happened was 	ideas	
	o After that,		
	o Then		
	o Finally,		
Paraphrase/summarize	Paraphrase, Summarize and Recast	 Paraphrase, 	Stories are accurately
stories used in Read		summarize	paraphrased/summarized
Aloud activities	Repeat the information heard during class discussion or from a	and recast	
	Read Aloud activity.	information	
		inionnation	
	 Engage students to use their own words to share what they 		
	remember about a story that was shared.		
Give, receive and act on	Give simple instructions in audible voice	• Follow	Instructions given are followed
information/instructions		instructions	correctly
	 Stop writing. Close your book 	accurately	
	 Stand 		
	 Sit and listen attentively 	 Give clear 	
		instructions	
	Participate in games (e.g. Simon Says, 1-2-3 Red Light, Mother		
	May I)		
Question the speaker to	Listen to presentation from a class guest speaker. Write and ask	Listen to	Questions written or/asked confirm
· ·		presentation	or clarify given information.
gain clarity or to confirm	questions to gain clarity about the presentation.	Write	or orally given intollination.
what is said		questions	
		Ask questions	
		- ASK questions	

	STRAND: W	ORD RECOGNITION AN	D FLUENCY	
ATTAINMENT TARGETS		OBJECTIVES Students should be ab	ole to:	
 Automatically reword lists) throudevices Establish a concercognition clue identify new wo Develop phonic 	d with appreciation ecognise words (including basic sight agh repeated exposure and mnemonic ept of print and use a range of word s, re-reading and reading ahead, to rds awareness and use knowledge of letterndences in order to decode unfamiliar	 Blend consonant and vowel sounds to read grade level words Read words with clusters in the initial and final positions Read words with the 'r' controlled vowels Spell and practise correct pronunciation of the 'aw', 'au', 'augh', 'ough', 'a' vowels by applying appropriate articulation of the sounds given the words in which the vowels are used Spell and practise correct pronunciation of the 'ear', 'er', 'ar' vowels by applying appropriate articulation of the sounds, given the words in which the vowels are used Revise and use syllabication rules to improve vocabulary and spelling Apply the Word within Word strategy as a means of decimbering unknown words 		
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:		KEY SKILLS	ASSESSMENT
PHONICS	3.35E1113 WILL.		<u> </u>	
Blend consonant and vowel sounds to read grade level texts	In pairs, read portions of texts, decoding blending consonants and vowels.	g unfamiliar words by	Blend phonemes	Unfamiliar words accurately blended and decoded
Read words with clusters in the initial and final positions	In pairs, sort cards with words containing and final positions. Identify the clusters clearly in each word.	_	Produce sounds of clusters	Clusters accurately located and pronounced in targeted words

	Read sentences with these words, emphasizing the clusters in targeted words.		
Read words with 'r-controlled' vowels	Become Vowel Detectives. Work in small groups to examine and compare two sets of vowels. Read the first set of words, emphasizing the targeted vowels which are not r-controllede.g. stick, send, scamp, hamburger, love and listen carefully to the sound of the targeted vowel in each word. Say each vowel sound aloud as it occurs in the word. Read the second set of words containing r-controlled vowels and try to determine the effect of the Bossy 'r'. For example, read each word aloud and listen to the vowel sound. Compare the r-controlled vowel sound with the related vowel sound in the first group. For example,/i/in 'stick' and/i/in 'stir'	 Isolate vowel sounds Produce vowel sounds 	r-controlled vowels accurately produced Impact of 'r' on vowel satisfactorily explored
Sight Words			
Read in isolation and in context, sight words appropriate to the grade level	Use games/jingles/poems/rhymes to review words on Word Wall daily - individually and with peers - in order to build sight word vocabulary	Practise sight words	Sight words decoded correctly
Structural Analysis			
Revise and use syllabication rules to improve vocabulary and spelling	Create posters to illustrate a syllabication rule. The poster should include the rule itself, an illustration and at least four examples of divided words for the rule.	Create postersSyllabicate words	Rules, illustrations and division of words are correctly depicted on poster.
Apply the Word-	Cut grade level words from newspapers/magazines. Make a	Apply word	Word-Within-Word Strategy

Within -Word strategy	list of these words in their notebooks. Identify smaller words	recognition strategy	effectively applied to decode
as a means of deciphering unknown words	in the larger words and cut these apart from the larger unit. Read these words/word parts aloud. Try to figure out the words/word parts in the larger words which they are unable to quickly decode using another word recognition strategy already learnt or as a last resort. Consult a peer or the teacher for assistance. Having decoded/worked out the unknown word parts, read the complete words from their notebooks.	recognition strategy	unfamiliar words
Identify and explore the meaning of inflectional endings as a means of differentiating between words during the reading process	Search for pairs of words in class readers and supplementary texts that are differentiated by the presence/absence of inflectional endings. Share the meanings, which are communicated by each word in the pair.	Analyse inflectional endings	Use of inflectional endings appropriately analysed to determine how they impact word meaning and help to differentiate between words
Spelling			
Spell and practise correct pronunciation of the 'aw', 'au', 'augh', 'ough', 'a' vowels by applying appropriate articulation of the sounds, given the words in which the vowels are used	Watch videos or listen to tapes relating to the sounds – 'aw', 'au', 'augh', 'ough', 'a'. Practise the pronunciation of these sounds based on what is modelled, using list of related words. Take turns in assigning words (with these sounds) to be spelt by peers.	Pronounce vowel sounds	Vowel sounds - 'aw', 'au', 'augh', 'ough', 'a' accurately pronounced

Spell and practise	In pairs, randomly select cards with words which include the	Pronounce vowel	Words with the ear', 'er' and 'ar'
correct pronunciation	'ear', 'er' and 'ar' sounds, then read them aloud. Close their	sounds	sounds accurately pronounced in
of the 'ear', 'er' , 'ar'	eyes and try to spell each word after reading it aloud.	 Spell words 	words
vowels by applying appropriate articulation of the sounds, given the words in which the vowels are used	In pairs, students take turns calling words from word cards while the other student spells the word.		Words with ear', 'er' and 'ar' sounds correctly spelt
Vocabulary Developme	nt		
Work cooperatively with peers to build vocabulary	Play game 'Figure it Out' with peers. Game	Use context clues	Context clues effectively used to determine word meaning
Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Students, barring one, are given a set of cards/strips containing word clues in pictures, words, sentences and paragraphs for different words. They will use these in the game to assist students who may need assistance in the game. Game One student rolls a die and selects a card from a pile that reflects the number matching that of the face-up side of the die. The goal is to supply the meaning of the word but if they cannot, other students should give context clues to assist the student in determining the meaning.		
	If the student is unable to supply the meaning after three (3)		

	attempts, despite assistance of peers, then another student will supply the response and the die will be rolled again and another challenge given.		
Use reference sources to confirm word meanings and appropriate use of targeted words in context	Participate in dictionary drill activity. Students hold closed dictionary in hands and wait for the leader to call the word to be searched for as soon as the leader says 'GO' they begin to look for the word in the dictionary. The student who finds the word reads it to the class. Scores can be awarded for each word that is found. Students are given sentences and they will use a word from the list (words used in activity above) to complete a sentence, e.g. joy hoop highway Paul jumped for when he saw his new puppy.	Locate word meanings from dictionary	Word meanings accurately located in dictionaries Words correctly used in sentences

Т			
	OBJECTIVES		
enjoyment of texts, using a tion and identify ideas and interpret information and ideas	Students should be able to: Make inferences before, during, and after reading Identify main idea and supporting details Clarify ideas through discussions and activities Use information in text to form and refine questions and predictions		tails activities
UGGESTED TEACHING AND LEARN STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT
groups to review and discuss how to ariety of inference charts or tips. e. The term of its says (Background Knowledge) Trext Gluence Charts or tips. e. (Text Gluence Cha	ext ext es} educt/FREE-Inference-	 Apply strategy Make inference 	Discussion focused on how the chart guides the process of making an inference and provides opportunities for all members of the group to ask and answer questions Sample inferences are accurately aligned to the text read and demonstrate use of the steps outlined on the chart
vwv	Rackgröund Knowledge Line Companies of the Companies of t		Rackgröund Knowledge V.teacherspayteachers.com/Product/FREE-InferenceInference-Graphic-Organizer-443376

	of making inference.			
	Complete prepared/sourced worksheet that requires that they read and use clues to decipher meaning. e.g. "My father did not like to wear his crown. He said it was heavy and made his	•	Make inferences	Inferences made are accurate and aligned to the information provided
	head hurt. While I did not have a crown, my parents made sure I had a silk dress with gold thread to wear for the coronation." Who Am I?			
	https://www.schoolonwheels.org/wp-content/uploads/2017/03/48-inference_practice_who_am_i.pdf			
	Use pictures, headings and sub-headings of selected texts to make inferences before, during and after reading using an inference chart as they read the text.	•	Make inferences Monitor own	Inferences made are accurately aligned to the text read
	Comment on how this helped them during the reading process.		reading	Comments shared highlight the use of making inference to monitor own reading
Identify main idea and supporting details	Engage in a collaborative activity to discuss tips that may be helpful when identifying main idea and supporting details in texts. Use ideas to create strategy poster for individual or whole class use.	•	Engage in discussion Identify main idea Identify supporting details	Discussion focused on identifying and explaining helpful tips when identifying the main idea and supporting details in texts read
	Read grade level text and identify main idea. Select a sentence strip that appropriately captures the main idea of the text read.	•	Identify main idea	Main ideas accurately identified

	Read story excerpts/paragraphs/short stories and circle/underline	Identify main	The main idea sentence(s) correctly
	The house is old and needs some work. It needs new paint. The windows are broken. The door is loose. The roof has holes. 1. The house is old but nice. 2. The old house needs to be fixed. Sometimes you need to read all of a story to find the main idea. Read this story. Circle the sentence that tells the main idea. It is raining. Ann puts on boots. She puts on a hat. Now she is ready.	Identify main idea	The main idea sentence(s) correctly identified
Clarify ideas through discussions and activities	http://www.talkcsme.com/main-idea-of-a-story-worksheet-main-idea-comprehension-and-ideas-e04d9ef284b12e8c.html Work in small groups to use the Readers Theatre strategy to summarise and present a story read. Engage in a whole class discussion to allow classmates to react to the presentation and clarify ideas.	 Summarise story Engage in discussion Clarify ideas 	Readers Theatre presentation depicts a true summary of the text read Discussion provided an opportunity for students to seek clarification on the text presented
	Work in pairs to write questions they would ask themselves to clarify ideas before, during and after reading. Share questions with the class. Engage in an oral reading session where they utilise two or more of the questions to provide/seek clarification.	 Write questions Respond to questions Clarify ideas 	Questions written sought to request or provide clarity on issues of focus Oral reading sessions provided demonstration of the use of questions to seek and provide clarification during reading

Use information in text to form and refine questions and predictions	Collaborate with their teacher to use the DRTA strategy to read grade level texts and decipher meaning. Use colour coded sticky notes to write their predictions. Paste the note at the point in the text where information to either support or refute the prediction is located. Place a tick on the note if the prediction is aligned to the text. Place a think bubble and modify prediction if necessary.	•	Read grade level text Use DRTA strategy Refine predictions	Sticky notes appropriately placed to either confirm or refute ideas in text with predictions made Tick or think bubble used to confirm or refute ideas in text with predictions Predictions modified in accordance with the information garnered from the text
	Work in pairs to peruse pictures, headings and subheadings in texts and use information presented to make predictions about the texts. Write at least five questions that may be answered by the text. Read the text alternately and talk about portions of the text that either support or refute the predictions made. Make new predictions and continue checking until the text is complete	•	Make predictions Support predictions with evidence	Questions written aligned with the information presented in the pictures, headings and sub headings. Discussions concentrate on confirming and refuting predictions citing evidence from text Predictions made and modified according to the sequence of ideas in the text
	Engage in a discussion focused on making predictions about a selected grade level text. Make predictions about the characters, setting, and plot and record same on specified charts or sections of the board. Listen as the teacher or their peers read different portions of the text. Snap their fingers when a portion of the text read supports or refutes their prediction. Engage the class in a mini discussion to say why that part of the text refutes or supports the prediction.	•	Engage in discussion Make predictions Support or refute predictions Cite evidence in texts	Discussion and predictions satisfactorily linked to the different story elements Chart or board recordings captured the predictions made Mini discussion highlighted students' understanding of the text

	as well as the extent to which
	different portions supported or
	refuted predictions made

	STRAND: GRA	AMMAR AND CONVENT	IONS	
punctuated, using SJIUse and adapt a rang	ch are grammatically accurate and correctly E and JC appropriately ge of sentence structures according to ng between SJE and JC	OBJECTIVES Students should be able to:		
OBJECTIVES	SUGGESTED TEACHING AND LEARN	NING ACTIVITIES	KEY SKILLS	ASSESSMENT
Use adjectives appropriately in written and oral tasks	STUDENTS WILL: Expand simple sentences by adding adjectives to make more interesting sentences. Discuss their choice and placement of adjectives in each sentence.		Use adjectivesExpand sentencesJustify adjective usage	Adjectives appropriately used to expand sentences Adjective choices and use adequately justified
	On given word cards half of the class will we the other half will write a noun. Move around match for their noun/adjective. Once a mastudents will partner to create a sentence adjective and the noun.	und the room to find a atch is found both	 Distinguish adjectives and nouns Use adjectives Describe nouns Construct sentences 	Adjectives and nouns appropriately paired and used to construct sentences
Identify and use adverbs appropriately	Search for adverbs in their class readers or classify the adverbs found in the following		Identify adverbsUse adverbs	Adverbs accurately identified and sorted based on function

when composing sentences	WHEN? WHERE? HOW? TO WHAT EXTENT?	Distinguish adverbs by function Sentences appropriately expanded with a range of adverbs
	Add an adverb to given simple sentences. The adverb should satisfy the criteria listed in brackets. e.g. The student answered the question. (HOW?) Sample response: The student CAREFULLY answered the question.	 Compose sentences Use adverbs Associate adverbs with function Adverbs appropriately used to modify simple sentences
Apply the concepts of adding -d, -ed to form the past tense	Use the 3-2-1 strategy to discuss in the simple past tense stories read or classroom activities completed. For example: 3- record three things you remember from this story/activity 2- record two things you liked about the story/activity 1- record one thing you did not like about the story/activity	 Use the past tense Discuss past events Past Tense form of verbs accurately used to discuss stories read or activities completed
Use the irregular form rules of the simple past tense to build vocabulary and writing skills	In small groups use teacher- made verb cards (with past tense verbs) to create simple stories written in the past tense. Points to Note:	 Work collaboratively Create stories Use the past tense Past tense verbs accurately used to create stories to create stories

Apply knowledge of	Example: "Late one night my neighbour knocked on the front door and asked" In small groups use teacher-made/sourced letter tiles to make		Pronouns accurately formed from
Apply knowledge of pronouns (personal, possessive, demonstrative) in a variety of written and oral tasks	pronouns. Use pronouns formed to make sentences.	Form pronounsUse pronounsMake sentences	letter tiles and appropriately used to create sentences
	Read articles in student newspaper e.g. Children's Own. Choose one or two paragraphs and underline all the nouns. Replace all the underlined nouns with pronouns. Discuss the impact of this exercise on the given piece of writing.	 Identify nouns Replace nouns with pronouns Discuss pronoun usage 	Pronouns appropriately used to replace nouns Pronoun usage in written piece meaningfully discussed
Use punctuation marks (full stop, comma, and question sign) accurately to compose	Edit given paragraphs for correct punctuation usage. Rewrite using the correct punctuation marks.	Edit for punctuationUse punctuation	Given paragraphs accurately edited and revised to reflect appropriate punctuation usage
simple sentences/paragraphs	Compose post card messages and discuss punctuation choices. With a partner reflect on and explore other punctuation options for the message.	 Discuss punctuation usage Work collaboratively 	Punctuation choices adequately discussed in written pieces
Choose appropriate verbs to agree with	Design a subject/verb agreement poster (with examples) for the	Design poster Present	Subject/verb agreement poster adequately highlights

he/she/it and other	class display board.	information	subject/verb agreement rules
singular subjects	He likes		and examples
	It is		
	Jamaica produces		
	Complete conversations for comic strip by using the correct verb.	 Complete sentences Use correct subject/verb agreement Design comic strip 	Sentences for comic strip reflect accurate subject/verb agreement

	STRAND	: WRITING		
ATTAINMENT TARGETS OBJECTIVES Students should be able			o:	
 their ideas into paragraphs Write to narrat purposes, using media approach Use language a create vibrant 	aches to the writing process to enable them to organise a coherent structure including, layout, sections and se, to persuade and for a range of transactional g SJE and JC appropriately and incorporating multihes to their writing and text forms appropriately and with imagination to and engaging texts structed paragraphs which have linking sentences ween them SUGGESTED TEACHING AND LEARNING STUDENTS WILL:	 Formulate interview questions using 5 Ws -who, what, when, who why Summarize information or list critical/essential information Develop headings for sets of simple sentences/paragraphs Compose draft text using a paragraph frame Extend generated words and phrases into sentences Record details of an event that had or will happen (state event, happened, to whom, when, where, why/how) Expand writing by adding details and descriptive words With teacher support, review work done and improve as necess 		al information es/paragraphs entences ppen (state event, what entences)
Formulate interview questions using 5 Ws -who, what, when, where, why	Work in pairs to peruse a magazine, newspaper or text to utilise the 5 Ws. Write sample questions on a graphic of sourced by the teacher. Mount graphic organiser in the Observe as their teacher models writing questions with topics into questions. Engage in teacher-led discussion demonstration observed and the processes involved.	rganiser prepared or classroom. the 5 Ws by turning	 Identify questions Write questions Observe teacher model Engage in discussion 	Graphic organiser completed accurately with 5 Ws questions Discussion focused on highlighting and examining the processes involved in using headings and sub headings to write questions with the 5 Ws
	Work with their partners to write between five and ten questions that they will ask a resource person. Write questions using the 5 Ws. Critique each other's work for accuracy.		Construct questionsPractise Critiquing	Questions accurately utilised the 5 Ws Critique that is constructive and accurately aligned to the information presented by

			their peers
Summarize information or list critical/essential information	Engage in a teacher-led discussion/YouTube/interactive video focused on writing simple summaries. Listen to a short speech or presentation on tape/read by the teacher/read by a peer. Then do a quick write to summarise the information heard	 Engage in discussion Do a quick write Summarise text 	Discussion focused on the processes involved in writing and critiquing summaries
	Work in pairs to read teacher prepared hand-out and identify main ideas. Use graphic organiser to capture main idea. Use interactive writing strategy to write sample summary.	 Identify main idea Write summary 	Main ideas accurately identified and recorded on graphic organiser Summary accurately captured and communicates main ideas and important supporting details
Develop headings for sets of simple sentences/ paragraphs	Use sentence strips to write headings for a paragraph.	Write headings	Headings appropriately written and aligned to the paragraphs
Compose draft text using a paragraph frame.	Complete a paragraph frame then use it to write a paragraph. Share paragraphs with elbow partner and make suggestions for the next draft.	Compose paragraphs	Paragraph written is aligned to paragraph frame
Extend generated words and phrases into sentences	Construct sentences with Vocabulary Words. Create a story/book incorporating all of their vocabulary words. Each sentence must build on the previous sentence and make sense.	Construct sentencesCreate story/book	Sentences constructed correctly using vocabulary words Sentences in story/book

	https://buildingrti.utexas.org/sites/default/files/documents/Vocab_practice_activities.pdf		adequately developed to make a cohesive piece of writing
Record details of an event that had or will happen. State event, what	Complete a graphic organizer about an activity that you planned for someone. Event/Activity	Complete graphic organizerRecord details	Graphic organizer completed satisfactorily to record details of an event
happened, to whom, when, where, why/how	What happened?		
	To whom did it happen?		
	When?		
	Where?		
	Why/How?		
Expand writing by	Review first draft of a piece of narrative writing. Identify and rewrite sentences	Review draft	Rewritten draft reflects
adding details, and descriptive words	that can be improved by adding details/descriptive words.	Rewrite sentences	added details/use of descriptive words
With teacher support, review work done and improve as necessary	Use information from teacher response journals to review/rewrite various pieces of writing.	Review/rewrite drafts	Drafts written satisfactorily reflect evidence of teacher support

RESOURCES:

- Dolch Sight Word List for Grade 3 (basic sight words)
- Fry's Word List- High frequency words The third hundred
- Words from Literacy 1-2-3 Big/Little books (Readers)
- Words from concepts being learnt in Integrated Studies
- Words related to general Language Arts content for Term 2 units.
- Relevant learning websites videos, Power Point presentations, stories and interactive activities, including games
- Pre-recorded stories
- Puppets
- Reading games
- Word cards
- Magazines, newspaper, post cards, comic strips
- Sentence strips
- Supplementary readers
- Laptop
- Dictionaries
- Worksheets
- Sticky notes
- Letter tiles
- Multimedia Projector
- Internet
- Voice recording device
- Grade level texts
- Strategy posters comprehension and writing strategies and skills,
- Subject–verb agreement chart
- Samples of students' writing (stories. letters, response journals)
- Graphic organizers

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 LANGUAGE ARTS TERM2 - UNIT1 - 6 WEEKS

Grade 3 – Term 2 – Unit 1 – 6 weeks

Introduction to the Unit:

After completing one term in Grade Three, the students are now equipped with the necessary skills that will allow them to become more independent as learners. They will continue to apply previously learnt skills across the strands. In this unit, further opportunities are given for students to share opinions, to ask and answer questions using the listening and speaking skills.

There is emphasis on application of skills and concepts learnt that will better enable them to decode and encode words to increase fluency and understanding. They continue to use the writing process to express their ideas and utilise a variety of prewriting strategies in the selection of topics and organization of ideas. They write fully developed paragraphs that reflect essential paragraph elements. Writing checklists are used to edit documents for the traits of quality writing.

On completion of this unit, the students would have been exposed to activities that would have allowed them to scaffold on learnt skills and concepts that will greatly impact the development of the language skills.

	STRAND: SPEAKING AND LISTENING				
		OBJECTIVES Students should be able to:			
 Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Plan and deliver a second competence for different purposes and audiences, using SJE and JC appropriately and creatively Listen and follow in 		speech to an audience estions to gain/clarify information/instructions nstructions accurately nmaries then respond sharing opinions and interpretations			
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT	
Plan and deliver a speech to an audience	In groups, use given roles (e.g. Member of famous sports personalities, Artistes) to disa Speech, Introduction or Vote of Thanks to Negotiate roles for planning and delivering and vote of thanks.	scuss, plan and deliver o a named audience.	Speak appreciatively of others work collaboratively role play	Words used appropriately demonstrated appreciation Conventions of speech adequately reflected in presentation	
Listen and follow instructions accurately	In pairs, students will be given pictures and student with the picture will give instruction that will allow him to draw the picture. The drawing must not be shown the picture undrawing. Points to note The activity can also be done as a whole grateacher gives the instruction. Pictures can	ons to the other student e student who is til he has finished coup activity where the	 Give clear instructions Follow instructions Listen attentively 	Pictures drawn reflect that students followed instructions satisfactorily	

	roles are reversed.			
Ask and answer questions to clarify information/instructions	View safety signs and posters. The leader throws a ball to a student and asks a question about a sign or poster. The student catches the ball and responds to the question. The student then throws the ball to another student and asks a related question. The activity continues until students are unable to think of questions or respond to questions about a sign/poster. Another sign/poster is used to generate new responses and questions.	•	Respond to questions Ask questions	Relevant questions asked and answered satisfactorily
Listen to story summaries then respond sharing opinions and interpretations of the same story	After listening to readings/recordings of stories students will work in groups to develop a summary of the story. Groups will present their summaries. Students compare and contrast summaries .	•	Listen responsively Share opinions Interpret ideas	Summaries adequately reflect central and main ideas of the story

	STRAND: W	ORD RECOGNITION AN	D FLUENCY	
ATTAINMENT TARGETS		OBJECTIVES Students should be able to:		
 Automatically reword lists) throudevices Establish a concercognition cluedentify new wo Develop phonic 	d with appreciation cognise words (including basic sight igh repeated exposure and mnemonic ept of print and use a range of word s, re-reading and reading ahead, to rds awareness and use knowledge of letterndences in order to decode unfamiliar	 Identify and accurately pronounce vowel digraphs and diphthongs in isolation and in context Read words with the 'r'-controlled vowels Revise and use syllabication rules to improve vocabulary and spelling Use knowledge of inflectional ending to read and decipher meaning of unfamiliar words Read in isolation and in context, sight words appropriate to the grade level Work cooperatively with peers to build vocabulary Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words Use reference sources to confirm word meanings and appropriate use of targeted words in context Begin to use the knowledge of roots and affixes to determine the meanings of words Substitute words in context to reflect similar and different meanings through practice with synonyms and antonyms Practise the appropriate use of homonyms and homographs 		
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:		KEY SKILLS	ASSESSMENT
PHONICS	STODENTS WILL.			
Identify and accurately pronounce vowel digraphs and diphthongs in isolation and in context	Dip and Read Take turns to pull sentence strips from a sentences, emphasizing vowel digraphs	· ·	Read vowel digraphs/diphthongs	Vowel digraphs/diphthongs accurately read in sentences
Read words with the 'r'- controlled vowels	In pairs, read selected portions of grade material containing words with r-contro each other and give feedback on how r-	olled vowels. Listen to	Pronounce r- controlled vowels	r-controlled vowels accurately pronounced in the context of

	pronounced in the context of wo	ords/sentences.			words/sentences
Structural Analysis					
Revise and use syllabication rules to improve vocabulary and spelling	Spell words aloud, clearly demonstrating the application of syllabication rules; for example: Word to be spelt - Cycle Spell showing that each syllable has a vowel sound - cy- cle Word to be spelt - shallow Spell splitting the syllables between the double consonants l-shal-low			Apply syllabication rules	Syllabication rules appropriately applied to spell words
Use knowledge of inflectional endings to read and decipher meaning of unfamiliar words	In small groups, compare sets of related words and indicate shifts in meaning arising from the presence of inflectional endings in some words, e.g. Set 1 Set 2 position positioned believe believing		•	Analyse words Decipher word meanings	Knowledge/understanding of the use of inflectional endings effectively used to determine the meanings of unfamiliar words
Read in isolation and in context, sight words appropriate to the grade level	Using charts provided in differer groups, take turns in reading alo indicated. Individually, select three (3) sight each to write a sentence. Excha	ud different sight words t words from the list and us		Read sight words	Sight words accurately read in isolation and in context

	aloud, emphasizing the sight word in each case.		
Vocabulary Developme	nt		
Work cooperatively with peers to build vocabulary Use context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Play the Game 'Open your Eyes' In groups, work to find the meanings of three (3) unfamiliar words using a set of different clues – pictures, words, sentences and paragraphs. Use these clues to confirm that the determined meaning is likely to be accurate. The first group that is able to accurately work out the meanings of the targeted words will be declared the winner.	 Use different word clues Determine word meanings 	Word meanings accurately determined based on the effective use of context clues
Use reference sources to confirm word meanings and appropriate use of targeted words in context	Complete crossword puzzle. Students will use reference sources to help them in completing the puzzle. Use vocabulary words to make sentences.	 Use reference materials Make sentences 	Crossword puzzle completed satisfactorily Vocabulary words used appropriately in sentences
Begin to use the knowledge of roots and affixes to determine the meanings of words	Match index cards with affixes to root words after definition is read aloud. e.g. Care ful less Meaning: showing much thought and attention Use the word in a sentence.	 Match word and meanings Use affixes Create sentences 	Affixes correctly matched to root words Words appropriately used in sentences

Substitute words in context to reflect similar and different meanings through practice with synonyms and antonyms	Use the synonyms and/or antonyms of words given to make/complete sentences. Play "Snap" card game. Snap Card Game Select 10 words. For each word select 2 synonyms and 2 antonyms. Words are written on the cards. In groups of six, each player is given three cards. The rest stays in the deck. One card is faced up. If a player has a synonym or antonym of the word they throw down the matched card with another. If another player can match the card then he does the same as above. If the card cannot be matched then another card is drawn from the deck. The player who disposes of all the cards first, wins.	•	Substitute synonyms Match synonyms and antonyms	Synonyms correctly substituted in context Synonyms and/or antonyms are paired correctly
Practise the appropriate use of homonyms and homographs	Complete a story/passage using given homonyms and homographs. In pairs select a homograph from a container. One student uses it to make a sentence and the other student uses the homograph in a different context.	•	Select homonyms and homographs Practise using homographs	Homonyms and homographs selected correctly

	STRAND: COMPREHENSION					
ATTAINMENT TARGETS	ATTAINMENT TARGETS		OBJECTIVES			
		Students should be able to:				
variety of clues to ga events Use deduction and ir and to predict outcome	variety of clues to gain information and identify ideas and events • Use deduction and inference to interpret information and ideas and to predict outcomes • Use information			bute to class discussions and decision before, during and ng process es and reasonable predictions nin text to modify predictions and questions and supporting details to summarize text		
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT		
Make inferences and reasonable predictions	Work in small group to review making inference clues in the book my own thinking I think because https://www.pinterest.co.uk/pin/5129178 Use an example from a text or picture to diposter	45031468737/	Review making inference	Discussions are focused on utilizing the strategy poster during reading Examples cited are accurate		
	Complete teacher-prepared Making Inference on grade level text read. e.g.	nce Worksheets based	Make inferences	Worksheets are accurately completed with reasonable inferences and supporting evidence		

https://www.scho	_	;/wp- erence_practice_who_am_i.pdf		
I had finally gotto being weightless comfortable feel especially liked f the window to so Earth below.	i. It became a ling. I loating by			
Inferences Made Who Am I? I often work in the morning when the The canvas has he over night. When I start, I make subrushes are clean	ne light is best. nad time to dry n re all of my			

to modify predictions and question	modifying predictions as well as asking and answering questions during reading (teacher may use a teacher-prepared/sourced chart with tips and steps to guide the discussion).	discussionModify predictions	necessary tips and steps to be taken when making and modifying predictions as well as asking and answering questions during reading
	Engage in the use of the Directed Reading Thinking Activity (DRTA) to develop the skill of making and modifying predictions. Read to pre-determine stopping points then pause to confirm, refute or modify predictions made before and during reading.	 Make predictions Modify predictions Confirm predictions Refute predictions 	Predictions are made, confirmed, refuted and modified based on evidence from text and experience
Use main idea and supporting details to summarize text	Engage in a teacher-led discussion focused on what is a main idea and what are supporting details. Read/listen to grade level text then complete Summary Graphic organizer using information from text. e.g. SUMMARY 9RAPHIC OR 9ANIZER	 Engage in discussion Use main idea and supporting details Summarize text 	Discussions are focused on establishing a clear understanding of main idea and supporting details Graphic organizers completed with accurate information from text
Willingly contribute to class discussions and decision before, during and after the reading process	Circle the 3 most important words in the Main Idea, and then write them here: Three Important Details 1) 2) 3) Summary of the Passage in ONE Sentence		
	https://www.pinterest.com/pin/160651911679187751/		

	STRAND: GRA	AMMAR AND CONVENT	IONS			
 ATTAINMENT TARGETS Write sentences which are grammatically accurate and correctly punctuated, using SJE and JC appropriately Use and adapt a range of sentence structures according to context, distinguishing between SJE and JC 		OBJECTIVES Students should be able to: Identify and use proper nouns in a variety of texts Identify and use common nouns Apply the distinction of gender when using nouns Use full stops and commas when writing simple sentences Show appropriate use of the apostrophe (') when writing singular possessive nouns Construct sentences (orally or written) demonstrating the use of subject vertagreement Apply basic past tense rules in speech and written work (add -d and -ed) Apply the concept of the regular form (-ied) of the past tense to build vocabulary and writing skills Identify and use the concept of the past participle to build writing skills Begin to extend the way they use adverbs in written work				
OBJECTIVES Identify and use proper nouns in a variety of texts	SUGGESTED TEACHING AND LEARN STUDENTS WILL: Participate in a Proper Noun 'Gallery Walk' around the classroom in groups to write ex nouns on charts. Charts may be given varionally Names of Girls, Schools, Important Events compete to see how many proper nouns the given time). Pick teacher-made proper noun cards from them to create sentences/short paragraphs	where they will move amples of proper ous headings, e.g. , etc. (Groups may ney can generate in a	 KEY SKILLS Write examples of proper nouns Construct sentences/paragraphs Use proper nouns 	ASSESSMENT Charts accurately completed with examples of proper noun Sentences/paragraphs appropriately reflect use of proper nouns		

Identify and use common nouns	Compete in teams to see how many common nouns they can generate from given categories, e.g. community workers, fruits, places etc. Complete story frames/poems by filling in the blank spaces with appropriate common nouns. Share product with class.	•	Work collaboratively Generate common nouns Complete stories/poems	Common nouns appropriately generated under given categories Appropriate common nouns used to complete story frames/poems
Apply the distinction of gender when using nouns	Collect pictures to create Noun Gender Albums. Use the following categories: Feminine, Masculine, Common, Neuter. Complete sentences with the correct gender nouns.	•	Collect pictures Classify nouns Complete	Pictures of nouns accurately classified according to gender Sentences appropriately
	e.g. She and herare celebrating their 50 th wedding anniversary.	•	sentences Use gender nouns	completed with gender nouns
Use full stops and commas when writing simple sentences	Complete online or teacher-sourced worksheets practising the use of the full stop and the comma in simple sentences. Use a punctuation editing wheel (a wheel with the relevant	•	Use full stops and commas Create sentences Use full stops and commas	Full stops and commas accurately used to complete exercises on worksheets
	punctuation rules) to edit the sentences of their peers for full stops and commas.	•	Edit sentences	Sentences adequately edited for correct use of full stops and commas

Show appropriate use of the apostrophe (') when writing singular possessive nouns	Change different expressions into the possessive case. e.g. the shirt of the boy the punishment of a thief	•	Write the singular possessive form of nouns	The singular possessive form accurately formed from given expressions
	Create signs for their classroom/school using singular possessive nouns • e.g. The Principal's Office The teacher's desk	•	Create signs Use the singular possessive form of nouns	The singular possessive form correctly used to create classroom/school signs
Construct sentences (orally or written) demonstrating the use of subject verb agreement	View teacher prepared/online Web Quest to understand the concept of subject/verb agreement. Circle the subject and underline the verb in given simple sentences.	•	View for information Identify subject and verb Classify subjects	Subject and verb accurately identified Singular and plural subjects and verbs correctly identified and classified

	Create lists of singular/plural subjects and verbs		
	Work in small groups to write a short story/paragraph. Remove a few of the subjects and verbs. Exchange with another group and have them provide singular or plural subjects and verbs to complete the story/paragraph. Share their stories/paragraphs with the class.	Distinguish singular/plural subject and verbs Complete stories/paragraphs Use singular/plural subjects Use singular/plural verbs Share information	Stories/paragraphs completed with accurate subject/verb agreement
Apply basic past tense rules in speech and written work (add -d and -ed)	Use a given list of verbs to complete a dialogue in the simple past tense.	Complete dialogue Use the simple past tense	Given verbs appropriately used to complete the dialogue in the simple past tense.
	Compete to speak on a given topic for 30 seconds using the simple past tense. (Students are out of the game if they stop talking before the given time or if they do not use the past tense).	Speak freely Use the simple past tense	Speech on given topic satisfactorily delivered using the simple past tense.
Apply the concept of the regular form (-ied)	Match regular verbs to their past tense forms	Form the past tense	Verbs correctly matched to their past tense forms

of the past tense to build vocabulary and writing skills	 verb ending wit 'ied' e.g. try → tr/tried 	th the consond	ant 'y' remov	ve the 'y 'and add		
Identify and use the concept of the past participle to build writing skills	Complete teacher made participle of verbs. Complete given sentent verb. Listen to news items be of the verbs in the past past and present tense Prese pla sing cut	eing read and i participle. Co of the past patent Past y played g sang	past particip identify and omplete a ta	le form of the record the use ble inserting the	Solve crossword puzzles Identify past participle forms Complete sentences Use past participle Listen for information Identify past participle Record information	Crossword puzzles correctly completed using the past participle. Past participle verb forms correctly identified and recorded
Begin to extend the way they use	Examine the use of adverted the adverbs and the wo		•		Discuss adverb use	The use and impact of adverbs

adverbs in written	Determine whether the word is a VERB or ADJECTIVE. Talk about	Use adverbs	are adequately discussed
work	the impact of the adverbs on the meaning of the sentence.		Adverbs appropriately used to enhance the meaning of texts
	Use adverbs in a range of texts to enhance meaning.		

STRAND: WRITING				
 ATTAINMENT TARGETS Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including layout, sections and paragraphs Write to narrate, to persuade and for a range of transactional purposes, using SJE and JC appropriately and incorporating multi-media approaches to their writing Use language and text forms appropriately and with imagination to create vibrant and engaging texts Write well-constructed paragraphs which have linking sentences within and between them 	OBJECTIVES Students should be able to: Formulate simple interview questions Pose formulated questions Record information gleaned Use a variety of pre-writing strategies (e.g. webbing, brainstorming, listing, note taking, outlining, drafting, graphic organizers) to choose a topic and organize ideas Write fully developed paragraphs using proper form (e.g. topic sentence, details, summary, conclusion sentence) Revise and use editing checklist to edit documents for the traits of quality writing (e.g. ideas, organization, word choice, voice, sentence fluency, conventions and presentation) Prepare and publish final drafts of informative paragraphs			

OBJECTIVES	SUGGESTED TEACHING AND LEARNING ACTIVITIES STUDENTS WILL:	KEY SKILLS	ASSESSMENT
Formulate simple interview questions	Writing to Inform Interview	Formulate interview questions	Questionnaire highlights the use of the 5 Ws: who, what, when, where, why.
	Work collaboratively with teacher to develop interview questions based on topic of interest using 5 Ws fingers: who, what, when, where, why		Questions reflected alignment with topic of choice.
	Five W's Chart What? Who? Where? When? Why? http://thespeaker.co/write-news-piece/		
Pose formulated questions	Work in pairs to conduct interviews with peers using questionnaire developed. Record interview notes/responses in interview log. e.g. Interview Log	 Conduct interview Record interview notes 	Interviews demonstrated good composition of question using the 5Ws: who, what, when, where, why
			Interview log reflects an

Record information gleaned	Interview Questions Respondent Responses		understanding of good note taking technique
Use a variety of pre- writing strategies (e.g., webbing, brainstorming, listing,	Informative Paragraph Pre-writing activities	Generate ideas	Ideas generated and recorded demonstrate alignment with topic
note taking, outlining, drafting, graphic organizers) to choose a topic and organize ideas Listen to a portion of a grade level informational text read by the teacher. Respond to teacher prepared questions geared at soliciting and highlighting the elements of informational texts (e.g. factual information etc.).		Record ideas on topic	
	Use a semantic map to record facts related to topic of choice. Discuss information on map within their groups.	Discuss information	
	Work in groups to conduct a data collection drive to gather factual information to support their writing (e.g. capture pictures, observations, note details etc.) Create a folder to store all the materials/evidence/data collected from the data collection drive.	Collect data	Data collected satisfactorily support writings
Write fully developed paragraphs using proper form (e.g. topic sentence, details, summary, conclusion sentence)	Drafting Activities Compose draft texts using information from semantic map and data folder using paragraph frame, e.g.	Compose sentences relating to topic	Sentences provided a clear topic sentence, supporting details and evidence to support statements

	Author's Name: Informative Writing Title: Topic Sentence: Fact 1 Fact 2 Fact 3 Fact 4		
Revise and edit documents for the traits of quality writing (e.g., ideas, organization, word choice, voice, sentence fluency, conventions and presentation)	Revising Activities Engage in a game of "I Spy". Each group member will peruse a copy of the piece under scrutiny to search for errors re: Capitalization, Organisation, Punctuation and Spelling (COPS). Call "I Spy" when an error has been identified. Then state the error and where it can be found or is evident.	Revise work done	Revised writing reflected satisfactorily feedback from peers and teacher focusing on topic sentence, supporting details, sequencing of ideas etc.
	Use COPS revision checklist to review their drafts to identify elements of their writing that need improvement, using feedback from the teacher and peers, with a focus on specific features (e.g., a strong opening or "lead"; clarity of the main idea and inclusion of facts to support the topic)		

	Editing and Proofreading Activities	•	Develop checklist	Checklist developed included the areas of focus, topic sentence, supporting details, sequencing of
	Work in small groups to use editing wheel to edit each other's work.	•	Use checklist	ideas, etc.
	Sthore a topic sentence and a closing sentence? Check your writing carefully.		to edit writing	
	https://twitter.com/risingstarsedu/status/460848316340006912 Spin the wheel and use the prompt at the opening to edit the writing.			
Prepare and publish final drafts of informative paragraphs	Publishing Engage in using the publishing strategy "3 Compliments and a Wish" – read aloud their written work to the class. Then call on 3 students to give 3 compliments and 1 student to give 1 wish based on the piece read.	•	Publish written work	Published texts show good use of all the elements learnt: topic sentence, supporting details, sequencing of ideas, etc.
	Write completed written work on newsprint/construction paper to be mounted on school's bulletin board			

RESOURCES:

- Dolch Sight Word List for Grade 3 (basic sight words)
- Fry's Word List High frequency words The third hundred
- Words from Literacy 1-2-3 Big/Little books (Readers)
- Words from concepts being learnt in Integrated Studies
- Words related to general Language Arts content for Term 2 units.
- Relevant learning websites videos, Power Point presentations, Web Quests and interactive activities, including games
- Pre-recorded stories
- Safety signs and posters
- Word games
- Word cards
- Pictures from magazines, newspapers, post cards
- Sentence strips
- Supplementary readers
- Laptop
- Crossword puzzles
- Worksheets
- Multimedia Projector
- Internet
- Voice recording device
- Grade level texts
- Strategy posters comprehension and writing strategies and skills,
- Samples of students' writing (stories, letters, journals)
- Graphic organizers

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 LANGUAGE ARTS TERM2 - UNIT2 - 6 WEEKS

Grade 3 – Term 2 – Unit 2 – 6 weeks

Introduction to the Unit:

Students engage in learning the language skills and content through scaffolding. They engage in the learning process by participating in activities that will allow them to listen, speak, read and write. In this unit more practise is given to the skills across the strands. The skills are reinforced in innovative ways.

In this unit, new concepts are introduced and students are given opportunities to apply their newly acquired content and skills. As students read, they use their personal experiences to critique texts. They apply the rules of specific mechanics and grammar in their writings. Students use appropriate formats for writing. In this unit, emphasis is placed on the reviewing and revising stages of the writing process.

At the end of this unit, students would have demonstrated satisfactory application of Language Arts content and skills.

	STRAND: S	PEAKING AND LISTENING	G	
 Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Listen to, recall, understand and respond to speakers' messages, whether implicit or explicit Recognise, value and make distinctions between home language and SJE to improve/acquire language and literacy competencies Explain and comment on speakers' use of language, including use of SJE and JC, and their use of vocabulary, grammar and other features 		purposesAsk and answer queRespond to story suTalk about how the	estions about informa ummaries of classmat y feel about an event ions to reflect on the	
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT
Communicate in different contexts and through various media for a variety of purposes Money Gram, FedEx, Wire transfer, letters, Whatsapp. How am I alike/different from the people I outside of Jamaica? Retell main ideas or events in a video/elect story/PowerPoint presentation on communication — e.g. may Money Gram, FedEx, Wire transfer, letters, Whatsapp.		unication. ail, texting, telephone, , Skype, Tango and communicate with	 Listen attentively Recall and retell details accurately Compare and contrast effectively 	Main ideas/facts appropriately identified and discussed

Ask and answer questions about information received Use answers/questions to reflect on the actions taken in response to various instructions/information	 Plan Talks Ask questions to generate ideas Practice questioning techniques with classmates. Practice reporting information received Play the 'What if" in small groups. One student will ask "What if" and the other students would answer or pose other questions. The class reflects on the responses (Does it make sense? Could it happen?) 	 Generate questions Respond to questions Reflect on responses 	Questions generated adequately addressed the discussion topics Responses to questions related satisfactorily
Talk about how they feel about an event and characters in the story Respond to story summaries of classmates	View films/recordings about stories depicting our culture. Select and give their opinions about a character or an event in the story. Present summaries after viewing/listening. Discuss if summaries presented had relevant information.	Summarise storiesGive opinions	Oral summaries accurately reflected information received Responses to summaries adequately supported or refuted based on evidence

	STRAND: W	ORD RECOGNITION AN	D FLUENCY	
 devices Establish a concept of print and use a range of word recognition clues, re-reading and reading ahead, to identify new words Develop phonic awareness and use knowledge of lettersound correspondences in order to decode unfamiliar words Work cooperatively with peers to build use context clues, pictures, words, sententially words in context Begin to use the knowledge of roots and words 				
		rent sounds associated with yowel digraphs and diphtho labication rules to improve inflectional ending to read and in context, sight words at their understanding of the res and blending graphemes isting mnemonics to learn to shonic relationships tegies to learn to spell tricky ationships ly with peers to build vocable pictures, words, sentences alliar words arces to confirm word mean anowledge of roots and affix	diphthongs in context mprove vocabulary and spelling to read and decipher meaning of unfamiliar words appropriate to the grade level g of the relationship between segmenting & phemes o learn to spell tricky words or words with ell tricky words or words with irregular	
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:		KEY SKILLS	ASSESSMENT
Phonics	J. J. J. LITTO WILL.			
Produce the different sounds associated with targeted graphemes	Read a passage/verse/jingle that has the repeated many times. Students identify the targeted grapheme. Students repeated other words that have the targeted grapheme.	the words that have at the sound and give	 Identify targeted grapheme Reproduce targeted grapheme 	Targeted grapheme correctly identified and reproduced

Read words with vowel digraphs and diphthongs in context	Make up three sentences with words that have diphthongs and digraphs. In pairs read each other's sentences. Students check each other's work and make corrections where they are needed. e.g. Joy has a toy that she will give to Roy. The man put the soil on the foil.	 Create sentences Read sentences Edit sentences 	Sentences created, read and edited correctly
	Complete a cloze passage with words from the list. e.g. moist enjoy choice toys Although it rained we did our trip to the beach. The sand was after the rain. We played with our instead of going into the water. I think we made the right .		Cloze passage completed accurately using given words
Structural Analysis			
Revise and use syllabication rules to improve vocabulary and spelling	Arrange themselves in a circle. The teacher throws a ball to a student. As she throws the ball she will call out a word. The student will catch the ball, break the word into syllables and spell the word. Students will use the words from the game to make sentences.	Syllabicate wordsConstruct sentencesSpell words	Words correctly separated into syllables Words correctly spelt
Use knowledge of inflectional ending to read and decipher	Using picture clues, work in pairs to select the best word to complete sentences. e.g.	Identify picture cluesSelect words	Words selected correctly to complete sentences

meaning of unfamiliar words	long, longer, longest The snake is the animal. shelf shelves There were many books on the					
Read in isolation and in context, sight words appropriate to the grade level	Participate in word game. List of targeted sight words is displayed. Students will be placed in teams. The teacher reads and displays a sentence and the team that selects the correct sight word to complete the sentence is awarded the point. Use the paired reading strategy to read a passage that contains the sight words from the list.	Select sight wordsRead passage	Words selected correctly to complete sentences Sight words correctly read in passages			
Spelling						
Spell words using their	Participate in class "Spell Off" to spell two and three syllable	Segment phonemes	Words spelt correctly			

understanding of the	words.			•	Blend graphemes	
relationship between				•	Spell words	
segmenting & blending	Points to note					
phonemes and	Students can make u		•			
blending graphemes	suggest words for th	e list of words to spe	ell.			
Develop or use existing mnemonics to learn to spell tricky words or words with irregular grapho-phonic relationships	spelling difficult words. Share the mnemonics with the class. Create a class book of mnemonics for spelling difficult words. Students can use those they researched as well as make up their own.			•	Research information Create class book	Mnemonics appropriately used to spell tricky words Class book created depicts researched as well as original mnemonics for spelling tricky words
Use different strategies to learn to spell tricky words or words with irregular grapho- phonic relationships	Identify and share with class different strategies that they use for spelling tricky words. In groups create strategy bookmarkers for spelling tricky words. Work in groups to apply these strategies to spell tricky words. They will then report to class if the strategies used were helpful.			•	Identify strategies Share ideas Spell words Apply strategies	Strategies appropriately identified, shared and used to spell tricky words
Vocabulary	1					
Work cooperatively with peers to build vocabulary	with peers to build be given the vocabulary words and they will think of a song			•	Cooperate in groups Share ideas Identify song titles	Vocabulary playlist satisfactorily created to show connections with the word and the song
	Vocabulary Word	Song Title	Connection			
		The word is used to describe the star				

Use context clues, pictures, words, sentences, paragraphs, as an aid to gain the meaning of unfamiliar words	Complete a rebus story activity sheets. Read sentences. Select the meaning, then identify the words that helped to give the meaning of the highlighted word. She penned a letter to her aunt. a. took b. wrote	identify context clues select meanings	Vocabulary word correctly identified using context clues
Use reference sources to confirm word meanings and appropriate use of targeted words in context	Use thesaurus and dictionary to find the meanings of targeted words to complete worksheets.	Use dictionaries and thesaurus	Worksheets satisfactorily completed
Begin to use the knowledge of roots and affixes to determine the meanings of words	Play affixes domino game. As students match root words to affixes to make new words, they should make a sentence with the word that gives its meaning. e.g. His careless behaviour caused the accident.	 Match affixes to root words Construct sentences 	Affixes correctly matched to root words Sentences constructed to reflect meanings
Substitute words in context to reflect similar and different meanings through practice with synonyms and antonyms	Complete sentences by giving the synonym/antonym of a given word. Write the antonym/synonym of the word in brackets to complete sentences e.g. The man gave all his money away. (rich)	Give synonyms/antonyms	Sentences completed correctly with appropriate synonyms/antonyms

Practise the appropriate use of homonyms and homographs	•	ole by writing a sentence the fthe words as used in cont		Construct sentences	Sentences constructed satisfactorily to give the suggested meaning
	Words	Meanings	Sentences		
	back	Part of the human body			
	back	Opposite of front			

	STRAN	ID: COMPREHENSION			
ATTAINMENT TARGETS		OBJECTIVES			
 Read for meaning, fluency and enjoyment of texts, using a variety of clues to gain information and identify ideas and events Use deduction and inference to interpret information and ideas and to predict outcomes Read fluently and with appreciation 		Students should be able to: Share personal experiences that help them to connect with and understand written work Critique text using personal experiences Identify elements of poetry to enhance understanding Discuss meaning in poetry			
OBJECTIVES	SUGGESTED TEACHING AND LEARI STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT	
Critique text using personal experiences	Engage in a teacher-led brainstorming active meaning and intentions of a critique. (What critique?) Observe as the teacher demonstrates using experiences to critique a text	at does it mean to	 Engage in discussion Observe teacher demonstration 	Discussions focused on explaining the meaning and intentions of a critique	
Share personal experiences that help them to connect with and understand written	Write in journals about a personal experier read text. Share the journal entry with elbo		Write journal entriesShare journals	Journal entries depicted logical connections with personal experiences and texts	
work	Read grade level text and work in pairs to usexperiences to critique the text based on grareas given by the teacher (these may be due the students to make reference).	uiding questions/focus	Critique textsUse guiding questions	Critiques were aligned to the guiding questions/focus areas given by the teacher and were based on the students' personal experiences	
Identify elements of	Work in groups to define/explain terms (rh	ythm, rhymes, stanzas,	Review poetic	Discussions focused on accurately	

poetry to enhance	imagery etc.) previously learnt. Engage in a whole class discussion	devices	explaining the terms related to the
understanding	focused on establishing correct understanding of the terms that highlight basic poetic devices.		poetic device
	Listen as the teacher reads a piece of text that has rhymes and a rhythm. State whether or not the text read is a poem and what caused them to decide that it was or was not.	Identify poetic devices	Responses confirmed that the piece read is a poem as well as highlighted the poetic devices employed
Discuss meaning in poetry.	View a teacher-prepared/sourced PowerPoint presentation focused on discussing imagery, mood and theme in poetry. Engage in a whole class discussion relating to the presentation viewed.	Engage in discussion	Discussions focused on establishing an understanding of how imagery, mood and themes provide/suggest meaning in poetry
	Observe as teacher models using his/her knowledge of imagery, mood and themes in poetry to extract/establish meaning from a poem.	Observe teacher demonstration	
	Listen as teacher reads grade level poem aloud. Engage in a discussion to identify the lines that create imagery. Work in small groups to Insert this information in a 5 Senses graphic organizer. e.g.	Identify imageryDiscuss meaning	Graphic organizers accurately completed and highlighted students' understanding of imagery in poetry

http://willireads.blogspot.com/2011/11/graphic-organizers.html Present their graphic organizers to the class and state how these helped them to understand how the poet is feeling as well as how they felt after reading the poem.		
Work in pairs/small groups to read grade level poem issued by the teacher and use emotion stickers to identify different emotions/moods identified in the poem (e.g. a student will paste a sad face sticker at a line/stanza that caused them to feel sad or believe that the author is sad). Make oral presentation to the class (completed activity sheets may be mounted in the class for reinforcement).	Detect mood/feelings	Mood/emotions identified are appropriately conveyed in the poem Oral presentations focused on highlighting students' reasons/rationale for the decisions they took

	STRAND: GRA	MMAR AND CONVENT	IONS	
punctuated, using SJUse and adapt a rang	ch are grammatically accurate and correctly E and JC appropriately ge of sentence structures according to ng between SJE and JC	OBJECTIVES Students should be able to: curate and correctly Use full stops and commas when writing sentences and paragraphs. Use the apostrophe (') to show singular possession • Demonstrate knowledge of the various forms of the verb. i.e. present, past		
OBJECTIVES	SUGGESTED TEACHING AND LEARN STUDENTS WILL:	IING ACTIVITIES	KEY SKILLS	ASSESSMENT
Use full stops and commas when writing sentences and paragraphs. Use the apostrophe (') to show singular	Complete given sentences by adding a singue. e.g. Mark drove car to the store.	ular possessive noun.	 Complete sentences Use singular possessive nouns 	Sentences accurately completed using singular possessive nouns Sentences appropriately
possession	e.g. The bag was locked in the car. It below Answer: My teacher's bag was locked in the	nged to my teacher.	Combine sentencesUse singular possessive nouns	combined using singular possessive nouns

	Rewrite sentences/paragraphs using the correct punctuation marks (full stops and commas).	•	Punctuate sentences/ paragraphs	Sentences/paragraphs satisfactorily rewritten with the correct punctuation marks
Demonstrate knowledge of the various forms of the verb, i.e. present, past and past participle (regular and irregular)	Complete various texts using the correct verb tense, e.g. letters, dialogue, comic strip conversations etc.	•	Use correct verb tense	Correct verb tense used appropriately to complete a range of texts
Use the negative forms of a verb in a simple sentence (present and past tense)	Convert given positive sentences into negative forms. e.g. I clean my classroom. → I do not clean my classroom. I cleaned my classroom. → I did not clean my classroom. Participate in a puppet show where they provide answers to questions.	•	Construct negative sentences Manipulate puppets Construct negative sentences	Positive sentences correctly converted to negative sentences
Use question marks to construct questions with 'do', 'who', 'where', 'which', 'when'	Complete given sentences by putting in appropriate question words and question mark. e.g is your birthday Construct questions to gather data on given topics.	•	Complete questions Use question mark Construct	Question words and question mark used appropriately to complete questions Questions appropriately constructed based on given

			questions	topics
Apply the use of the apostrophe to form contractions	Rewrite a teacher sourced poem by replacing the underlined expressions with contractions. I am - I'm did not- didn't	•	Use contractions	Contractions appropriately formed and used to replace underlined expressions
Practice using comparative adjectives (irregular)	Bring two objects to class, e.g. teddy bears, trucks, books, etc. Describe the objects for their peers using comparative adjectives. Record their favourite description and highlight the comparative adjectives used. In groups identify and correct errors in the use of comparative adjectives.	•	Compare nouns Identify and use comparative adjectives Record information Identify and correct error	Comparative adjectives appropriately used to compare objects Descriptions satisfactorily recorded and comparative adjectives accurately highlighted Errors in the use of comparative adjectives correctly identified and corrected
Appropriately use the conjunction 'but' in written and oral work	Join simple sentences using the conjunction 'but'.	•	Join sentences Use conjunction	Conjunction appropriately used to connect simple sentences

	Complete sentence frames by using comparative adjectives.	Complete sentence frames	Sentence frames appropriately completed using appropriate comparative adjectives
Compare adjectives using the phrase 'morethan'	Collect pictures of items in teacher- selected categories (e.g. homes, cars, plants etc.) Work in groups to compare pictures from the same category using the words 'morethan' e.g. Nadine's house is more beautiful than Gary's. Record the sentences produced and the rule governing comparing these adjectives	 Work collaboratively Compare items Use comparative adjectives Record information 	Items in pictures adequately compared using the relevant comparative adjectives accurately

STRAND: WRITING				
 Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including layout, sections and paragraphs Write to narrate, to persuade and for a range of transactional purposes, using SJE and JC appropriately and incorporating multi-media approaches to their writing Use language and text forms appropriately and with imagination to create vibrant and engaging texts Write well-constructed paragraphs which have linking sentences within and between them 	crives ents should be able to: Use a variety of pre-writing strategies (e.g., webbing, brainstorming, listing, utlining, drafting, graphic organizers) to choose a topic and organise ideas dentify and use parts of a friendly letter to generate ideas for writing ormulate friendly letters to convey ideas related to grade level experiences/interests Use approved friendly letter format eview and revise their own writing evise and use editing checklist to edit documents for the traits of quality writing (e.g., ideas, organization, word choice, voice, sentence fluency, conventions and presentation) repare and publish final drafts of friendly letters aimed at achieving different urposes - inviting, expressing thanks, requesting			

OBJECTIVES	SUGGESTED TEACHING AND LEARNING ACTIVITIES STUDENTS WILL:		KEY SKILLS	ASSESSMENT
Use a variety of pre- writing strategies (e.g., webbing, brainstorming, listing, outlining, drafting, graphic organizers) to choose a topic and organise ideas	List/brainstorm ideas about two given topics then select one of the topics that they would like to write about. Give reasons for selecting the topic.	•	List ideas Brainstorm ideas Select topic	Ideas listed are relevant to the topic Reasons given adequately supported choice

Identify and use parts of a friendly letter to generate ideas for writing	Friendly letter Pre-writing Activities	•	Identify parts of a friendly letter	Charts accurately labelled with the parts of a friendly letter
	Select parts of a friendly letter on flash cards prepared by the teacher. Work in groups to place the cards on the structure of a human body. Present their work to the class and explain rationale for the decisions taken within their groups, e.g. Address Date Greetings Body Closing	•	Generate ideas	
	Peruse samples of letters supplied by the teacher and respond to teacher guided questions to ascertain the parts and components of a friendly letter. Use information learnt from discussion to note ideas for their own writing.			Discussions focused on highlighting and establishing the parts and components of a friendly letter

	Engage in a teacher-led discussion focused on explaining the RAFT writing strategy (Role, Audience, Format and Topic). Collaborate with teacher to use the RAFT strategy to interpret a given writing task/outline and critical components to compose a friendly letter. Example of RAFT chart:		RAFT charts are accurately completed and represent correct interpretation of the writing task
	Role Audience Format Topic Document ideas for writing their letter under the Format column of the chart.		Ideas documented under the Format column are aligned to the topic of the letter
Formulate friendly letters to convey ideas related to grade level experiences/interests	Drafting Activities Use information from RAFT chart to compose drafts for their friendly letter.	 Organize ideas Document ideas in letter format 	Draft letter shows good organization of content
Use approved friendly letter format	Use letter template to compose their first draft. e.g.		

Review and revise their own writing	Work in groups to peruse and use teacher-prepared chart with guidelines for revising their drafts. Revise letters using ticks to note parts of their writing that they are comfortable with and question marks to note areas of concern and areas that need improvement. Work with teacher/partner to review ticks and question marks. Rewrite draft.	•	Revise written work	Letters highlight clear organization of content, appropriate use of transitional words, punctuation and capitalization
Revise and use editing checklist to edit documents for the traits of quality writing (e.g. ideas, organization, word choice, voice, sentence fluency, conventions and presentation)	Examine the class' existing editing checklists/editing wheel to add or subtract elements to make them appropriate for proofreading friendly letters. Use revised checklist/editing wheel to edit and proofread their written letters. Work with parents/guardians to source/develop editing checklists that may be used to edit and proofread friendly letters. Present their checklist to the class for discussion and feedback.	•	Revise checklists Use checklist to edit work	Checklists are appropriately modified/sourced to suit the revision of the friendly letters Letters are accurately edited
Prepare and publish final drafts of friendly letters aimed at achieving different purposes - inviting,	Publishing Place their letters in envelopes and work with their teachers to establish "postman system" to have their letters delivered.	•	Publish completed letters	Published letters reflect organization of content, appropriate use of transitional words, punctuation and capitalization

expressing thanks, requesting	Collaborate with their parents/other family members to have their letters hand-delivered/sent by post to their best friend.	
	Collaborate with their teacher to establish a classroom postal agency in the form of a nicely decorated box/chart. Place their letters in the classroom postal agency for further study/reference.	

RESOURCES:

- Dolch Sight Word List for Grade 3 (basic sight words)
- Fry's Word List High frequency words The third hundred
- Words from Literacy 1-2-3 Big/Little books (Readers)
- Words from concepts being learnt in Integrated Studies
- Words related to general Language Arts content for Term 2 units.
- Relevant learning websites videos, Power Point presentations and interactive activities, including games
- Pre-recorded stories, poems
- Board games
- Word cards
- Pictures and passages from magazines, newspaper, post cards
- Sentence strips
- Bean bag/ball
- Dictionaries
- Supplementary Readers
- Laptop
- Crossword puzzles
- Worksheets Cloze passages, Rebus stories
- Multimedia Projector
- Internet
- Voice recording device
- Grade level texts
- Strategy posters comprehension and writing strategies and skills
- Samples of students' writing (stories. letters, journals)
- Graphic organizers

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 LANGUAGE ARTS TERM3 – UNIT1 – 6 WEEKS

Grade 3 – Term 3 – Unit 1 – 6 weeks

Introduction to the Unit:

As students approach they end of Grade Three, they show signs of maturity and are becoming more responsible for their own learning. In listening and speaking they use the SJE to clarify information and to justify their response to instructions and information. In Word recognition and fluency, there is greater focus on structural analysis, with the purpose of using encoding and decoding skills to acquire meaning. As they interface with text, they continue to make connections with self, text and the world. There is in depth investigation of text features in non-fiction texts.

As students communicate through writing, they employ the skills learnt in process writing. They are exposed to varied strategies that can be used to edit documents. In this unit, the students are given many opportunities to review and revise their writings before publishing.

At the end of this unit, the Grade Three students would have completed three years of the Language Arts Programme at the primary level. They would have exhibited mastery of listening and speaking skills; be exposed to a range of encoding and decoding skills to increase fluency and derive meaning; demonstrated the use of varied reading strategies to gain understanding and used the structures and mechanics of the SJE learnt, to communicate their ideas through different formats.

Thus, the Grade Three students would have been adequately prepared to begin the Grade Four Language Programme.

STRAND: SPEAKING AND LISTENING					
ATTAINMENT TARGETS		OBJECTIVES Students should be able to:			
 Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Listen to, recall, understand and respond to speakers' messages, whether implicit or explicit Recognise, value and make distinctions between home language and SJE to improve/acquire language and literacy competences Explain and comment on speakers' use of language, including use of SJE and JC, and their use of vocabulary, grammar and other features 		 Ask and answer questions with sensitivity to audience Ask and answer clarifying questions about information presented by peers/teacher Reflect on discussions and talk about how they feel about what was said Make relevant contributions/suggestions to discussion Ask and answer questions to clarify information received 			
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT	
Ask and answer questions with sensitivity to audience Ask and answer questions to clarify information received	Select a provider of goods and services and prepare a 3-minute presentation on the roles and responsibilities. Students make presentations to the class using SJE. The other students prepare questions to ask at the end of the presentations. Points to note Teacher guides question and answer sessions. Teacher reminds students to ask questions that are relevant to the presentation.		 Develop questions Respond to questions Speak SJE 	Questions and answers reflect sensitivity to audience Questions and responses adequately used to clarify information SJE used satisfactorily to ask and answer questions	
Ask and answer clarifying questions about information presented by peers/teacher	Select a topic about something that is specit with the class. Ask and answer question explain ideas about the presentation.		 Ask and answer questions Explain ideas Use SJE 	Questions asked and answered are relevant to the presentation SJE used adequately to ask and answer questions	

Practice speaking SJE when asking and responding to questions in class			
Make relevant contributions/suggestions to discussion	Observe and Report Go on a nature walk. Participate in discussion that: Describes the physical environment – trees, houses, roads Compare school and community environments Share how you care and protect the environment	 Give accurate descriptions Compare and contrast Share factual information 	Descriptive words used in report accurately capture observations discussed Relevant contributions/suggestions expressed adequately
Justify response to instruction/information	In small groups, one student gives an answer to a question that he has made up. He does not tell the others the question. The other students write and say possible questions. In groups they discuss and decide on the best or the most suitable question. After discussions, say how they felt when their questions were/were not selected.	 Develop questions Select questions Make decisions 	Questions satisfactorily match answer
Reflect on discussions and talk about how they feel about what was said.	Points to note Teacher records incorrect questions for later discussion.	Express opinions	Descriptive words adequately used to reflect feelings

	STRAND: WORD	RE	COGNITION AND F	LUENCY	
ATTAINMENT TARGETS Read fluently and with appreciation			OBJECTIVES Students should be able to: • Practise the correct pronunciation of 'x"		
 Automatically recognise words (including basic sight word lists) through repeated exposure and mnemonic devices Establish a concept of print and use a range of word recognition clues, re-reading and reading ahead, to identify new words Develop phonic awareness and use knowledge of lettersound correspondences in order to decode unfamiliar words 		 Read words with vowel digraphs, diphthongs and vowels controlled by 'l' 'r' and 'w' Determine the silent letters in targeted words Read words with silent letters w, l, b, t, k, u, and h Apply rules of syllabication in order to identify and read multisyllabic words Apply knowledge of inflectional endings for the purposes of encoding, decoding and deriving meaning Automatically recognize grade level sight words Work cooperatively with peers to build vocabulary Use with greater effectiveness and accuracy context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words Use reference sources to aid in distinguishing between the multiple meanings of targeted words 			
OBJECTIVES SUGGESTED TEACHING AND LEARNI STUDENTS WILL:		NG A		KEY SKILLS	ASSESSMENT
pronunciation of 'x" teache isolation Try to i	ideo on mouth formation of the consor's mouth formations as he/she mode on and in words mitate the mouth formations as they on and in the words targeted in the vidue of the following words and try to emphasine	ls th pror	ne sound /ks/ in nounce 'X" in or by the teacher.	 Imitate mouth formations of 'x' Pronounce 'X' sound in words 	Mouth formations are satisfactorily imitated as 'x' is accurately pronounced in isolation and in words

	box taxi					
Read words with vowel digraphs, diphthongs and r-controlled vowels	rel digraphs, contains digraphs, diphthongs or r-controlled vowels which have already been learnt in previous grades, terms and units, along				 Review digraph/diphthong/r-controlled vowels Support peer learning 	Sounds of digraphs, diphthongs and r-controlled vowels are accurately produced Words with digraphs, diphthongs and r-controlled vowels are accurately read
	ar Bar Oi	or For ow down	fur er hammer			
Determine the silent letters in targeted words	Listen to the	pronunciation , guard, write	of words with	targeted silent letters nark out the letter on	Identify silent letters	Silent letters accurately identified in targeted words

	g u a r d Share findings with the whole class.		
Read words with silent letters w, l, b, t, k, u, and h	In separate lessons, complete offline/online interactive activities with silent letters w, l, b, k, t, h and u as in the words wall: e.g. thumb, knew, wrap, depot, hour, guide	Complete interactive activities	Interactive activities with silent activities are accurately completed
Structural Analysis Syllabication			
Apply rules of syllabication in order to identify multisyllabic words during the reading process	In small groups, review syllabication rules learnt in Grades One and Two and in Terms 1 and 2 of Grade 3 by consulting charts, notes and online/offline sources. Using erasable markers on personal/class white boards, indicate syllable junctures by inserting forward slashes in multisyllabic words, e.g. plan/ta/tion, pi/men/to, dif/fer/ent	 Review syllabication rules Syllabicate words 	Syllabication rules are meaningfully reviewed Syllable junctures are accurately inserted in targeted multisyllabic words Words are accurately syllabicated during the reading process in order to identify challenging multisyllabic words.
	As they each read with a pair, apply the syllabication strategy to multisyllabic words in class readers or supplementary texts as required during the reading process.		

Apply knowledge of inflectional endings for the purposes of encoding, decoding and deriving meaning

Chunk words into inflectional endings and base words and give the meaning of the root/base words and the word with the inflectional ending, e.g.

Word	Meaning	Inflectional Ending	Root/base word	Meaning
played	The past tense of play	ed	play	To occupy oneself in an activity for enjoyment and recreation
laughing	To continue to laugh	ing	laugh	To express amusement or happiness by producing a series of inarticulate sounds
smiles				

- Chunk words
- Define words
- Identify base/root words
- Create sentences

Inflectional endings appropriately identified and used to encode, decode and derive meaning

Make sentences with the words.

e.g. We played football at the park.

Sight Words			
Automatically recognize sight words in the reading process	Tour school environment and find sight words being learnt. Engage in a number of interactive on-line off-line games with sight words at their grade level. Use Word Wall to reinforce sight word vocabulary through games such as 'I Spy' and other activities. Play Hopscotch and other physical games to reinforce sight words. As they read segments of class readers, supplementary texts and other print forms in the classroom, demonstrate instant recognition of sight words learnt over the term.	 Recognise sight words Read sight words 	Sight words accurately identified in on-line/off-line games Sight word vocabulary satisfactorily revised through use of Word Wall Sight word vocabulary satisfactorily revised through physical games Sight words are automatically recognized during the reading process
Work cooperatively with peers to build	View Power Point or chart which reflects the multiple meanings of words as used in different contexts.	Extract informationParticipate in	Multiple meanings of targeted words are accurately determined
vocabulary	Participate in discussion on how different meanings may be communicated by the same word.	discussion	,
	In pairs, read sentences with words having more than one meaning such as fair , bark , leaves , land , crow and bear .		Cooperation with peers during activity is satisfactory
	For example,		
	 Alan was <u>fair</u> in complexion but his twin was very dark. You are not playing <u>fair</u>; you cheated me just then. 	Determine word meaning	
	1. I cannot <u>bear</u> the terrible pain in my head.		

	tree. Write down	what each m	e men who were pion ember of the pair the sed in each sentence	ninks is the			
	Sentence 1 2 1 2	Word fair fair bear bear	Meaning				
Use with greater effectiveness and accuracy context clues, pictures, words, sentences, paragraphs as an aid to gain meaning of unfamiliar words	Read sentences, underline the wo	find similar v ords that are dog <u>found</u> a w	ay to open the gate		• Se	ead sentences elect similar words lentify context ues	Synonyms correctly selected Context clues correctly identified
Use reference sources to aid in distinguishing between the multiple meanings of targeted words	meanings. Using sources including	g school diction g dictionaries and peer supp	om a bank of words onaries, online/offlion, thesaurus and othe wort, compose sente of words.	ne reference er resources, as	sc	eruse reference ources ompose sentences	Reference sources are effectively used to guide students in composing sentences which aptly distinguish between the multiple meanings of targeted words

Use knowledge of root	Complete t	he tables	in which prefixe	s/suffixes and roots are used	b	 Use roots/affixes 	Affixes and roots are used to
words and affixes to	to work ou	t the mea	nings of words.				determine word meanings
determine the							
meaning of words	e.g.						
	Word	Prefix	Root	Word Meaning			
	word						
	rewrite	're'	write	Write again			
		means					
		'again'					
	dislike	'dis'	like	Not like			
		means					
		not					
	unhappy	'un'	happy	Not happy			
		means					
		not					

	STRAND: COMPREHENSION				
ATTAINMENT TARGETS		OBJECTIVES			
variety of clues to ga events		 Students should be able to: Reflect and comment on their own progress during the reading process Identify text features in textbooks and nonfiction texts (bold-faced print, italics, diagrams, headings, subheadings, etc.) Make text to text, text to self and text to world connections Distinguish between fact and opinion in nonfiction text 			
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT	
Identify text features in textbooks and nonfiction texts (boldfaced print, italics,	Work in small groups to select flash card w mystery bag. Peruse grade level text to ide chosen and engage in discussion (using tea	entify the text feature	Identify text featuresComment on the use of text	Text features accurately identified in text Explanations focused on the use of	

diagrams, headings, subheadings, etc.)	questions) about its use in the text. Share their findings with rest of the class.	features • Engage in discussion	the text feature in the text selected
	Engage in a teacher-led discussion focused on highlighting and developing understanding of features in nonfiction texts that aids understanding.		
	Work in pairs to read grade level text provided/selected by the teacher. Respond to teacher-prepared questions focused on using the text features in the text to aid comprehension (e.g. Which text feature would I use to highlight an important word or idea?). Feature Example Purpose Calls attention to new and important words/ideas	 Identify text feature Give examples of text features Prepare strategy poster 	Strategy posters depict accurate information regarding the name, purpose and example of the text features assigned
	OR Create strategy poster depicting information about a text feature.		
	gives the reader on idea of what the book will be about that the book will be about that the work what the explains what it is or is about		

	http://www.talkcsme.com/1000-images-about-nonfiction-on-pinterest-nonfiction-20804b6a53022326.html		
	Work in pairs to peruse grade level text and complete Text Feature Hunt using the following as guide. Text Feature Hunt I can Tally The Text Features I See	Identify text features	Text Feature Hunt guide accurately completed using the text selected/assigned
Make text to text, text to self and text to world connections	Observe as teacher engages in reading a grade level text and using the <i>Think Aloud</i> strategy along with the strategy poster below (print and mount in classroom) and sentence stems to make connections with self, another text and the real world. Note the	 Observe demonstration Engage in discussion 	Demonstration and discussion focused on highlighting and explaining the processes involved in making connections with text at

Reflect and comment	use of sentence stems such as;	T.	Make	all three levels (text to text, text to
on their own progress	use of sentence sterns such as,	•	connections	·
during the reading	This reminds me of		connections	self, text to world)
process	I felt like that character when			
process	Text to Self This reminds me of a time Text to World This reminds me of another book Text to World This reminds me of something I heard about https://www.pinterest.com/pin/373165519108015829/			Connections made are accurate and reflect the level being represented using the model sentence stems provided by the teacher.
	Engage in teacher led discussion focused on discussing the			
	demonstration observed and highlighting the three levels of			
	connections (text to text, text to self and text to world) that were			
	demonstrated. Be randomly selected to attempt to use the			
	sample sentence stems to make these connections with a			
	story/text previously read in class.			
	Listen as the teacher/classmate reads a grade level text. Use	•	Make	Information on sentence strips and
	sentence strips or leaflets to write a sentence or draw a picture		connections	drawings reflect students'
	that depicts their connection with the text. Paste their		with texts	connection with the text at all
	picture/drawing under the appropriate column on a teacher-			three levels (text to text, text to

prepared chart mounted on the board. e.g.		self, text to world)
https://www.pinterest.com/pin/414471971927018001/ Collaborate with their teacher to review and comment on the completed chart.		Comments that reflect students" analysis of the information presented on the chart
Collaborate with teacher to examine and comment on a Making Connections sheet/chart that depicts how connections can be drawn. Work in pairs to use a visual representation to show their connection with the text.	Make connectionsUse visual representation	Visual representations explicitly depicted students' connection with the text
Work in small groups to think about their experiences, books read and observations in the world that relate to or connect with a topic given by the teacher. Plan a group dramatization to reflect their connections with the topic. Present their pieces.	Make connections with texts	Dramatization reflected connection with the assigned topic at all three levels (text to text, text to self, text to world)
Be randomly selected and recorded by the teacher as they engage in reading a grade level text and using sample sentence stems to make connections with self, other text or real world. Listen to the	Make connectionsComment on effectiveness	Connections and feedback are meaningful and focused on highlighting the effectiveness of

	recording captured by the teacher and pause at each connection to engage in a teacher guided discussion focused on determining if the connection was meaningful and whether or not it contributed to gaining understanding of the text. Use the following questions to guide their discussion; • Does that help us learn more about the story? • Can you tell why you think this is meaningful? • What can we understand from that connection?	of connections Listen attentively Read grade level text	the connections in developing/extending understanding of the text
	Read and compare grade level texts selected by the teacher. Use Venn diagram to show connections between the two texts read	 Make connections Read grade level texts Compare texts 	Completed Venn diagram depicts accurate connections between the two texts read
Distinguish between fact and opinion in nonfiction text	Engage in a teacher-led discussion focused on highlighting and explaining the difference between a fact and opinion. Give examples of statements of facts and opinions regarding a topic given by the teacher.	Identify facts and opinions	Discussion focused on establishing and developing understanding of a fact versus an opinion
	Work in pairs to read grade level text and use Post It notes to identify sentences, paragraphs, pages, etc., with a fact or opinion. Share their work with the class and rationalize the decision taken.	 Identify facts and opinions Distinguish between fact and opinion 	Facts and opinions accurately identified. Reasonable rationale given for classification of fact and opinion.
	Select and read grade level text from reading corner/classroom library. Use double entry journal template to extract and record statements of facts and opinions in one column and give reasons in the other column, e.g. Fact/Opinion from Reason text	 Distinguish fact and opinion Justify choices 	Double entry journals outline accurate identification of facts and opinions as well as gives valid reasons for the decisions taken.

Share their journals with their teacher/classmates. Complete a teacher prepared worksheet that will require that they write fact or opinion beside statements extracted from a grade	Identify facts and opinions	Worksheets completed with statements correctly labelled as a
Read and discuss grade level texts in groups. Use the 3-2-1 strategy to identify 3 facts, 2 opinions and 1 idea they may not be sure how to classify or vice-versa depending on the text. Present their findings to the class using the 3-2-1 strategy poster. e.g.	 Identify facts and opinions Distinguish fact and opinion 	fact or an opinion. 3-2-1 strategy poster highlights 3 facts, 2 opinions and 1 idea that students were not be certain about based on the text read
3-2-1 Comprehension Check 3 Facts Opinions		

	STRAND: GRA	AMMAR AND CONVENT	IONS	
ATTAINMENT TARGETS		OBJECTIVES Students should be abl	e to:	
punctuated, using SJ Use and adapt a rang	ch are grammatically accurate and correctly E and JC appropriately ge of sentence structures according to ang between SJE and JC	 written work Apply various form irregular) in written Use the conjunction simple sentences Apply knowledge of the sentences Apply the use of excomposing sentences Apply the use of the will + verb Use of the forms of (present and past) has not have 	is of verb tense, i.e. preson and oral work on 'but' to show contrast of the apostrophe (') what' quotation marks in simp exclamation marks to indicates, e.g. "Stop! You are go the future tense form of vertical to the contract of the contract of subject verb agreement	cate strong feelings/emotions when going to fall." erbs using o be' to construct sentences ng the negative form 'not' e.g.
OBJECTIVES	SUGGESTED TEACHING AND LEARN STUDENTS WILL:	NING ACTIVITIES	KEY SKILLS	ASSESSMENT
Apply correctly the use of question marks, full	In small groups design a board game which	can help them to	Design board game	Punctuation board game satisfactorily designed to allow

stops and commas in a range of written work	practice using punctuation marks. Develop and record the instructions/rules to play the game (instruction sheet must be accurately punctuated).	 Develop instruction/rule sheet Punctuate written work 	for punctuation practice Game instruction sheet adequately outlined the rules/directions for playing the game and is correctly punctuated
	Create a post card message to a real or imaginary friend about a place they like to visit. Analyse their use of punctuation in the message and write brief justifications for their choice of punctuation.	 Create post card message Punctuate written work Analyse and justify use 	Post card messages accurately punctuated using question marks, full stops and commas Punctuation use adequately analysed and justified
Apply various forms of verb tense, i.e. present and past tense (regular and irregular) in written and oral work	Rewrite paragraphs from their favourite books using another tense (if the paragraph is in the present they will rewrite it in the past tense and vice- versa). Discuss how the tense change affects the meaning of the paragraph and the importance of using the appropriate tense. Attend/watch a sporting event. Record the events as they unfold using the past tense. Make a running log of irregular verbs in their journals. Use verbs from this list in their writing and oral presentations	 Apply correct verb tense Discuss verb tense Record events Use the past tense 	Chosen paragraph rewritten using appropriate verb tense

		•	Create list of irregular verbs heard and read Use irregular verbs in written and oral work	Events observed are recorded accurately with appropriate use of the past tense List of irregular verbs made and used appropriately in written and oral work
Use the conjunction 'but' to show contrast/differences when constructing simple sentences	Play a game of 'Spin the Wheel' to convert clauses into complete sentences using the conjunction 'but'.	•	Construct sentences Use the conjunction 'but'	Sentences satisfactorily constructed using the conjunction 'but'
	Unscramble sentences joined by the conjunction 'but'. Justify their arrangement of the sentence and the purpose of the conjunction in the sentence.	•	Rearrange sentences Justify choices Discuss conjunctions	Scrambled sentences correctly reorganized using the conjunction 'but' appropriately
Apply knowledge of the apostrophe (') when writing plural possessive nouns	Rewrite phrases so that they include plural possessive nouns. e.g. the wives of the men, the offices of the teachers	•	Use plural possessive forms	Phrases rewritten show appropriate use of the apostrophe in plural possessive noun forms
	Points to Note: add an apostrophe(') e.g.			

	girls' bags dogs' tails add 's to the irregular nouns e.g. children's books men's pants		
Use speech marks/quotation marks in simple dialogue	Collect short comic strips. Create a short dialogue based on a chosen comic strip. Use quotation marks to indicate direct speech	Create simple dialogueUse quotation marks	Dialogues created based on chosen comic strip reflect accurate use of quotation marks
Apply the use of exclamation marks to indicate strong feelings/emotions when composing sentences e.g. "Stop! You are going to fall."	Collect sentences (not exclamatory) from their class Readers and create exclamatory sentences from them. e.g. Sentence from Reader: Have you been to Dunn's River Falls? Student writes: Hurrah! We are going to Dunn's River Falls.	 Collect non- exclamatory sentences Construct exclamatory sentences 	Non-exclamatory sentences from class Readers used to create appropriate exclamatory sentences
	Watch a teacher-made/internet video/photo story of beautiful sites in Jamaica. Work with their teacher to label each scene with an appropriate exclamatory sentence.		

		 View for information Construct exclamatory sentences 	Scenes from the video/photo story satisfactorily labelled with exclamatory sentences
Apply the use of the future tense form of verbs using Will + verb e.g. Marcia will eat her dinner. ✓ Am/Is/Are + going to+ verb e.g. Tommy is going to wall school.	Play a game of 'hot seat' where they will ask their peers sitting in the 'hot seat' questions about their future plans. Responses to questions should be given in sentence frames e.g. I will +verb or I am going to + verb	 Ask questions Respond to questions Use future tense 	Responses to questions from peers reflect accurate use of the future tense
Use of the forms of 'to have', 'to do' and 'to be' to construct sentences (present and past) that can be negated using the negative form 'not'	Convert given sentences written in the affirmative to negative sentences e.g. I play football.	Construct negative sentences	Negative sentences accurately formed from given affirmative sentences

e.g.			
has not			
have not			
had not	I do not play football.		
do not			
does not	Describe the events in given pictures using negative sentences.	 Describe pictures Construct negative sentences 	Events in pictures adequately described using accurately constructed negative sentences
	Interview their peers about things they do not like. Use negative sentences in their responses.	 Interview peers Ask questions Respond to questions Construct negative sentences 	Negative sentences satisfactorily constructed in response to questions from peers
Apply the concept of subject verb agreement with we/they and other plural subjects	Collect sentences from magazines/newspapers containing plural subjects, e.g. we/they. Share sentences and examine them to establish the rule which applies to verbs used with these subjects.	 Collect sentences Identify plural subjects Determine 	Sentences are analysed and an appropriate conclusion drawn as to the rule governing the agreement of verbs and plural

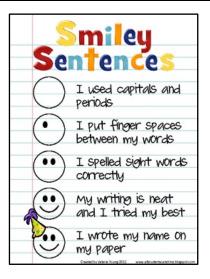
e.g. We write	Create a bookmark which displays the subject/verb agreement rule for plural subjects and examples.		subject/verb agreement rule	subjects
They <u>listen</u>	Complete online/teacher prepared plural subject/verb agreement worksheets.	•	Create bookmarks Record subject/verb agreement rule Apply subject/verb agreement rule Complete worksheets Apply subject/verb agreement rule	Bookmark creatively designed with accurate subject/verb agreement rule and relevant examples displayed Subject/verb agreement exercises for plural nouns accurately completed

	S	TRAND: WRITING		
ATTAINMENT TARGETS		OBJECTIVES Students should be able	e to:	
 organise their ideas i sections and paragra Write to narrate, to purposes, using SJE amulti-media approac Use language and teximagination to create 	persuade and for a range of transactional and JC appropriately and incorporating hes to their writing at forms appropriately and with e vibrant and engaging texts are paragraphs which have linking	Record information learnt through real and vicarious experiences		g., brainstorming, note taking) to documents for the traits of quality the fluency, conventions and
OBJECTIVES	SUGGESTED TEACHING AND LEAR STUDENTS WILL:		KEY SKILLS	ASSESSMENT
Record information learnt through real and vicarious experiences	Writing to Learn Observation logs Examine sample observation log prepared Engage in a teacher-led discussion based observation log and language used.	/sourced by the teacher.	 Examine observation log Engage in discussion 	Discussion focused on identifying and developing understanding of the components and language used in observation logs
	Work in pairs to observe their classmates at the various corners (reading corner, nature etc.) in the classroom. Engage in a whole on highlighting the type of information the an observation log as well as the language Collaborate with the teacher to complete at template mounted on the chalkboard.	e corner, science corner class discussion focused at could be recorded in they would use.	 Engage in observation Engage in discussion 	Discussion focused on highlighting the kinds of information recorded in an observation log Observation log completed using information garnered from activity

	Be guided by the teacher to conduct a nature walk on the school compound or in the community. Return to the class and use the information garnered to complete the observation log below.		Complete observation log Conduct observation	observed in class
	*To carefully inspect by looking, feeling, listening, and smelling Write four observations about any pattern blocks Looks Feels Smells Sounds			
Use a variety of prewriting strategies (e.g., brainstorming, note taking) to organize	Writing to Inform Prewriting Examine and discuss teacher- prepared/sourced sample book	•	Examine book report	Completed report form captures essential details in text
ideas for writing	reports. Complete sample report form based on a book previously read in class. Compare the report to sample report focusing on	•	Complete report form Read texts	WOW sentences, paragraphs and pages identified contain important information and ideas in text

	work in pairs to read grade level text and identify wow sentences, paragraphs or pages (information that captures the main and important ideas in the text) using sticky note pads.		
Modify written pieces to add details	Drafting Activities Complete draft book report template using information gleaned from WOW pages originally identified along with personal reactions. Book Report Template	Prepare draft book report	Draft book report shows an alignment with information gleaned from WOW pages (main ideas, supporting details)

	BOOK REPORT Name: Book Title: Author: Who are the books main characters? Who are the books main characters? What was your favorite part of the story. What was your favorite part of the story? Did you like this book? Why or why not? https://www.pinterest.com/pin/223420831489602578/?lp=true		
		Revise work done	Revised report reflect modifications made
Revise and use editing checklist to edit documents for the traits of quality writing (e.g. ideas, organization, sentence fluency, conventions and presentation)	Revising Use teacher prepared smiley sentence checklist focusing on accuracy of content and inclusion of personal reaction.	Use checklist to edit work	Proofreading markers accurately inserted to depict areas of concern/for improvements



https://www.teacherspayteachers.com/Product/Smiley-Sentences-Poster-253766

(Teachers should modify sentences on poster to reflect areas of focus)

Editing and Proofreading

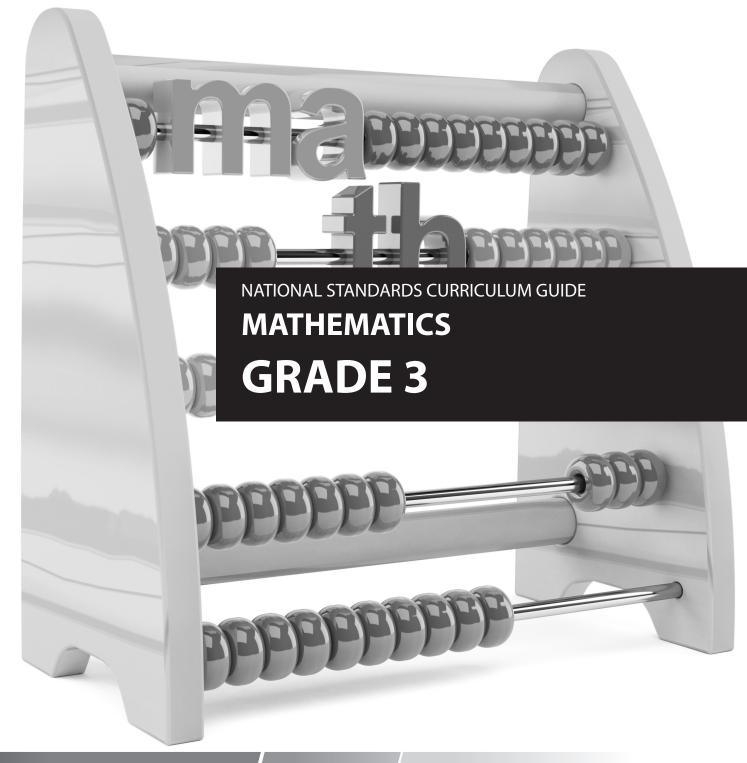
Edit and proof read each other's' work as it is projected onscreen or by using copies produced by the teacher. Use the proofreading checklist mounted in the class as a guide to edit and proof read the work. Be randomly selected by the teacher to go to the board and insert a proof reading marker where an area for improvement is noted. Confirm/refute the editing done by their classmates in the form of a discussion.

	Proofreading Marks Capitalize letter. Add a pariod. Add a question mix. Add acomma. V Add an apoetropho. Do not use a space. VV Add anticlion mix. Add secretly. Lowercase letter. Indeed. Add words. Divide into two words. Divide into two words. Tolice words. Tolice words. N Add words. Divide into two words. The indeed. A Add words. Divide into two words. The indeed. The indeed. The indeed. The indeed. The indeed. The indeed. The indeed in the inclusion. Sample proof reading markers. Teachers should modify to suit the needs in their class.		
Prepare and publish final drafts of book reports	Publishing Source/design a shape of choice using cartridge paper/construction paper. Mount their completed book report and prepare it for publishing. Submit their completed reports to the schools' newsletter committee.	Publish completed book report	Completed report shows good use of all the elements learnt: main ideas, supporting details, sequencing of ideas, etc.

Mount completed book report in the reading corner/writing		
corner or class library		

RESOURCES:

- Dolch Sight Word List for Grade 3 (basic sight words)
- Fry's Word List- High frequency words The third hundred
- Words from Literacy 1-2-3 Big/Little books (Readers)
- Words from concepts being learnt in Integrated Studies
- Words related to general Language Arts content for Term 1 units.
- Relevant learning websites videos, Power Point presentations and interactive activities, including games
- Pre-recorded stories
- Board games
- Word cards
- Word Wall
- Dictionaries
- Magazines, newspapers, post cards, comic strips
- Sentence strips
- Supplementary readers
- Laptop
- Worksheets
- Multimedia Projector
- Internet
- Voice recording device
- Grade level texts
- Strategy posters comprehension and writing strategies and skills,
- Samples of students' writing (stories. letters, journals, reports)
- Graphic organizers





Out of many, one people..... Jamaica

Maths Prayers

Lorna P. Thompson(PhD), 2010

Lord, teach me to number my days And graph them according to your ways Trusting you to base me in my plan To complement your perfect diagram Subtract the points you do not want from me But add the values you have set for me Divide the dividends I possess accordingly So I can multiply them systematically. Draw the lines I have to follow Guide me properly with your arrow Because sometimes I tend to be irrational Yet all the while you want me to be rational. Well, I learn that life is like a slope With it ascends and descends that I must cope Going through such a wonderful formula Is just like solving problems in algebra Life is indeed an infinite equation Perfected by your eternal computation And only a minuscule yet projection Give thanks and praise your Almighty creation.



Dear Father in Heaven,

Lorna P. Thompson(PhD), 2010

Enlighten my mind so that I may recognize Your good works for what they are and neither add to nor subtract any fraction from all that You have commanded of me. (Deuteronomy 12:32)

Supply and multiply the seed of Your righteousness in and through me, so that I may rightly divide the word of truth and present myself to You as a worker who does not need to be ashamed. (2Corinthians 9:10-11; 2 Timothy 2:15)

For You are worthy of all praise and deserve nothing less than my best, as there is no other God who is equal to or greater than You.

How precious also are Your thoughts to me, O God! How great is the sum of them! (Psalms 139:17)

May my thoughts also be a sweet savor to You as I count Your blessings to infinity, in Jesus name, Amen!



It is your life, live it right.

Bickersteth Infant and Primary

Introduction

The Jamaican Standards for Mathematics are statements about what students should know and be able to do in order to meet the Attainment Targets of The Primary Curriculum. The standards are articulated by grade level and describe a connected body of mathematical understandings and competencies that provide a foundation for all students in Grades 1 to 3.

The curriculum and the Standards for Mathematics complement each other. The standards provide support for teachers to monitor student progress and the success of teaching and learning programmes. They provide administrators and other stakeholders with a comprehensive overview of what students should be achieving in Grades 1-3. Most importantly, they provide a means by which student performance can be assessed in relation to the curriculum attainment targets and objectives, hence providing teachers with the necessary information to decide upon next steps for learning with students and to target students who need extra assistance.

These Standards are not intended to encompass the entire curriculum for a given grade, nor does it prescribe how the content should be taught. Teachers are encouraged to go beyond the standards and to select instructional strategies and assessment methods appropriate for their students

Together, the Curriculum and the Standards will play an important role in the successful development of students' mathematical ability by assisting teachers to improve the quality of teaching and learning in all Jamaican classrooms.



The Structure and Development of the Standards

The Standards for Mathematics are statements about what students should know and be able to do in order to meet the requirements of The National Standards Curriculum. These standards are structured according to the content and process strands identified in the Curriculum. For each content and process strand, a standard has been developed which is aligned with the Curriculum Attainment Targets. The Curriculum has outlined the expectations for progress through each grade level. It, therefore, serves as a guide for monitoring the progress of each student based on the standards for each grade as students will be performing at varying levels throughout the year, and will be working at a different pace. In light of this, these Standards therefore, provide support for the development of assessment programmes to assess students' achievement in relation to the targets set by the Curriculum.

Each content strand (number, measurement, algebra, geometry, statistics and probability) has a related standard outlining what students should know and be able to do in order to meet the requirements of the Curriculum. Aligned to each standard is the Curriculum Attainment Targets which specifically breaks down the content strand to several measurable goals aimed at achieving the standard. (See Figure 1). Further, Benchmarks which are the descriptions of the knowledge and skills students should acquire to achieve the Attainment Targets are presented with the related Curriculum Objectives aligned to them.

NATIONAL STANDARDS CURRICULUM GUIDE

GRADE 3 MATHEMATICS SCOPE AND SEQUENCE

Mathematics Scope and Sequence with Strategies and Techniques

STRANDS	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1. NUMBER	 a. Represent and name number up to 9999 using numerals and words. b. Compare and order numbers up to 9999. c. Use expanded notation (up to 4 digit numbers). d. Rename 4 digit numbers showing more than nine hundred. e. Identify the position of each digit in 4 digit whole numbers. f. Count by 1s, 10s and 100s, etc. g. Compare and sequence 4 digit whole numbers to include the number line using different scales (greatest/least). h. Use ordinal number up to thirtieth. 	 a. Memorize and recall addition and subtraction of 2-digit numbers (without using pencil and paper). b. Solve problems that require the addition and subtraction of up to 4 digit whole numbers. c. Round 2 digit numbers to nearest ten. d. Round a 3 digit number to the nearest ten, or hundred. e. Round a 4 digit number to the nearest ten, hundred, or thousand. f. Use rounded numbers to estimate answers for addition and subtraction problems. g. Use inverse operations to check answers. h. Differentiate between addition and subtraction in problem situations (include oral responses). i. Add or subtract simple 	 a. Explore factors and products. b. Name one or more parts of the same object using halves through tenths. c. Identify numerator and denominator of a fraction and tell what each shows using parts of an object, shape or grid. d. Identify fractions that are proper, improper and mixed numbers. e. Express improper fractions to mixed numbers and vice versa. f. Identify different names for a fraction (equivalent fraction). g. Generate a fraction equivalent to another fraction on denominator families of: 2, 4, 6, 8, 10, 12, 3, 6, 9, 12, 4, 8, 12. 	 a. Transfer information from one problem situation to another in order to solve the problem. b. Identify missing information in a problem. c. Solve problems with addition and subtraction in the sam problem (include oral responses). d. Use estimation in problem solving.

STRANDS	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
		measurements which use whole numbers. j. Use given information to construct addition and subtraction problems.	h. Place in serial order: - Unit fractions - Fractions with equal denominators	
2. MEASUREMENT	 a. Investigate the relationship between centimetre and metre. b. Estimate, measure and compare distances using metres and or centimetres. . 	 a. Compare lengths using terms such as: longer than shorter than Verify by calculating the difference. b. Explore and use the term perimeter. c. Measure and/or compute the perimeter of various rectangular outlines of objects within the environment 	 a. Establish a reference measure for 1 Kilometre. b. Use the word Kilometre and its symbol. c. Differentiate between the use of the centimeter / metre/kilometer in various measurement situations. d. Investigate the relationship between metre and kilometre 	 a. Know relationships between year, month, week and day. b. Associate the passage of years with a person's age and concepts of younger/older. c. Calculate age in years and months. d. Identify 12 objects as 1 dozen. e. Identify commodities sold by the dozen. f. Identify the number of objects in half and quarter dozen. g. Use dozen in problem solving situations.

STRANDS	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
3. GEOMETRY			a. Create patterns using a variety of shapes(triangles, quadrilaterals and circles) b. Explore the right angled triangle	
4. ALGEBRA			a. Investigate and complete number patterns involving addition, subtraction and multiplication.	
5. STATISTICS AND PROBABILITY			a. Construct simple bar charts	

SCOPE AND SEQUENCE FOR GRADE 3 TERM 2 (11 Teaching Weeks)					
STRANDS	JANUARY	FEBRUARY	MARCH		
1. NUMBER	 a. Use repeated addition to introduce multiplication. b. Use, the terms multiply, product and factors correctly. c. Demonstrate multiplication and division facts (e.g. arrays and number lines) d. Discover, memorize and recall multiplication facts with 2, 3, 4, 5 or 10 as a factor. e. Write multiplication sentences in various ways. f. Multiply any number by zero and one. g. Multiply a 2 or 3 digit number by 0 to 5 with/without renaming the partial product of ones and tens. h. Write from given data, story problems using multiplication to solve them. i. Solve problems which require the use of multiplication and addition/subtraction in the same problem (2 steps). j. Use rounded numbers to estimate products. k. Use the commutative property of multiplication. 	 a. Partition a set to show division b. Use division to tell how many members are in each set. c. Solve problems involving division. d. Show division as: repeated subtraction, the inverse of multiplication. e. Differentiate between multiplication and division in problem situations (include oral responses). 	 a. Use known division facts to find unknown factors. b. Find unknown factors and product. c. Recall related division and multiplication facts with one factor being 2, 3, 4 or 5. a. Divide numbers having up to 4 digits by 2, 3, 4 or 5. b. Use subtraction to check division examples. c. Use a fractional number to represent a part of a set/number of objects. d. Divide any number by one. e. Divide numbers close to a division fact to get a remainder. f. Organize multiplication facts on a chart. 		

SCOPE AND SEQUENCE FOR GRADE 3 TERM 2 (11 Teaching Weeks) **JANUARY STRANDS FEBRUARY** MARCH a. Identify the surface (coverage) of any 2. MEASUREMENT a. Investigate the relationship between object, as its area. gram and kilogram. b. Find areas of regular and irregular flat surfaces using non-standard unit/regions, e.g. leaves, grids or circles. c. Find the area of flat surfaces (actual pictures or diagrams of) when placed on a grid. DO NOT USE FORMULA. A Geoboard would be useful. 3. GEOMETRY Identify similar shapes and Name polygons using the names of their objects in the environment corner points in order, e.g., ABCDE and identify each pair of letters with the (to be investigated) appropriate line segment. 4. ALGEBRA a. Investigate number patterns involving multiplication and division.

SCOPE AND SEQUENCE FOR GRADE 3 TERM 3

(11 Teaching Weeks)

	(11 reaching weeks)								
STRANDS	APRIL	MAY	JUNE						
1. NUMBER	 a. Count change from whole numbered denominations used as a cashier would in a purchasing situation. b. Tell the worth of a set of coins or notes using combinations up to \$500 and\$1000 notes. c. Identify Jamaican notes and coins up to \$1000, and show \$500, or \$1000 as a combination of other notes and coins. 	 a. Add and subtract fractions with the same denominator up to 12. b. Model the addition and subtraction of fractions using fraction pieces or shading a grid. c. Subtract a proper fraction from whole numbers. d. Differentiate between the use of multiplication, division, addition and subtraction in a problem situation. e. Solve problems involving division. 	 a. Write pairs of multiplication and division facts from an array or given product and factors. b. Recall multiplication and division facts; use to find unknown factors or products in multiplication or division sentences. c. Transfer data from one problem situation to another in order to solve the problem. d. Write story problems and solve. e. Use multiplication to verify answers for division problems. f. Generate number patterns using four operations – represented on the hundred chart. 						
2. MEASUREMENT	 a. Investigate the relationship between minute and hour b. Tell or show time on the clock using intervals, using the format: minutes to/minutes past. 	 a. Identify quantities that are best measured in litre or milliliter b. Estimate, measure and record capacity of various containers in litre or millilitres. c. Use the symbols L, and ml when writing measures of volume or capacity. 	 a. Associate a given temperature with hot or cool day, normal body temperature, fever, freezing and boiling point of water. b. Record a given temperature using symbols, e.g. 28°C. c. Estimate, measure and record 						

	(11 T	eaching Weeks)	
STRANDS	APRIL	MAY	JUNE
	c. Solve problems that involve finding time and elapsed time.	d. Investigate the relationship between milliliter and litre	temperature using standard metric unit.
3. GEOMETRY		a. Identify by folding, the line of symmetry in shapes.	
		b. Check if a shape has a line of symmetry.	
4. STATISTICS AND PROBABILITY	a. Solve problem using the information given on a table or in a pictograph.b. Interpret horizontal or vertical bar charts.	a. Conduct simple probability experiments and record outcomes (e.g. Tossing coins, rolling dice and spinning spinners).	
	3.0.0	b. Predict outcomes of experiments	
		c. Compare predictions with outcomes of experiments.	

PROCESS STRAND CHECKLIST

Mathematical Processes

Problem – Solving Skills	Pre - K	K	1	2	3
Using a problem-solving plan					*
Use data from a picture, graph, table		*	*	*	*
Choose an operation		*	*	*	*
Multiple-step problems			*	*	*
Extra or missing information			*	*	*
Exact answer or estimate			*	*	*
Interpreting remainders					*
Translating words to expressions				*	*
Writing to explain					*
Writing to describe					*
Writing to compare					*
Using a calculator or computer			*	*	*

Problem – Solving Strategies	Pre - K	K	1	2	3
Act it out, use objects, do simulations	*	*	*	*	*
Draw a picture		*	*	*	*
Use logical reasoning		*	*	*	*
Try, check, and revise		*	*	*	*
Look for a pattern	*	*	*	*	*
Make an organized list		*	*	*	*
Make a table		*	*	*	*
Make a graph		*	*	*	*
Solve a simpler problem					*

Work backward				*
Write a number sentence/equation/proportion	*	*	*	*
Choose a strategy				*
Using multiple strategies				*

Reasoning and Proof	Pre - K	K	1	2	3
Logical reasoning					
Comparing/contrasting	*	*	*	*	*
Classifying/sorting/Venn diagrams	*	*	*	*	*
Finding/extending/using patterns	*	*	*	*	*
Making connections	*	*	*	*	*
Making generalizations			*	*	*
Drawing conclusions and evaluating		*	*	*	*
arguments					
Making/testing conjectures			*	*	*
Explaining/justifying answer/checking for			*	*	*
reasonables					
Visual and creative thinking					
Visual patterns/spatial reasoning	*	*	*	*	*
Solving non-routine problems		*	*	*	*
Generating problems			*	*	*

Connections	Pre - K	K	1	2	3
Curriculum connections to other subjects		*	*	*	*
Connections among mathematical ideas	*	*	*	*	*
Real-world connections					
Students' daily lives	*	*	*	*	*
Consumer					*
Career					*
Multicultural connections		*	*	*	*
Connections using technology			*	*	*

Communication	Pre - K	K	1	2	3
Writing to explain					*
Writing to compare					*
Writing to describe					*
Reading for math success/reading		*	*	*	*
assists/math language					
Write about it/journal					*
Talk about it/share	*	*	*	*	*
Working in cooperative groups	*	*	*	*	*
Writing convincing arguments using			*	*	*
mathematical ideas					

Representation	Pre - K	K	1	2	3
Concrete/pictorial and number-line models for	*	*	*	*	*
whole numbers					
Integers on a number line					
Whole-number addition/subtractions using	*	*	*	*	*
concrete/pictorial models					
Whole-number multiplication/division using				*	*
concrete/pictorial models					
Integer computation using pictorial or number-					
line models					
Concrete/pictorial models for part of a		*	*	*	*
whole/set					
Fractions on a number line					*
Fraction operations using pictorial models					*
Dividing whole numbers by fractions using					
pictorial models					
Pictorial model for decimals					*
Decimals on a number line					
Decimal operations using pictorial models					*
Integer operations using pictorial or number-					
line models					
Ratio, proportion, percent models					
Proportions related to maps and scale drawings					
Counting units to find length, area, volume		*	*	*	*
Geometric models for real-world situations		*	*	*	*
Making graphs/charts/tables/diagrams	*	*	*	*	*
Models for equations (algebra tiles, two-color					
counters)					
Solving problems by drawing a		*	*	*	*
picture/diagram					
Number sentences and equations to model real		*	*	*	*
situations					

NATIONAL STANDARDS CURRICULUM GUIDE

ILLUSTRATIVE ACTIVITIES



Grade 3 Mathematics Content Standard - Number

GRADE 3	MATHEMATICS	MATHEMATICS CONTENT STANDARD – NUMBER						
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.							
Benchmarks and I	Ilustrative Examples	NSC A	Attainment Targets (AT) and Objectives					
Benchmark 3.1.1		AT-1	Demonstrate an understanding of the ideas of sets.					
	standing of groups or sets or pictures of objects.							
Illustrative Examp	oles	Objectives						
 Which of these sof members? Look at the mar 	sets has the same number	2.1.1	Compare the relative sizes of two or more sets of objects and tell "more', 'less', 'same as'.					
e Look at the man	bles in the picture.	2.1.2 NEW	Identify sets with the same number of objects (equivalent sets). Manipulate sets of objects by joining, two or more unequal sets; taking out parts of a sets.					
*	* • • • • • • • • • • • • • • • • • • •	NEW	Manipulate sets of objects by joining sets of the same number; taking out several equivalent sets.					
b) Separate the	narbles together. e marbles in different ways: ith a hole in the middle,							



GRADE 3							
STANDARD 1							
Benchmarks and I	Ilustrative Examples	NSC Attainment Targets (AT) and Objectives					
outside the l 3. Practically share one at a time. A	e 16 dog bones for 3 dogs, fter sharing, note how many are these equal amounts? ft over?	NEW Divide a set of objects into two or more equal parts.					
Benchmark 3.1.2		AT-1 Demonstrate an understanding of the ideas of sets.					
	with the members in a set of itions of objects or symbols.						
Illustrative Exa	amples	Objectives					



GRADE 3 M	IATHEMATICS CONT	CONTENT STANDARD – NUMBER						
	ionship among num	e an understanding of numbers, types of numbers, numeration systems, and apply number theory concepts to compute fluently and						
Benchmarks and Illustrative Exa	amples NSC	Attainment Targets (AT) and Objectives						
Use the number blocks or bund show	dles of tens to 1.1.5	Extended:						
a) 20 b) 47 c) 178		Identify the number of members in a set of up to 9999 members.						
What number do these number show altogether? a)	new New	Place up to 9999 objects into groups of tens, hundreds (tens of tens) and/or thousand (tens of hundreds) as a preliminary to writing numerals. Experience larger numbers, thousands of objects (truck load of oranges), persons at a function, game etc.						
b)								



GRADE 3	MATHEMATI	CS CONTENT STANDARD – NUMBER			
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives			
	3				
	3				
c) Draw or find a picture of a truck full of oranges going to the market.					



GRADE 3	MATHEMATICS CONTENT ST	ANDARD – NUMBER			
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
Benchmarks and Illustr	ative Examples	NSC Attainment Targets (AT) and Objectives			
Benchmark 3.1.3		AT-2 Know the value of numerals and associate them with			
Read and write number vusing the Hindu-Arabic passociates both with num	lace value system, and	their names, numbers and ordinals.			
Illustrative Examples		Objectives			
1. Write the standard nu		1.2.2 Extended:			
a) Three thousand forb) Five thousand, the two.		Name numbers up to 9999 using (standard) numerals e.g. 1259			
•		1.2.3 Extended:			
Write the number nar standard numerals fo Thousands Hun	r:	Combine number words from grade 1 & 2 with "thousand" to read and write up to at least <i>nine thousand nine hundred and</i>			
	dreds Tens Ones	ninety nine 2.2.6 Extended: Interpret a numeral for a 4-digit whole number using thousands, hundreds, tens and ones.			
1	2 4 7 200 40 7				



GRADE 3	MATHEMATICS	CONT	ENT STANDARD – NUMBER
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.		
Benchmarks and Illustrative Examples		NSC A	Attainment Targets (AT) and Objectives
		3.3.1	Read and write 3-digit and 4 digit numbers using expanded notation and simplified form of hundreds tens and ones (e.g. 7392 =7000+ 300+ 90+2)
		NEW	Rename a 4- digit number showing more than nine hundreds e.g.1798 as 17 hundreds 9 tens 8 ones
instead of thou hundreds): a) How many hund	wing numbers using hundreds isands (1 thousand is 10 dreds is the same as		
2 thousand?b) How many hundreds is the same as5 thousand 3 hundreds?			



GRADE 3	MATHEMATIC	S CONTENT STANDARD – NUMBER		
STANDARD 1		nstrate an understanding of numbers, types of numbers, numeration systems, p among numbers, and apply number theory concepts to compute fluently and		
Benchmarks and Illustrative Examples Benchmark 3.1.4 Demonstrate an understanding of the magnitude (size) of numbers and use this to compare and to place whole numbers and/or fractional numbers in order of size including use		NSC Attainment Targets (AT) and Objectives		
		"5 H!&"Know the value of numerals and associate them with their names," numbers and ordinals		
of the number line				



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER			
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.			
Benchmarks and I	Benchmarks and Illustrative Examples		Attainment Targets (AT) and Objectives	
		Objec	tives	
Illustrative Exam	nples	3.3.4	Extended:	
1. Which shows the most? 2567; 1789; 9871			Identify the greatest and least of any set of 4 digit whole numbers, at least.	
	nning with the least:	3.3.5	Identify numbers just before or just after a given whole number.	
376 , 290, 760,	237	2.3.3	Extended:	
3. Which number co	omes next when counting in		Place in serial order any set of numbers up to 9999 (at least).	
1726, 1826, 19	26,	2.3.4 Extended:		
	bers along the number line 300, 1200, 1350, and 1400.		Name a missing number in a sequence of any set of whole numbers, counting by 1's, 10's, 100's etc.	
←		NEW	Order and compare 3, and 4 digit numbers on a number line using different scales: e.g., 1 unit = 50; 1 unit = 100, 1 unit = 500	



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER				
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
Benchmarks and II	llustrative Examples	NSC Attainment Targets (AT) and Objectives			
5. Which fraction of $\frac{1}{4}$ or $\frac{1}{2}$?	the same apple is bigger:	 3.3.14 Place in serial order unit fractions (¹/₂, ¹/₃,) and fractions having equal denominators . 3.3.16 Place in serial order fractions with the same numerator. 			
Benchmark 3.1.5 Demonstrate an understanding of the use of number to tell positions (ordinals) and other properties and types of number Illustrative Examples 1. When two numbers are multiplied the product is 16: What are the numbers called? a) fractions b) factors c) multiples 2. What number is a factor of 6?		AT-2 Know the value of numerals and associate them with their names, numbers and ordinals. Objectives NEW Identify and give examples of even, odd, whole, counting numbers NEW Understand the idea of prime numbers, factors, products. 1.2.1 Extended: Use ordinal numbers to 20 th at least.			



GRADE 3 MATHEMATICS CONTENT STANDARD – NUMBER			
STANDARD 1 Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to comfluently and solve problems.			
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives	
Benchmark 3.1.6		AT-2 Know the value of numerals and associate them with their names, numbers and ordinals.	
Use fractional numbers to name equal parts of an object or a set of objects			



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER				
STANDARD 1		udents will demonstrate an understanding of numbers, types of numbers, numeration systems, d the relationship among numbers, and apply number theory concepts to compute fluently and lve problems.			
Benchmarks and II	Benchmarks and Illustrative Examples		tainment Targets (AT) and Objectives		
 3. Complete by filling in the boxes to generate equivalent fractions. (This is the multiplication by 1 technique.) a) \(\frac{1}{4} \times \sum = \frac{1}{12} \) \(\frac{1}{4} \) is the same as b) \(\frac{2}{3} \times \sum = \frac{4}{12} \) \(\frac{2}{3} \) is the same as 		 3.3.17 b Change whole and mixed numbers to improper fractions and vice versa. 2.3.30 Identify different names for a fraction (equivalent fractions). 3.3.18 Modified Generate a fraction equivalent to another fraction on denominator families of a) 2,3,6,8,10,12 b) 3,6,9,12 c) 4,8,12 e.g. ³/₄ =? /8 3.3.19 Identify a fraction in its simplest form (using equivalent fractions). 			
Benchmark 3.1.7		AT-5	Demonstrate an understanding of the use and value of money.		
•	notes and coins in the and apply these values to	3.5.1	Write amounts of money using the symbol '\$' and the decimal point (use the point without any explanation at this time)		
the use of money to as purchases.	everyday situations such	3.5.2	Count change from notes/ coins in common use as a cashier would in a purchasing situation.		
Illustrative Examples					
•	note for the following: \$20 coins c) \$10 coins.				



GRADE 3	MATHEMATICS	MATHEMATICS CONTENT STANDARD – NUMBER				
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.					
Benchmarks and I	Ilustrative Examples	NSC Attainment Targets (AT) and Objectives				
Tell how many of each was used.		3.5.3a Tell the worth of a set of coins or notes using combinations up to \$500 and \$1000 notes				
2. What is the value of this set of notes? STOOL BANK OF AMAICA STOOL BANK OF AMAICA STOOL STOOL		NEW Identify Jamaican notes and coins up to \$1000, and shows \$500, or \$1000 as combination of other notes and coins.				
\$180 with a \$50 change as a cas a) Step 1 : Give i.e. \$20 as \$ b) Step 2 : Cou \$200 until yowas used to \$500.	bag of oranges priced at 0 note. Count out the shier would. e an amount to make 200, 3180 plus \$20 is \$200. Int out \$100 notes adding to ou reach the amount that pay for the goods that is change is \$320.					



GRADE 3	MATHEMATIC	S CONTENT STANDARD – NUMBER				
STANDARD 1		strate an understanding of numbers, types of numbers, numeration systems, among numbers, and apply number theory concepts to compute fluently and				
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives				
Benchmark 3.1.8		AT-4 Use Mathematical symbols for comparison and decision making				
Identify simple mathematical symbols and use these symbols to show comparisons and number operations. Illustrative Example Which of these symbols < , > , = will make this number sentence true? Write it in the box below.		Objective 3.5.3 Compare number expressions written using parentheses and insert the symbols <, >, = to make true sentences.				
Benchmark 3.1.9 Compute with whole number quickly and accurately; use these skills to find answers in		AT-3 Use the basic operations with numbers and number patterns.				
,	situations. er operation: addition, and bers up to 9999 at least.	Objectives				



GRADE 3	MATHEMATICS	S CONTENT STANDARD – NUMBER		
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.			
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives		
Illustrative Examples 1. Can you tell different ways to find the answer to this problem? What number when added to 320 will make 500? a) Use the inverse (opposite of) addition. 320 + ? = 500; so 500 - 320 = ? The answer is 180.		 3.3.10 a Memorize and recall addition of 2-digit numbers (without using pencil and paper). 3.3.11 Add whole numbers up to 4 digits (9,999) at least in vertical or horizontal format, renaming ones, tens, hundreds, any two, or all three. NEW Solve problems that require the addition of up to 4 digit whole numbers. 3.3.64 Generate number patterns using addition and represent these on the addition chart. 3.3.47a Differentiate between of addition, and subtraction; in problem situations (include oral response). 3.3.47b Differentiate between addition, and multiplication in problem situations (include oral response). 3.3.56 Transfer data from one problem situation to another in order to solve the 		
b) Counting on from 320 until you get to 500: 320 + 20+20+20+20 = 400; 400 + 100 = 500 The answer is 180		problem.		



GF	RADE 3	MATHEMATICS CONTENT STANDARD – NUMBER				NT STANDARD – NUMBER				
ST								an understanding of numbers, types of numbers, numeration systems, g numbers, and apply number theory concepts to compute fluently and		
Ве	nchmarks and I	llustrative E	xam	ples	6		NSC A	NSC Attainment Targets (AT) and Objectives		
•	A.II			_			3.3.65	Lay out presentations logically and use the correct label for the answer to a problem.		
2.	Although the headings TH, H, T, O can be used to help students align numbers, students should be able to add without		3.3.66	Identify the data missing from a problem which makes it impossible to solve.						
	relying on the he	eadings.					3.3.67	Identify data given which is not necessary in the solving of a problem.		
	Add 5273 + 792	2 + 54		3.3. 68	Solve problems which require the use of addition and subtraction in the same problem.					
			Th	Н	Т	0				
			5	2	7	3				
				7	9	2				
		5 4		4						
		_								
3.	. Peta's father has 870 marbles. He gives Peta 650 and gives her brother John 150. How many does he have left?).				



GRADE 3	MATHEMATIC	CS CONTENT STANDARD – NUMBER						
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.							
Benchmarks and I	llustrative Examples	NSC Attainment Targets (AT) and Objectives						
accurately; use thes realistic (problem) s b) Model the numb	er operation: subtraction, m whole numbers from up	AT-3 Use the basic operations with numbers and number patterns. Objectives 3.3.6 Check answers in subtraction examples by adding. 3.3.10b Memorize and recall subtraction of 2-digit numbers (without using pencil and paper).						
Illustrative Examp 1. Subtract a) 3 6 9 2 - 1 5 7 c) 2 3 0 0 - 2 7	b) 7 1 9 8 - 1 5 2 6 	 NEW Subtract from up to 9999, a 1, 2, 3, or 4 - digit number, given in horizontal or vertical format, renaming tens, hundreds and/or thousands, any two positions or all three positions. NEW Subtract from multiples of ten, hundred, thousand or numbers with zero in any position. NEW Show how to check answers to subtraction by adding. 						



GRADE 3	MATHEMATICS CONTENT S	TANDARD – NUMBER					
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.						
Benchmarks and Illustrat	tive Examples	NSC Attainment Targets (AT) and Objectives					
e) 3865 – 498 = 2. How many times can a g	roup of 8 be subtracted from 126?	3.3.47c Differentiate between addition, and subtraction; in problem situations (include oral response). 3.3.47d Differentiate between subtraction and division in					
3. Can this situation be so Joy collects bottles. more to exchange to of soda. How many she now have?	hem for a bottle	problem situations (include oral response). 3.3.68 Solve problems which require the use of addition and subtraction in the same problem (2 steps) 3.3.65 Lay out presentations logically and use the correct label for the answer to a problem.					
by adding.Example:	ction and check your answer by IECK 8898	3.3.66 Identify the data missing from a problem which makes it impossible to solve.3.3.67 Identify data given which is not necessary in the solving of a problem.					
- 3 7 8	+ 3 7 8						
8 8 9 8	9 2 7 6						



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER					
STANDARD 1		e an understanding of numbers, types of numbers, numeration systems, and apply number theory concepts to compute fluently and				
Benchmarks and II	llustrative Examples	NSC Attainment Targets (AT) and Objectives				
•		AT-3 Use the basic operations with numbers and number patterns. Objectives 3.3.20 State, using multiplication ideas, in a sentence the idea of repeated addition of the same number. (e.g. Moving from 3 + 3 + 3 to 4 x 3)				
,	and multiply up to a 3-digit					
1. What do these ar a)		 3.3.23 Use an array to discover or show multiplication and division facts. 3.3.24 Write multiplication sentences in various ways (e.g. four 3's = 12,4 x 3 = 12 or 12 / 4 = 3). 3.3.25 3.3.25 <i>Modified</i> Discover, memorize and recall pairs of multiplication facts with 2, 3, 4, 5 or 10 as a factor. 3.3.40 Use the commutative property of multiplication. 				



GRADE 3			MATH	EMATICS	CONTENT STANDARD – NUMBER		
STANDARD 1	and t	he re			e an understanding of numbers, types of numbers, numeration systems, ng numbers, and apply number theory concepts to compute fluently and		
Benchmarks and I	llustrat	tive E	xampl	es	NSC Attainment Targets (AT) and Objectives		
x= =					3.3.30 Use arrays, number line or pictures to demonstrate multiplication facts with one factor 3.		
2. Draw an array to	2. Draw an array to show the answer to 2 x 9.				3.3.32 Identify pairs of related multiplication facts (same product for the result).3.3.27 Show the correct multiplication facts for a repeated addition, example, by use of a number line picture or an array.		
3. How many of the fill in correctly in one	•		•	•	3.3.62 Organize multiplication facts into a chart.		
memory.)			,		3.3.49a Recall the multiplication facts with one factor (2, 3, 4, or 5), that is related to a given division fact using the inverse relationship.		
х	4	6	9				
1					3.3.54a Write pairs of multiplication facts from an array or from a given product and factors.		
2	8				3.3.22 Use the terms 'multiply', 'product', and 'factor' correctly.		
3							
5							



GRADE 3					MATHEMATICS CONTENT STANDARD – NUMBER								
STA						relat	tion	shi		e an understanding of numbers, types of numbers, numeration systems, ng numbers, and apply number theory concepts to compute fluently and			
Ber	ncl	hm	nark	s an	d II	lus	trativ	e Exa	amp	les		NSC Attainment Targets (AT) and Objectives	
4. \$	Sh	ow	/ hov	w to 1	ind	the	e ans	wer to	72	× 3	by		
		a) add	ding				!	b) n	nulti	plying		
5.	M	ulti	iply										
a)	3	3	1	b)	3	0	0	c)	4	7	3		
	>	×	3		×		3		×		5		
d)		13	36 x	2									



GRADE 3	MATHEMATICS	MATHEMATICS CONTENT STANDARD – NUMBER					
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.						
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives					
Benchmark 3.1.9	cont.	AT-3 Use the basic operations with numbers and number patterns.					
accurately; use the realistic (problem) s c) Model the number to multiplication, whole number to the search of the search row in a rechairs to seat 9 answer. 7. Each table hold are needed for	er operation: and multiply up to a 3-digit by 0 through 5. les cont. bws of chairs with 4 chairs in bom. Do you have enough 0 persons? Explain your ls 4 chairs. How many chairs 45 tables?	Objectives cont. 3.3.35 Find the product when one factor is zero. 3.3.31 Multiply any number by one. 3.3.33 Multiply a 2-digit number by 2, 3 or 4 without renaming. 3.3.36 a Modified Multiply a 2-digit number (including money) by 0 to 5, number renaming the partial product of ones. 3.3.37 Compare products and identify the greatest and lesser product. 3.3.38 a Modified Multiply a 2- or 3-digit number (including money) by 0, 1,2,3,4 or 5 with or without renaming the partial product of ones. 3.3.41 Modified					
answer to the p A box hole batteries. F	on do you need to find the broblem below? ds 200 packs of flashlight How many single re in the box?						



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.					
STANDARD 1						
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives				
		Multiply a 3-digit number by 0 to 5 renaming the partial product of tens.				
Challenge		3.3.61 Assess whether or not a given response to a multiplication problem is correct.				
hole. A field ha	by placing 3 seeds in each as 5 rows with 6 holes in each y seeds are planted in all?	3.3.34 Check by addition, the answers for or not multiplication examples.				
Draw a diagrar	n to help you.	3.3.47e Differentiate between addition and multiplication in problem situations (include oral response).				
		3.3.47f Differentiate between multiplication and division in problem situations (include oral response).				
		3.3.56 Transfer data from one problem situation to another in order to solve the problem.				



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER					
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.					
Benchmarks and I	Ilustrative Examples	NSC Attainment Targets (AT) and Objectives				
information. Solve if information. 1. Carrol has 5 bags types of fruit. How in have? 2. Stephanie has \$1 wholesale and bought who much change of the solution of the solutio	s of fruit. Each bag has 3 many oranges does Carrol 1000.00. She went to the ght bread, milk and sardine.	 AT-3 Use the basic operations with numbers and number patterns. Objectives cont. 3.3.57a Write from given data, story problems using multiplication to solve them. 3.3.65 Lay out presentations logically and use the correct label for the answer to a problem. 3.3.66 Identify the data missing from a problem which makes it impossible to solve. 3.3.67 Identify data given which is not necessary in the solving of a problem. NEW (3.3.68 Modified) Solve problems which require the use of multiplication and subtraction in the same problem (2 steps) NEW 3.3.68 Solve problems which require the use of multiplication and addition in the same problem (2 steps) 				



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER Students will demonstrate an understanding of numbers, types of numbers, numeration systems and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
STANDARD 1					
Benchmarks and I	Illustrative Examples	NSC A	ttainment Targets (AT) and Objectives		
Benchmark 3.1.9		AT-3	Use the basic operations with numbers and number patterns.		
•	nole numbers quickly and	Object	tives		
realistic (problem) s d) Model the number	se skills to find answers in situations. er operation: division, and mbers by 2, 3, 4 or 5.	3.3.42	Partition objects into equivalent sets of a given number e.g. Put 32 oranges in groups with two members until no oranges remain and associate this partitioning with division.		
Illustrative Examp	les				
1. Donna has thes	e 27 oranges.	NEW	Share objects into a given number of equivalent sets, e.g. place 15 mangoes in 3 groups, associate this partitioning with division.		
		3.3.44	Write division examples using the signs.		
		3.3.46	Show division as a) repeated subtraction b) the inverse of multiplication.		
()	oup the oranges so that there es in each group.	3.3.48	Use known division facts to find unknown factors.		



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
STANDARD 1					
Benchmarks and II	lustrative Examples	NSC Attainment Targets (AT) and Objectives			
complete the 27 ÷ 3 2. Write the related multiplication ser	division for this ntence: 7 × 5 = 35.	 3.3.49bRecall division facts with one factor 2, 3, 4, or 5, and the related multiplication fact using the inverse relationship. 3.3.54bWrite pairs of division facts from an array or from a given product and factors. 3.3.53Divide any number by one (1). 3.3.58b Divide 2-digit multiples of ten, e.g. 40 ÷ 2, and three digit multiples of ten e.g. 360 ÷ 3, where each digit is a multiple of the divisor. 3.3.58 a Divide by 2, 3, or 4 a 2- or 3-digit number where each digit is a multiple of the divisor e.g. 248÷2 Divide by 2, 3, 4, or 5, a 3-digit number whose first two digits (from the left) and the third digit are multiples of the divisor e.g. 164 ÷ 4, 255 ÷ 5. 			
) 963 ÷ 3 = c) 80 ÷ 4 =) 246 ÷ 3 = f) 360 ÷ 3 =				
	to divide 46 by 2, he gave 2. Is John's answer ase explain.				



GRADE 3	MATHEMATIC	S CONTENT STANDARD – NUMBER			
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
Benchmarks and II	lustrative Examples	NSC Attainment Targets (AT) and Objectives			
Benchmark 3.1.9 c	ont.	AT-3 Use the basic operations with numbers and number patterns.			
accurately; use thes realistic (problem) si	e number quickly and e skills to find answers in ituations. It operation: division, and onbers by 2, 3, 4 or 5.	Objectives cont. NEW Divide numbers close to a division fact to get a remainder. 3.3.63 Divide numbers having up to 4 digits by 2,3,4, and 5. (OPTIONAL) 3.3.61b Assess whether or not a given answer to a division example is reasonable. 3.3.50 Use subtraction to check division examples. 3.3.60 Use multiplication to check (verify) the answer for a division example.			
Illustrative Exampl	es cont.	3.3.45 Solve problems which require the use of division			
each division is	to find out if the answer to correct. b) 24 ÷ 4 = 10				



GI	RADE 3	MATHEMATICS CONTENT STANDARD – NUMBER					
ST	ANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.					
Ве	enchmarks and II	llustrative Examples	NSC Attainment Targets (AT) and Objectives				
7.	show? What is the answin each of these zero is sometime a) $18 \div 4 =$ b) $40 \div 5 =$ c) $245 \div 4 =$ The teacher has	Rem Rem	3.3.47g Differentiate between multiplication and division in problem situations (include oral response). 3.3.56 Transfer data from one problem situation to another in order to solve the problem. 3.3.57a Write from given data, story problems using division to solve them. 3.3.65 Lay out presentations logically and use the correct label for the answer to a problem. 3.3.66 Identify the data missing from a problem which makes it impossible to solve. 3.3.67 Identify data given which is not necessary in the solving of a problem.				
	number of cars.	ars did she give each child?					



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.	
STANDARD 1		
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives
b) How many cars will be left over?		
Show or tell h	ow you got the answers.	



GRADE 3	MATHEMATIC	MATHEMATICS CONTENT STANDARD – NUMBER			
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives			
Benchmark 3.1.9		AT-3 Use the basic operations with numbers and number patterns.			
accurately; use the realistic (problem)	le number quickly and se skills to find answers in situations. t amounts of money and	Objectives			
1. Subtract a) \$609 - \$350 = c) \$ 5 0 0 - 3 5 0	0 b) \$ 1 6 7 8 - 5 8 8	 3.3.11 Add whole numbers showing money in \$ or cents (not both) up to 4 digits (9,999) at least in vertical or horizontal format, renaming ones, tens, hundreds, any two, or all three. NEW Subtract from a whole number up to 9999, a 1, 2, 3, or 4 digit number, showing money in \$ or cents (not both) given in horizontal or vertical format, renaming tens, hundreds and/or thousands, any two positions or all three positions. 			



GRADE 3	MATHEMATICS	CONTE	NT STANDARD – NUMBER
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration and the relationship among numbers, and apply number theory concepts to compute flucture solve problems.		
Benchmarks and II	Benchmarks and Illustrative Examples		tainment Targets (AT) and Objectives
How long is it fro other, using the n	m one end of the line to the neasures given?	NEW	Subtract from whole numbers showing money in \$ or cents (not both) which are multiples of ten, hundred, thousand or numbers with zero in any position.
40 metres	75 metres	3.6.8	Add or subtract simple measurements which use whole numbers of metres or centimeters.
3. A table measures 8 metres and a bench measures 12 metres. What is the difference between the length of the table and the length of the bench?		3.6.10	Compare lengths using such terms as is longer than ', 'is shorter than', and verify by calculating the difference.
GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER		
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.		



GRADE 3	MATHEMATIC	S CONTENT STANDARD – NUMBER			
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives			
Benchmark 3.1.9		AT-3 Use the basic operations with numbers and number patterns.			
•	e number quickly and se skills to find answers in situations.				
f) multiply amounts	of money and measures	Objectives			
Illustrative Examp	les				
1. Multiply a) $$12 \times 4 = b) $230 \times 5 =$		3.3.36b Multiply a 2-digit number (including money) by a 1-digit number renaming the partial product of ones.			
2. Tickets to the fair cost \$50. How much will 5 tickets cost?		3.3.38b Multiply a 2-digit or 3-digit number (including zero and money) by 0 to 5 with or without renaming the partial product of ones, or tens.			



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER			
STANDARD 1	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.			
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives		
Benchmark 3.1.10		AT-3 Use the basic operations with numbers and number patterns.		
•	onal numbers quickly and se skills to find answers in ituations.			
a) Add and subtract fractions on <u>like</u> (same) denominators.		Objectives		
Illustrative Examp	les			
1. The grid below shows 5 equal parts, shade 3 parts in red, shade 1 part in blue. How		2.3.32 Modified		
many parts in al	I are shaded?	Add and subtract fractions with the same denominator up to 12ths		
Complete: 3 1		NEW Model the addition and subtraction of fractions using fraction pieces or shading a grid.		
Complete.	5 + - =			



GRADE 3	MATHEMATIC	S CONTENT STANDARD – NUMBER		
STANDARD 1		te an understanding of numbers, types of numbers, numeration systems, ong numbers, and apply number theory concepts to compute fluently and		
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives		
2. There are two pies. Each pie has been cut into thirds. Draw the picture using the rectangle model.a) How any thirds are there in all?b) John eats one of the thirds. How many thirds are left?		NEW Subtract a proper fraction from whole numbers less than 4.		



GRADE 3 MATHEMATICS			S CONTENT STANDARD – NUMBER		
			derstanding of numbers, types of numbers, numeration systems, bers, and apply number theory concepts to compute fluently and		
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives			
Benchmark 3.1.11		AT-3	Use the basic operations with numbers and number patterns.		
Use approximation and estimation with numbers a) Round whole numbers					



GRADE 3	MATHEMATICS CONTENT STANDARD – NUMBER Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.			
STANDARD 1				
Benchmarks and I	Ilustrative Examples	NSC Attainment Targets (AT) and Objectives		
48 when rounde nearest multiple a) Where is 48 b) Which multiple or 50? 40 2. Which multiple or numbers? a) 32 3. Use the number closer to 800 that	on the number line? ble of ten is it closer to: 40 for ten is closer to these b) 56 c) 81 line to show that 792 is an to 700, and so 792 hearest hundred (multiple of	 3.3.1 Round a 2-digit number to the nearest number of tens. NEW Round a 3 – digit number to the nearest ten, or hundred using a number line or counting in tens, hundreds. Optional NEW Round a 4 – digit number to the nearest hundred or thousand using a number line or counting in tens, hundreds. 		



GRADE 3	MATHEMATICS	CONTENT STANDARD – NUMBER			
and t	Students will demonstrate an understanding of numbers, types of numbers, numeration systems, and the relationship among numbers, and apply number theory concepts to compute fluently and solve problems.				
Benchmarks and Illustrative Examples Benchmark 3.1.11 Use approximation and estimation with numbers b) Use rounded numbers to estimate answers when computing and/or solving problems. Illustrative Examples		NSC Attainment Targets (AT) and Objectives			
		 3.3.1 Use rounded numbers to estimate answers for addition and subtraction examples using 2-digit numbers. 3.3.8 Estimate and check whether or not responses for addition and subtraction are reasonable. 3.3.9 Use rounded numbers to estimate products. NEW Estimate quotients (answers) when dividing. 			
1. Lenora went to the supermarket with \$500. She wants to buy a bag of cornmeal for \$183, and a tin of milk for \$239. Estimate and tell a) whether or not she has enough money to buy these items, b) how much will be left?		3.3.70 Use estimation in problem solving.			



Grade 3 Mathematics Content Standard - Measurement

GRADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT				
STANDARD 2		s will use non-standard and/or standard metric (SI) units, instruments, and procedures ate and measure quantities of different attributes, and to compute and solve problems.			
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives			
Benchmark 3.2.1		AT-6	Estimate, compare and use various types of measurements.		
Estimate and meas	sure distance .				
Illustrative Examp	ples	Objec	etives		
 Which metric unit is most often used to measure the distance Along a roadway? 		3.6.4	Differentiate between the use of metre and centimetre in measurement situations.		
b) On a racing track?		3.6.5	Estimate, measure, and compare distances in metres and / or centimetres.		
		NEW	Recognize measuring instruments that are used to measure distances: ruler, metre stick, tape measure, and know how to use them.		
			Use the word metre or one centimetre and their symbols 'm' and 'cm' to describe and record distances		
distances? a) The length 15 cm, 15 r	ible measures for these of a new pencil? m, 15 km ce from Kingston to Ocho	3.6.6	Know that 100 cm = 1m,		



GRADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT				
STANDARD 2		s will use non-standard and/or standard metric (SI) units, instruments, and procedures ate and measure quantities of different attributes, and to compute and solve problems.			
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives			
c) The height 2 cm, 2 m, 3. How many cer metres? 4. Present an ob have a watern students to se students: a) What can watermelo to the othe heavy it is.	2 km ntimetres are the same as 5 ject (It would be good to nelon or other objects for e, and touch) and ask we measure about the n? (Distance from one ender, distance around, how) e distance around the	 NEW Use the knowledge in 3.6.7 to tell how many centimetres will be exactly the same length as a whole number of metres. 3.6.10 Measure and/or compute the perimetre of various objects and polygons. (DO NOT use a formula) 3.6.11 Establish a reference measure for one kilometre. 3.6.12 Use the word kilometre and its symbol km to describe the appropriate unit length. 3.6.13 Differentiate between the use of the metre, the centimetre and the kilometre in various measurement situations. 3.6.14 Know that 1000m = 1 km. Also see computation with measures under Number 1.9 e and f. 			
Benchmark 3.2.1 Estimate and mea		AT-6 Estimate, compare and use various types of measurements.			



	RADE 3 MATHEMATICS (ONTENT STANDARD – MEASUREMENT				
Illustrative Example cont. 5. A wall goes all the way around Mrs. Ham's land. How long is the wall if the land looks like the diagram below? 5 m 7 m 8 m		Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.				
5. A wall goes all the way around Mrs. Ham's land. How long is the wall if the land looks like the diagram below? 5 m 7 m 8 m	enchmarks and Illustrative Examples	NSC Attainment Targets (AT) and Objectives				
7m 8 m	A wall goes all the way around Mrs. Ham's land. How long is the wall if the land looks					
8 m	7m Land					



GRADE 3			MATHEMATICS CONTENT STANDARD – MEASUREMENT			
STANDARD	2		Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.			
Benchmarks and Illustrative Examples		NSC A	Attainment Targets (AT) and Objectives			
Benchmark 3.2.2		AT-6	Estimate, compare and use various types of measurements			
the week 2. Use the c	Exampur birth	oles day fall year? E ar to an	on the	e same day of	Objec 3.6.3 /	Modified Read a calendar to tell a) month, b) day of week, and date.
15 16 17 18 19 20 21 12 13 22 23 24 25 26 27 28 19 20	0 21 22 23 24 25	5 M 7 W 1 F 5 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 1 18 19 20 21 22 23 24 25 26 27 28 29 30 31 2	5 M T W T # 5 1 2 3 4 5 6 7 8 9 10 11 12 13 14 5 16 17 18 19 20 21 12 23 24 25 26 27 28 19 30		NEW	Associate the passage of years with a person's age and concepts of younger, older.
1 M T W T F S S M 1 2 3 4 5 6 7 8 9 10 11 12 3 4 13 14 15 16 17 18 19 10 11 20 21 22 23 24 25 70 17 18	1 T W T F S 1 2 1 5 6 7 8 9 1 12 13 14 15 16	15 16 17 18 19 20 21 1	9 20 21 22 23 24 25 6 27 28 29 30 31		3.6.4	Calculate age in years and months.
3 M 7 M 7 F 3 1 7 1 9 10 11 12 13 14 15 14 15 16 17 18 10 20 21 22 21 23 24 25 26 27 28 29 28 2	day of is the o	the wee	the 2 nd	Monday in	NEW	Know that 60 minutes = 1 hour



GRADE 3	MATHEMATICS	MATHEMATICS CONTENT STANDARD – MEASUREMENT				
STANDARD 2	Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.					
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives				
3. What time is on the clock		3.6.5 Tell or show the time on the clock, (picture or model of) in minute intervals using the format minutes to / past.				
		2.6.3 Modified				
		Solve problems that compute elapsed time How many months until; how many hours until.				
		NEW Compute the difference between two times given in hours and minutes, both before or both after 12 noon, or 12 am.				
		NEW Add and subtract amounts of time e.g. 5 hrs 45 minutes + 15 minutes.				



GF	RADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT					
ST	ANDARD 2		ndard and/or standard metric (SI) units, instruments, and procedures quantities of different attributes, and to compute and solve problems.				
Ве	Benchmarks and Illustrative Examples			Attainment Targets (AT) and Objectives			
Ве	nchmark 3.2.3		AT-6	Estimate, compare and use various types of measurements			
Es		ure liquid capacity or	Objec	tives			
	volume.		3.6.17	Know that 1000mL = 1 L.			
	Illustrative Examples1. Which of these are measured using litres?		3.6.18	Estimate, measure and record the capacity of various containers in litres (L) or milliliters (mL).			
			NEW	Use the symbols L, and mL when writing measures of volume or capacity.			
			3.6.19	Differentiate between the use of the litre and the milliliter in measurement situations.			
			NEW	Know what attribute of an object or quantity is measured using litres.			
2.	Which is about (a) A bottle of m	one litre? nedicine for a baby.	NEW	Recognize measuring instruments that are used to measure volume or capacity: measuring cup, teaspoon and know how to use them.			
	b) A bucket of water to wash a car.						
	c) A jug of orang	ge juice for breakfast.					



GRADE 3	MATHEMATICS	MATHEMATICS CONTENT STANDARD – MEASUREMENT					
STANDARD 2		dents will use non-standard and/or standard metric (SI) units, instruments, and procedures stimate and measure quantities of different attributes, and to compute and solve problems.					
Benchmarks and	Illustrative Examples	NSC A	Attainment Targets (AT) and Objectives				
Benchmark 3.2.4		AT-6	Estimate, compare and use various types of measurements				
Estimate and meas	sure mass , using non-	Objec	tives				
	standard and standard metric units. Illustrative Examples		Differentiate between the use of the kilogram and the gram in various measurement situations.				
4	Is this object measured in kilograms?		Know that 1000g = 1 kg.				
1. Is this object m			Use the symbols kg, and g; or words kilogram, gram when recording measures of mass.				
2. Mister Joel is u	using this instrument.	NEW	Know what attribute of an object or quantity is measured using grams or kilograms.				
A	В	2.6.6	Recognize measuring instruments that are used to measure mass: balance, scale and know how to use them.				
a) What is the	name of the instrument?						
Name of in	Name of instrument :						
b) What is he f	inding out?						
He is findin	g out:						



GRADE 3	MATHEMATICS C	CONTENT STANDARD - MEASUREMENT						
STANDARD 2		use non-standard and/or standard metric (SI) units, instruments, and procedures d measure quantities of different attributes, and to compute and solve problems.						
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives						
grams? a) The mass	e are best measured in of a spoon of salt. of a truckload of potatoes.							
Benchmark 3.2.5	5	AT- 6 Estimate, compare and use various types of measurements						
	oncept, estimate and ature, using standard metric	3.6.20 Associate a given temperature with a) a hot or cool day, b) normal body temperature, c) a fever, d) the freezing and e) boiling point of water.						
Illustrative Exam	ples	3.6.21 Record a given temperature using						
3. A kettle begins to boil. What is the most likely temperature of the water in the kettle? A) 0°C, B) 30 °C, C) 100 °C		symbols e.g. 28 °C. 2.6.10 Use the thermometre to read temperatures at different times of the day and year and record these readings.						
Keep a class log of the temperature each day for a week, at different places in the school.								



GRADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT					
STANDARD 2	Students will use non-standard and/or standard metric (SI) units, instruments, and proced to estimate and measure quantities of different attributes, and to compute and solve problem.					
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives				
Benchmark 3.2.6		AT- 6 Estimate, compare and use various types of measurements				
Associate the measurement of a quantity (distance, volume/capacity, mass) with the units and instruments best used.		2.6.23 Select the unit (metre, centimetre, litre, kilogram) best used in a given situation.				
		2.6.24 Tell the measurement situation(s) in which a given unit (metre,				
Illustrative Exam	ples	centimetre, litre, and kilogram) is best used.				
Tell which is the be following:	est unit of measure for the					
 a) length of the classroom b) length of a leaf c) distance between two towns d) the weight of a watermelon e) the weight of an envelope f) jug of lemonade 						



GRA	ADE 3		MATHEMATICS CONTENT STANDARD - MEASUREMENT						
STA	NDARD 2		Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.						
Ben	chmarks and	 llustrati	ve Examples	NSC A	Attainment Targets (AT) and Objectives				
Ben	chmark 3.2.7			AT-6	Estimate, compare and use various types of measurements.				
Unde	erstand the meas	sure: doze	en						
Illus	strative Examp	les		Objectives					
			ne vase, and one	3.6.22	Identify twelve (12) objects as one dozen.				
	dozen eggs are :hings make on		ox. How many	3.6.23	Identify commodities usually sold by the dozen.				
	dozen?			3.6.24	Identify the number of objects in half and quarter dozen.				
			NEW	Use 'dozen' in problem solving situations.					
2.	Which of these		•						
	priced by the dozen? (When you ask the price, the seller says: per								
	dozen)								
		Yes (√)	No (X)						



GRADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT					
STANDARD 2	Students will use non-standard and/or standard metric (SI) units, instruments, and procedures					
	to estimate and measu	re quantities of different attributes, and to compute and solve problems.				
Benchmarks an	d Illustrative Examples	NSC Attainment Targets (AT) and Objectives				
Rice						
eggs						
ackee						
potatoes						
cars						



GRADE 3		MATHEMATICS C	ONTENT ST	ANDARD - MEASUREMENT			
STANDARD 2		Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.					
Benchmarks a	and Illustrativ	/e Examples	NSC Att	ainment Targets (AT) and Objectives			
Benchmark 3.2 Understand the and a grid to de	e concept: are	ea; use informal units, area of objects.	AT-6 E	stimate, compare and use various types of measurements.			
Illustrative Exa	amples		Objectiv	es			
(This is the ver	ry first introdu	ction to area, and these	3.6.25	Identify the surface (coverage) of any object, as its area.			
examples show before going to	•	a practical idea of area, formula.)	3.6.26a	Find the area of irregular and regular flat surfaces using non- standard unit regions (e.g. leaves or circles)			
1. Compare the pictures of these objects.		3.6.26b	Find the area of flat shapes (actual, pictures of or diagrams of) when placed on a grid (Do NOT use formula) (A Geoboard would be useful here)				
hula hoop	wheel	plate					



GRADE 3		MATHEMATICS	S CONTENT STANDARD – MEASUREMENT			
STANDARD 2		Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.				
Benchmarks a	nd Illustrativ	ve Examples	NSC Attainment Targets (AT) and Objectives			
plate?	the plate diffe	like the wheel and the rent from the wheel a				
Rail	Window	Door				



GRADE 3	MATHEMATICS CONTEN	T STANDARD -	- MEASUF	REMENT			
STANDARD 2	Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.						
Benchmarks and Illustra	tive Examples NSC	Attainment Ta	argets (AT) and Obj	ectives		
	the window and door? w and the door alike,						
2. Plates, windows, doors, area. What is area?	floors all have a lot of						



GRADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT Students will use non-standard and/or standard metric (SI) units, instruments, and procedures to estimate and measure quantities of different attributes, and to compute and solve problems.			
STANDARD 2				
Benchmarks and II	lustrative Examples	NSC	Attainment Targets (AT) and Objectives	
Understand the condetermine the area of the condetermine the condeterm	cept: area; use informal units, and a grid to of objects. es	AT-6	Estimate, compare and use various types of measurements.	
b) a sheet of nev a) Find a table o that have fall leaves as yo	area a) the top of a table, vspaper has. If a sheet of newspaper. Collect many leaves len from a tree. Paste as many of these u can to cover the paper o cover the table top.			



GRADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT					
STANDARD 2		e non-standard and/or standard metric (SI) units, instruments, and procedures measure quantities of different attributes, and to compute and solve problems.				
Benchmarks and I	llustrative Examples	NSC Attainment Targets (AT) and Objectives				
 c) Are there and 5. Cut out shapes of paper. Studen given a different many of the small object. 6. Find out: How many the classroom? 7. A grid helps us significant size of circles. Look at an an	eaves covered the paper? by spaces? and use them to cover a larger flat object or sheet on the could work in groups, with each group being the shape or a different sized shape, to find out how aller shapes will cover the larger shape or flat on the larger shape or flat on the see how many smaller shapes is covered. It is see how many smaller shapes is covered. It is grid and respond. It is grid and respond. It is the area of					



GRADE 3	MATHEMATICS CONTENT STANDARD – MEASUREMENT			
STANDARD 2		n-standard and/or standard metric (SI) units, instruments, and procedures sure quantities of different attributes, and to compute and solve problems.		
b) Draw a mat	I Illustrative Examples t shaped like a rectangle s 10 squares.	NSC Attainment Targets (AT) and Objectives		



Grade 3 Mathematics Content Standard - Geometry

GRADE 3	MATHEMATICS CONTENT STANDARD – GEOMETRY Students will apply geometric concepts (points, paths, lines, shapes) to reason about objects and space in the environment.		
STANDARD 3			
Benchmarks and Illustrative Examples		NSC Attainment Targets (AT) and Objectives	
Benchmark 3.3.1 Explore ideas of points, paths, lines, corners, and shapes and relate these to objects in the environment. Illustrative Examples		AT-7 Explore paths and/or shapes in the environment and relate basic mathematical shapes to everyday life. Objectives	



GRADE 3	MATHEMATICS CONTENT STANDARD – GEOMETRY		ENT STANDARD – GEOMETRY	
STANDARD 3	Students will apply geometric concepts (points, paths, lines, shapes) to reason about objects space in the environment.			
Benchmarks and	I Illustrative Examples	NSC Attainment Targets (AT) and Objectives		
Show the square corners in these shapes?		3.7.1	Identify or describe a point, a line segment, a simple closed path, a polygon, a square corner.	
		3.71	Identify and name lines, line segments, rays, angles, right angles.	
Benchmark 3.3.2 Identify, describe and name shapes seen in the environment		AT-7	Explore paths and/or shapes in the environment and relate basic mathematical shapes to everyday life	
		Objectives		
Illustrativo Exam	nlac	3.7.4	Describe in words, the differences and similarities between shapes in the environment.	
Illustrative Examples1. Write at least 4 similarities and 2 differences between the square and the rectangle		3.7.5 Modified		
			Identify similar shapes and objects in the environment and say why they are similar.	
Discuss the typangles and len segments/side	_	3.7.3	Name polygons using the names of their corner points in order e.g., ABCDE and	
	angle, the square and the ng the types and number of			



GRADE 3	MATHEMATICS CONTENT STANDARD – GEOMETRY		
STANDARD 3	Students will apply geometric concepts (points, paths, lines, shapes) to reason about objects and		
	space in the environment.		
Benchmarks and Illustrative Examples		NSC A	Attainment Targets (AT) and Objectives
4. Draw and label t	the polygon with 5 angles the vertices of polygons. nat has a right angle		identify each pair of letters with the appropriate line segment.
Benchmark 3.3.3 Understand the idea of line symmetry. Illustrative Examples Cut out the shape. Fold and check to see if the dotted line is a line of symmetry.		AT-7	Explore paths and/or shapes in the environment and relate basic mathematical shapes to everyday life
		Objectives	
		NEW	Identify by folding, the line of symmetry in objects, and shapes.
		NEW	Check by folding whether or not a given line on an object or shape is a line symmetry.



GRADE 3	MATHEMATICS CONTENT STANDARD – ALGEBRA		
STANDARD 4	Students will use symbols and variables to reason about number relationships, to solve		
	problems and make decisions.		
Benchmarks and I	Ilustrative Examples	NSC Attainment Targets (AT) and Objectives	
Benchmark 3.4.1		AT-8 Demonstrate the use of variables in mathematical sentences.	
Write simple mathematical sentences with a box, (blank, and a letter of the English alphabet or any other symbol) to represent unknown amounts, in problem situations stated in diagrams or words.		Objective 3.8.4 Select or write the appropriate n-sentence in a problem situation, including different money ideas (e.g. earning, saving, and spending).	
Illustrative Examples			
	quation for a given blve where appropriate. erence between an		



Benchmark 3.4.2

Find the number the symbol (box, blank, and a letter of the English alphabet or any other symbol) represents in order to make a mathematical sentences true.

Illustrative Examples

- 1. Finding the unknown in each situation
 - a) n + 345= 653
 - b) 7843- n = 4103
 - c) $n \div 5 = 325$
 - d) $4860 \div y = 810$
- 2. What is the relationship among these three numbers 620; 20 and 31? Use these numbers to write true mathematical sentences

- AT-8 Demonstrate the use of variables in mathematical sentences
- 3.8.4 Find what the number n represents when n replaces an addend, a sum or a product.
- 3. 8. 5 Find n where n represents a product or factor in a multiplication or division sentence
- AT-3 Use the basic operations with numbers and number patterns
- 3.3.55 Recall multiplication and division facts, one factor 2,3,4,5, and use these to find unknown factors or products in multiplication and division sentences.



GRADE 3	MATHEMATICS CONTENT STANDARD – ALGEBRA		
STANDARD 4	Students will use symb	ols and variables to reason about number relationships, to solve cisions.	
Benchmarks and	Illustrative Examples	NSC Attainment Targets (AT) and Objectives	
Benchmark 3.4.3		AT-3 Use the basic operations with numbers and number patterns	
	matical (number) sentence not it is true or false (not	Objective 3.3.69 Tell whether a given number sentence is true or false.	
Have students e	explore and write various entences (true or false)		



Benchmark 3.4.4

Substitute a number for a variable in a simple mathematical sentence.

Illustrative Examples

If n= 25

What is a) $n \times 40$

- b) 625÷n
- c) 135×n
- d) n × n -25

AT-3 Use the basic operations with numbers and number patterns

Objective

- 3.8.4 Solve "If _____ then _____ " examples. For example "If n = 40 then 90 n = ?"
- 3.8.5 Solve "If______ then_____ examples which associate repeated addition with multiplications. For example,

"If n = 28 then n+ n =?"



Grade 3 Mathematics Content Standard – Statistics and Probability

GRADE 3	MATHEMATICS CONTENT STANDARD – STATISTICS AND PROBABILITY		
STANDARD 5		e, display and interpret data to find solutions and/or make decisions erstand and apply basic concepts of probability.	
Benchmarks and	Illustrative Examples	NSC A	Attainment Targets (AT) and Objectives
Benchmark 3.5.1 Collect, organize,	represent and present data.	AT-9	Collect, organize and interpret information in practical situations and use simple probability language.
Illustrative Examp		Objectives	
Making your own pictograph.		3.9.4	Collect and record attribute data (e.g. colour, type of car, favourite movie).
a) Select topic to investigateb) List the categoriesc) Carry out the investigation		Collect and record numeric data using larger numbers than in ous grades.	
represent p e) Decide how will stand for	v many people each picture	3.9.6	Use tally marks to record data where appropriate.
g) Create the			
Benchmark 3.5.2		Objec	tives
Interpret data pres graphs, and pictog	ented in simple tables, bar raphs		



GRADE 3	MATHEMATICS CONTENT STANDARD – STATISTICS AND PROBABILITY		
STANDARD 5		t, organize, display and interpret data to find solutions and/or make decisions and understand and apply basic concepts of probability.	
Benchmarks and	d Illustrative Examples	NSC Attainment Targets (AT) and Objectives	
Illustrative Exam	ıple	3.9.1 Read and interpret information given in a table or on a pictograph.	
Write and answer questions based on graphs created		3.9.2 Solve problems using information given in a table or on a pictograph.	
Explore and d graphs versus	iscuss when we use bar s tables	3.9. Read and interpret a horizontal or vertical bar chart.	



GRADE 3	MATHEMATICS CONTENT STANDARD – STATISTICS AND PROBABILITY The student will collect, organize, display and interpret data to find solutions and/or make decisions i practical situations, and understand and apply basic concepts of probability.		
STANDARD 5			
Benchmarks and	│ Ilustrative Examples	NSC Attainment Targets (AT) and Objectives	
Benchmarks and Illustrative Examples Benchmark 3.5.3 Understand and apply basic concepts of probability Illustrative Example Play probability game. Write the numbers 1 to 12 on a plain piece of paper. Place twelve counters on the numbers anyhow you desire. You can place more than one counter on a given number. You and your partner take turns in rolling and adding the sum of 2 dice. Remove one counter at a time if you have the number that is played. The first person to have all counters removed is the winner. Discuss why it was easier to get some numbers. Discuss what you would do differently if you had to play the game a		 3.9.7 Conduct probability experiments and record outcomes (e.g. tossing coins, rolling dice, spinning spinners). 3.9.8 Predict the outcomes of experiments before they take place. 3.9.9 Compare predictions with outcomes of experiments. 	

NATIONAL STANDARDS CURRICULUM GUIDE

NSC APPENDICES

STEM & THE NSC

PERSPECTIVES OF SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS & THE AESTHETICS

(STEM/STEAM) IN RELATION TO THE NATIONAL STANDARD CURRICULUM (NSC)

INTRODUCTION & BACKGROUND

The integration of theoretical principles that relate to STEM/STEAM Education in the NSC began in June 2014. This move was influenced by recommendations of the STEM Steering Committee that emphasized the need to develop learners who are not just productive, but who would also be innovative Jamaicans. STEM integration was also regarded as one of the strategic long term means of addressing the economic challenges being faced by Jamaica using education as a primary vehicle for the implied transformational change to happen, beginning from short term efforts.

Initial discussions and deliberations promoted an emphasis on STEM rather than STEAM Education. However, critical analysis of the conversations conveyed the perspective of STEM as a collection of related disciplines that all learners should have the opportunity of pursuing, to develop the competencies they offer and as a consequence be able to gain employment or become employers in STEM related areas. As stakeholders from different backgrounds processed their understanding of STEM, new meanings of the concept emerged from the discussions. One was the perspective of STEM as a methodology. There was, however, concern about the exclusion of "A" in STEM. This "A" component however, brought to the discussion, multiple meanings. In some instances, "A" was taken to mean a focus on affective development or affectivity. In other cases, it was used in reference to the Aesthetics as a field and was considered an important component to be included if educators are serious about issues of discrimination, holistic learning and current research on the iterative function of the brain that warrants attention to brain based learning and the role of the Arts in promoting knowledge integration to cater to multiple domains of learning. There was also discontent about neglecting the Performing Arts when related creative industries contribute significantly to economic development. The concern was that the role of the Arts to economic development was being trivialized.

The call for the integration of the Aesthetics or Art forms became more pronounced as STEM took on more national significance. This was supported by research that indicates the importance of the Aesthetics in developing values and attitudes, in promoting holistic learning and in serving as drivers of innovations. By integrating principles from STEM with those from the Arts/Aesthetics, the approach to problem solving would encourage greater appreciation for and reliance on the interdependent nature of knowledge when science and arts intersect.

Additionally, STEAM as a methodology encourages the harmonizing of the cognitive and the emotional domains in the problem-solving process.

The concept of STEAM was adopted in 2015, as an integrative approach to education and a methodology that pays attention to the benefits to be derived from the inclusion of the Arts or Aesthetics with STEM related principles. These collective benefits are supported by Jolly (2014), Sousa and Pilecki (2013) and include divergent thinking; differentiated learning; Arts integration; focus on intrinsic motivation and informed decision-making.

PERSPECTIVES OF STEM/STEAM IN THE CONTEXT OF THE NSC

In the context of the NSC, STEM/STEAM is used in a number of ways. These include:

STEM/STEAM as an integrative learning approach and methodology in facilitating learning. This perspective places emphasis on STEM/STEAM as a means of helping learners become creative or innovative problem solvers and lifelong learners who rely on scientific principles (laws and theories) to address issues/concerns or to deal with observed phenomenon that are puzzling for them or that inspire interest. As an approach, the focus is on solving problems based on principles. As methodology, the focus is on the system of practical procedures to be used to translate principles into the problem -solving processes or to choose from available problem- solving models.

STEM/STEAM as an Experiential-Vocational Learning Framework that is based on problem solving through the project-based approach. Emphasis is placed on solving real life problems in a context that requires learners and their facilitators to observe work-based principles. The primary purpose for this focus is for learners to: (i) become employable (ii) prepare for further education and/or for occupational or work readiness.

STEM as types of institutions in which learning is organized as a **meta-discipline** as described by Morrison and Bartlet (2009). Based on this perspective, STEM facilitates the demonstration of knowledge in a manner that removes the boundaries of each discipline for application to problem as would be practised in the real world.

IMPLICATIONS OF PERSPECTIVES OF STEM/STEAM IN LIGHT OF THE NSC

Since the NSC is based on Constructivism principles, STEM/STEAM as an approach and methodology, has to be established on post-positivistic thinking. From this position, STEM/STEAM influences the kind of practice that promotes collaboration, negotiation of meaning and openness to scrutiny.

The NSC developers selected a Constructivist approach that included the **deliberation**, **designing and development** stages of the curriculum process. Evidence of the influence of Constructivism can be seen the NSC Framework Document that conveys the following emphasis:

- (i) The element of objectives is presented in two forms; firstly as Learning Objectives to focus attention on process and experience rather than product. Secondly as Learning Outcomes that serve as some of the outputs of the process. They include the basic understandings, skills and dispositions anticipated from learners' engagement in the planned experiences.
- (ii) The element of content is treated as contexts for learners to think critically, solve problems creatively while developing their identity as Jamaicans. Content is not expected to be treated as disciplines to be mastered but as areas that contribute knowledge, skill sets and attitudes that form the composite of competencies to be acquired from their integration in the learning situations.
- (iii) The element of learning experiences (method) is presented as a set of learning activities that serves as a source of problems to be addressed as a part of the learning process. These real-life activities provide the scope of knowledge, skills and required dispositions or character traits for learners to make sense of that aspect of life or the world that they represent. They are the threads that connect all the other elements of the curriculum and allow for the integration of STEM/STEAM in the following ways:
 - Identification of activities that are presented as problems to be solved using the STEM/STEAM approach based on contextual

- Integrating activities to form a real problem to be solved as a short, medium or long term project to which the project based learning would be applied.
- The examination of learning activities by learners and teachers as co-learners through multiple lenses using content of science, technology, mathematics and the humanities that they have already explored to engage in the problem identification and definition processes.
- Extending learning in the formal setting to the informal by connecting co-curricular initiatives that are STEM/STEAM based that learners are undertaking at the institutional level through clubs and societies, as whole school projects or in partnership with external stakeholders.
- Using the learning activities to review STEM/STEAM initiatives that form a part of the informal curriculum to and for reflection on action.
- Using activities as springboards for reflecting on career or occupational interest in STEM/STEAM related areas.
- (iv) The element of evaluation is communicated in two major ways; firstly as prior learning which serves diagnostic purpose and secondly as an on-going developmental process. This formative focus is indicated by the inclusion of explicitly stated assessment criteria that are to be used alongside the learning activities. The use of assessment criteria as counterparts of the learning activities also indicates that assessment is learner centred since it is serving developmental rather than promotional purpose and as a consequence, allows learners to self-correct as they use feedback to develop feed-forward capabilities. Evidence of learning, based on the learning outcomes, can be collected from various types of assessment methods that emphasize the learner centred constructivist orientation. This brings to the fore the need for serious consideration to be given to differentiation in assessment for fairness and credibility of claims about learners' capabilities and to inform decisions that will impact their educational journey.

In general, this integrated approach, which is the context of STEAM, is aimed at improving the quality of the educational experience for learners while influencing the achievement of the aims of education that relate to productivity and creativity as part of the profile of the Jamaican learner.

REFERENCES

- 1. Jolly, A. (2014). STEM vs. STEAM: Do the Arts belong? Retrieved from: http://www.edweek.org/tm/articles/2014/11/18/ctq-jolly-stem-vs-steam.html
- 2. Morrison, J., Raymond, V. & Barlett, B. (2009). *STEM as a curriculum: An experiential approach. Retrieved from:* http://www.edweek.org/ew/articles/2009/03/04/23bartlett.h28.html
- 3. Sousa, D., Pilecki, T. (2013). *STEM to STEAM: Using brain compatible strategies to integrate the Arts*. London: SAGE Publications Ltd.
- 4. Trochim, Williams, M.K., (2006). Positivism & post-positivism. Web Centre for Social Research Methods. Retrieved from: http://www.socialresearchmethos.net/kb/positivsm.php

NSC THE 5Es

The 5Es Overview: "The 5E Learning Cycle"

What is a 5E Learning Cycle?

This model describes an approach for facilitating learning that can be used for entire programmes, specific units and individual lessons. The NSC supports the 5E constructivist learning cycle, as it places emphasis on the processes that may be used to help students to be personally involved in the learning situation as they are guided to build their own understandings from experiences and new ideas.

5E Instructional Model



Figure 1. Illustrating one version of the 5E model that conveys the role of evaluation as an interconnecting process that is at the core of the learning experience.



Figure 2, illustrating a cyclical perspective of the model with each process being given similar emphasis in contributing to the learning experience on a whole

EXPLANATION OF THE INSTRUCTIONAL MODEL

What are the 5Es?

The 5Es represent five key interrelated processes that provide the kind of learning experiences for learners to experience the curriculum or planned learning episodes: **Engage**, **Explore**, **Explain**, **Extend** (or **Elaborate**), and **Evaluate**.

ENGAGE: The purpose of the ENGAGEMENT dimension is to help students to be ready intellectually, socially, emotionally etc. for the session. Attention is given to the students' interests and to getting them personally involved in the lesson, while pre-

assessing prior understandings, attitudes and/or skills. During the experience, students first encounter and identify the instructional task and their roles and responsibilities. During the ENGAGEMENT activity, students make connections between past and present learning experiences, setting the organizational groundwork for upcoming activities. The engagement activity may be used to (a) help student unearth prior knowledge (b) arouse their curiosity (c) encourage students to ask questions as a sign that they have wonderments or are puzzled.

EXPLORE: The purpose of the EXPLORATION dimension is to get students involved in solving a real problem that is based on a selected context. EXPLORATION provides them with a chance to build their own understanding of the phenomenon being investigated and the attitude and skills involved for arriving at a workable solution. In exploring the students have the opportunity to get directly involved with the phenomenon and materials. As they work together in learning teams or independently, the need to share and communicate becomes necessary from the experiences. The teacher functions as a facilitator, providing materials, guarding against obstacles to learning and guiding the students to operate based on agreements. The students become inquirers and co-owners of the learning process. In exploring, they also ask questions, formulate hypothesis, search for answers or information/data, reflect with others, test their own predictions and draw conclusions.

EXPLAIN: The purpose of the **EXPLANATORY dimension** is to provide students with an opportunity to assess their thinking and to use intellectual standards as critical thinkers to communicate their perspectives and/or the meaning of the experiences. They rely on communication tools and their skills as Language users to: (a) organize their thoughts so that they are clear, relevant, significant, fair, accurate etc. (b) validate or affirm others (c) self-motivate. Reflection also occurs during the process and may cause students to adjust

their perspective or justify their claims and summarise the lessons being learned. Providing explanations contributes to vocabulary building and self-corrective actions to deal with misconceptions that they become aware of from feedback of their peers and/or their facilitator.

EXTEND: The purpose of this dimension is to allow students to use their new knowledge and continue to explore its significance and implications. Students work independently or with others to expand on the concepts and principles they have learned, make connections to other related concepts and principles within and/or across disciplines, and apply their understandings in new ways to unfamiliar situations.

EVALUATE: The purpose of the EVALUATION dimension is for both students and facilitator to determine progress being made or the extent to which learning has taken place based on the stated objectives or emergent objectives. EVALUATION is treated primarily as an on-going diagnostic and developmental process that allows the learner to become aware of gaps to be treated and progress made from their efforts to acquire the competencies that were the focus of the session. Examples of competencies include understanding of concepts, principles and processes and demonstrating various skills. Evaluation and assessment can occur at different points during the learning episode. Some of the tools that assist in this diagnostic and formative process include rubrics, teacher observation log, self-inventories, peer critique, student interviews, reflective presentations, displays/expositions, portfolios, performances, project and problem-based learning products. Analysis of reflections, video recordings are useful in helping students to determine the depth of their thinking and understanding and the objectives they have or have not achieved.

Who developed the 5E model?

The Biological Science Curriculum Study (BSCS), a team led by Principal Investigator Roger Bybee, developed the instructional model for constructivism, called the "Five Es".

The Link between the 5E model and Types of Learning Activities

The five (5) types of Learning Activities purported by Yelon (1996) can be integrated with the 5E's so as to enrich the teaching and learning process. He noted that every instructional plan should include the following learning activities

- 1. Motivation Activities: Intended to help learners to be ready for the session
- 2. Orientation Activities: Inform students of their roles and responsibilities based the purpose or objectives of a learning episode.
- 3. Information Activities: Allow students to manipulate current knowledge, access/retrieve and generate new ideas
- 4. Application Activities: Allow for the use of knowledge and skills in novel situations
- 5. Evaluation Activities: Allow for reflection, corrective actions and sourcing of evidence to confirm/refute claims about learning.

These activities can be planned to serve one of the purposes of each dimension of the 5E model. For example, ENGAGEMENT may be comprised a Motivation Activity and an Orientation Activity. EXPLORATION and EXPLANATION require an Information Activity, while EXTEND requires an Application Activity. EVALUATION requires the kind of activity that will contribute to the collection of data for assessing and arriving at a conclusion about performance based on stated or expected purpose for which learning is being facilitated.

References

Meegan, G. (2017). The intellectual standards. Retrieved from https://theelementsofthought.org/the-intellectual-standards/

The 5 E Model (n.d.). Retrieved from http://tiny.cc/7ogijy

The 5 E Model (n.d.). Retrieved from http://tiny.cc/oogijy

ATTAINMENT TARGETS

ATTAINMENT TARGETS

GRADE 3

SUBJECTS	ATTAINMENT TARGETS			
LANGUAGE ARTS	Speaking and Listening			
	 Communicate with confidence and competence for different purposes and audiences, using SJE and JC appropriately and creatively Listen to, recall, understand and respond to speakers' messages, whether implicit or explicit Recognise, value and make distinctions between home language and SJE to improve/acquire language and literacy competencies Explain and comment on speakers' use of language, including use of SJE and JC, and their use of vocabulary, grammar and other features 			
	Reading with Fluency and Recognition			
	Read fluently and with appreciation			
	Automatically recognise words (including basic sight word lists) through repeated exposure and mnemonic devices			
	Establish a concept of print and use a range of word recognition clues, re-reading and reading ahead, to identify new words			
	Develop phonic awareness and use knowledge of letter-sound correspondences in order to decode unfamiliar words			
	Reading for Meaning and Enjoyment			
	Read for meaning, fluency and enjoyment of texts, using a variety of clues to gain information and identify ideas and events			
	Use deduction and inference to interpret information and ideas and to predict outcomes			
	Identify and comment on the structure of texts and on the language choices, grammar and techniques writers use to create an impact			
	Reflect on and critically respond to literature and other texts, on paper and on screen			
	Reading for Information			
	Research activities on issues and interests by generating ideas and exploring texts using a range of strategies			

	Identify and use text features to support navigation of texts, retrieve and synthesize information gained from a range of sources			
	injormation gamea from a range of sources			
	Writing: Communication			
	Develop approaches to the writing process to enable them to organise their ideas into a coherent structure including, layout, sections and paragraphs			
	Write to narrate, to persuade and for a range of transactional purposes, using SJE and JC appropriately and incorporating multi -media approaches to their writing			
	Use language and text forms appropriately and with imagination to create vibrant and engaging texts			
	 Write well-constructed paragraphs which have linking sentences within and between the 			
	Writing: Language Structure			
	Use and adapt a range of sentence structures according to context, distinguishing between SJE and JC			
	Write sentences which are grammatically accurate and correctly punctuated, using SJE and JC appropriately			
	Use a range of punctuation correctly			
MATHEMATICS	AT1a. Know the value of numerals, associate them with their names, numbers, ordinals and use concrete objects to model patterns, expression and numbers			
	AT1b. Use the basic operations, number relationships, patterns, number facts,			
	calculators and appropriate software to compute and estimate in order to solve real world problems involving fractions, percentages and decimals.			
	AT2 .Use the correct units, tools and attributes to estimate, compare and carry out the			
	processes of measurement to given degree of accuracy.			
	AT3 Explore paths, geometric shapes and space and make generalization about			
	geometric relationships within the environment AT4 . Employ algebraic reasoning through the use of expressions, equations and formulae			
	to interpret, model and solve problems involving unknown quantities			
	AT5. Collect, organise, interpret and represent data and make inferences by applying			
	knowledge of statistics and probability.			

SCIENCE	Begin to explore the environment in order to relate everyday experiences to simple scientific concepts and processes.
	Begin to understand and apply aspects of the scientific method.
	Begin to explore selected life processes in humans, the interdependence between living things in the environment, and how lifestyles determine health and well-being in humans.
	Begin to appreciate the impact of selected human activity and natural phenomena on the environment.
	Begin to explore the properties of various materials, substances, selected forces and forms of energy through the use of the senses.
	 Begin to demonstrate stewardship for living things and the environment.
	Begin to demonstrate a positive attitude towards the use of scientific language.
	Begin to demonstrate positive interpersonal skills in order to foster good working relationships.

LESSON PLANS

INTEGRATED STUDIES

Integrated Lesson:

Class: Grade Three

Time: 3 hours

Term 3 Unit 1

Unit Title: Living and non-living things in my environment

Topic: Exploring Living Things & Non-Living Things

Focus Question 1: How can I tell if something in my environment is living?

Objectives: Pupils will be able to:

- ▶ Differentiate between living and non-living things
- ▶ Apply the seven life processes to determine living and non-living things
- Work cooperatively in groups
- Actively participate in reflective thinking

Materials: Flip chart/ cartridge paper, markers, Life Processes checklist, Tree song video, computer, projector, pictures of living and non-living things, germinating seeds, containers, soil

Procedure:

Engage

Students will participate in a game called "Guess my Thoughts." Students will take turns guessing what their peers are thinking as well as create their own clues for their peers to guess.

See example below

Guess My Thoughts

What am I thinking of?

I am round, I can bounce, What am I?

I have feathers, I cluck, What am I?

Explore

Students will role play being detectives to help solve a problem. In small groups they should demonstrate how they would address this problem using the question and timeline. The challenge is how quickly they can work together to produce the group's response.

Question: How do you know you are alive?

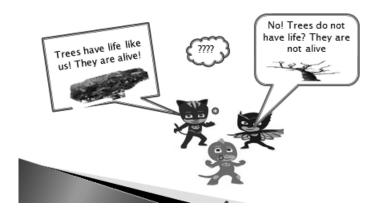
Timeline: 5 min

Groups share responses. Students will be engaged in a discussion of similarities and differences based on the responses from the group.

Students will examine a problem situation and use the tools provided to record information they will share based on assignment per group.

THE PROBLEM

- Problem Situation: The image below shows a problem:
 - How do you know there is a problem?



Tasks for Each Team

Team 1: how do you know there is a problem and what exactly is it? Explain/Illustrate

Team 2: How many persons are involved in this problem situation? Explain/Illustrate

Team 3: Why are they having this problem? Explain/Illustrate

Team 4: What tools/materials would your team need to help solve this problem? Explain/Illustrate

Team 5: How can your team help to solve this problem using the materials given?

Self Check

Pupils will listen/view the Tree song. They will listen for any clues in the song that support their idea that trees are living or non-living.

https://www.youtube.com/watch?v=Z6vFWmLXl3g

Elaborate

Activity: A line is drawn in the room/outside and one side is labelled as Living things and the other as Non-living things. A leader has word cards with examples of living and non-living things. A card is selected and the word is called out. Other students jump on the side to which it belongs. The person who jumps on the wrong side is out of the game. The person who stays in the game the longest is the winner.

Reflection/Self/Peer Assessment based on the gaming experience

Children share in groups how they handled the game by asking:

What did you notice about yourself and others based on the rules of the game?

Validate responses to include important attitudes/values. Share observations that children overlooked if this occurred. Negotiate and justify expectations going forward

Activity: In groups, be given samples/pictures of living/non-living things. Use a checklist of the 7 life processes to determine whether they are living or non-living. Write their group position to share using one of the following to share their views: Poetic language/ Song/ Visual

Group 1	Group 2	Group 3
Fish	Butterfly	Rock

Activity: Complete the following passage using the following words:

Food, water, shelter, air, sunlight

All living things need----- to drink and -----to eat.

All living things need fresh -----to breathe.

All plants need ----to grow.

All humans need----- to live in.

<u>Activity</u>: *Planting a germinating pea:*

Steps:

- ✓ Preparing the container with the soil
- ✓ Planting the germinating pea
- ✓ Measuring and adding adequate water
- ✓ Making decision of where to place their plant
- \checkmark Prepare their chart for capturing the daily growth of their seed

Pupils reflect on activity and share with peers how they arrived at decisions, steps and the results.

LANGUAGE ARTS

Grade Three

Subject: Language Arts

Time: One hour

Strand: Comprehension

Topic: Identifying imagery

Objectives: Pupils should be able to:

1. Identify elements (imagery, mood) of poetry to enhance understanding

Materials: Poem "Daddy fell into the pond" by Alfred Noyes, chart paper,

Procedure

Engage

Pupils will be given the title of the poem "Daddy fell into the pond" by Alfred Noyes. They will be asked to use the title to create drawings. Pupils will then share the drawings and say how they think Daddy fell into the pond.

Explore

Pupils will then be given the poem to read to identify the mood of the poem. They will draw faces to show how they felt at different parts of the poem. They will discuss with their elbow partner their reactions to the poem.

Pupils will use their drawings and compare with what really happened in the poem. Pupils will discuss the images that came to their mind while they were reading the poem.

Everyone grumbled. The sky was grey.

We had nothing to do and nothing to say.

We were nearing the end of a dismal day,

And there seemed to be nothing beyond,

THEN

Daddy fell into the pond!

And everyone's face grew merry and bright,
And Timothy danced for sheer delight.
'Give me the camera, quick, oh quick!
He's crawling out of the duckweed.'
Click!

Then the gardener suddenly slapped his knee,
And doubled up, shaking silently,
And the ducks all quacked as if they were daft
And is sounded as if the old drake laughed.

O, there wasn't a thing that didn't respond
WHEN
Daddy fell into the pond!

Alfred Noyes

Explain

Pupils will make anchor charts to depict their understanding of mood and imagery.

Extend/Elaborate

Group 1	Group 2	Group 3
Pupils will dramatize a scene	Pupils will tell the poem from the	Pupils draw pictures for different
depicting the poem	father's perspective.	stanzas/lines.

Evaluation

Pupils share their activities with class. Pupils discuss how the activities depicted the mood/imagery conveyed in the poem.

MATHEMATICS



Number lesson Plan

Topic: Multiplication (repeated addition) **Duration:** 60 minutes

Objectives

Students should be able to:

- State, using multiplication ideas, in a sentence the idea of repeated addition of the same number (e.g. moving from 3+3+3+3 to 4×3)
- Differentiate between the use of multiplication and addition to find "How many in all"
- Show the correct multiplication facts for a repeat addition, example, by use of an array.

Key concepts /	Resources/Equipment:	Skills:
Vocabulary:	plain paper, dice, pencil	Drawing sets
Repeated addition;		Writing multiplication facts
multiplication; times; array;		Making an array
facts		

Starter:

• Let's find out how many oranges in total are in the 4 heaps.



• How did you get your answer? What method did you use?

Teaching/Learning /Main/Exploring Activities:

Let's investigate the calculation we use to find the total when there are the same number of items in several groups.



- 1. Pupils play the game CIRCLES AND STARS
 - ❖ Pupils, in pairs, take turn and throw the die twice. On the first throw the pupils draw the circles and on the second throw draw the stars in the circle. For example if the first number is 3 and the second one is 4 then the pupil would draw 3 circles with 4 stars in each circle. Then write the multiplication facts beneath each game.
- 2. After each pair plays 6 times, the teacher asks what products were obtained and how. Pupils write the results on the chalkboard.

1	1×1					
2	1×2	2×1				
3	1×3	3×1				
4	1×4	2×2	4×1			
5	1×5	3×1 2×2 5×1				
6	1×6	6×1	2×3	3×2		

- 3. Students create their own array, show it to their elbow partner.
- 4. The answer is 10. What is question?

Extension

• Solve:

"Come into my parlour"

Said the spider to the fly.

"Answer now my question

Unless you want to die.



To give me twenty-eight fly legs

The number I desire

How many flies

Am I going to require?

Evaluation / Reflection

Which mathematical skills were developed? (Problem solving, communication, reasoning, connections, and representation.

reasoning, connections, and representation.

How did the activities help the students to understand the concept of multiplication as repeated addition?

Did the lesson give students opportunities to activate prior knowledge, acquire knowledge, understand knowledge, use knowledge and reflect on knowledge?

How did the teacher use the activities to assess students' understanding of the concept taught

Technology Integration possibility:

Numeric Interactive Software



Topic: Fractions (of a set of objects) **Duration:** 60 minutes

Objective:

• Use numerals $\frac{1}{2}$ and $\frac{1}{4}$ to describe halves and fourths of an object or a set of objects.

Key concepts / Vocabulary:	Resources/Equipment:	Skills:
quarter, one fourth, half.	Counters, students worksheet	• Dividing in 2 or 4 equal parts

Starter:

Sing 'fractions' song. Distribute to pairs of students 8 candies (skittles). Have students recognize that the 8 candies make one whole. Have them divide their whole in two equal parts, then further divide each halves into two again (to get quarters). Students will explain what they have done and describe how many they have in each group. They will be allowed to eat the candies at the end of the class.

Teaching/Learning / Exploring Activities:

- 1. Give 24 counters/pebbles to each group of students (maximum six students).
- 2. Have students make two equal groups from the set counters/pebbles.
- 3. Discuss with class the number of counters in each group and say what fraction of the whole each group represents.
- 4. Have students share the counters in four equal groups. How many would be in each group? What fraction of the counter is each group?
- 5. Place students in groups of 8. At the start of selected music they will quickly move to form groups representing given fractions $\frac{1}{2}$, $\frac{1}{4}$.
- 6. Students to consider: Each parish capital in Jamaica has a Mayor in the Parish Council. A half of this number represents men. Draw pictures showing all the mayors and indicate those that are men.



Plenary: A fraction can be part of a whole object or a set of objects.

Assessment:

- 1. Given a work sheet, students divide the various sets of objects as directed.
- 2. Have students colour each required fraction using a different colour for each.

Evaluation / Reflection:

Were students able to:

- fold a given square into quarters?
- identify the quarters in given shapes?
- divide other shapes in quarters (fourths)?
- Tell how many quarters in a half?
- Tell how many quarters in a whole?

TEACHING MATHEMATICS: IDEAS & ACTIVITIES



Teaching Mathematics through Games

Alpha-Bits

All 26 letters of the English alphabet are in a bag. The vowels are A, E, I, O, U and sometimes Y.

- How many possible outcomes are there when drawing a letter from the bag? 1.
- 2. What are the chances of drawing a vowel form the bag?
- What are the chances of drawing a consonant from the bag? 3.
- 4. What are the chances of drawing the letter:
 - B? K?
 - **Z**? A?
- If two of each vowel are placed inside the bag, along with one of each consonant, what are the chances of drawing a vowel? 5.
- If the letters A through J are removed from the bag, what are the chances of drawing the letter M? and U? 6.
- If the vowels are removed from the bag, what are the chances of drawing a consonant? 7.
- If the blocks for the numbers 1-9 are combined with the 26 letter blocks, what are the chances of drawing: 8.
- 1. A number?
- 2. A letter
- 3. A vowel 4. A consonant



MULTIPLICATION CHART

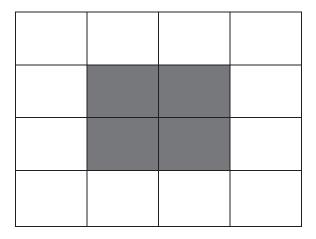
1	2	3	4	5	6	7	8	9	10	11	12	13	14
2	4	6	8	10	12	14	16	18	20	22	24	26	28
3	6	9	12	15	18	21	24	27	30	33	36	39	42
4	8	12	16	20	24	28	32	36	40	44	48	52	56
5	10	15	20	25	30	35	40	45	50	55	60	65	70
6	12	18	24	30	36	42	48	54	60	66	72	78	84
7	14	21	28	35	42	49	56	63	70	77	84	91	98
8	16	24	32	40	48	56	64	72	80	88	96	104	112
9	18	27	36	45	54	63	72	81	90	99	108	117	126
10	20	30	40	50	60	70	80	90	100	110	120	130	140
11	22	33	44	55	66	77	88	99	110	121	132	143	154
12	24	36	48	60	72	84	96	108	120	132	144	156	168
13	26	39	52	65	78	91	104	117	130	143	156	169	182
14	28	42	56	70	84	98	112	126	140	154	168	182	196



Teaching Mathematics through Games

Fraction Activity

Instruction: Insert the following fractions so that each row and column adds to give one (1).





·				100 (Chart				
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

nttp://matri.accut.co



150 Teaching Methods

- 1. Lecture by teacher (and what else can you do!)
- 2. Class discussion conducted by teacher (and what else!)
- 3. Recitation oral questions by teacher answered orally by students (then what!)
- 4. Discussion groups conducted by selected student chairpersons (yes, and what else!)
- 5. Lecture-demonstration by teacher (and then what 145 other techniques!)
- 6. Lecture-demonstration by another instructor(s) from a special field (guest speaker)
- 7. Presentation by a panel of instructors or students
- 8. Presentations by student panels from the class: class invited to participate
- 9. Student reports by individuals
- 10. Student-group reports by committees from the class
- 11. Debate (informal) on current issues by students from class
- 12. Class discussions conducted by a student or student committee
- 13. Forums
- 14 Bulletin boards
- 15. Small groups such as task oriented, discussion, Socratic
- 16. Choral speaking
- 17. Collecting
- 18. Textbook assignments
- 19. Reading assignments in journals, monographs, etc.
- 20. Reading assignments in supplementary books
- 21. Assignment to outline portions of the textbook
- 22. Assignment to outline certain supplementary readings



- 23. Debates (formal)
- 24. Crossword puzzles
- 25. Construction of vocabulary lists
- 26. Vocabulary drills
- 27. Diaries
- 28. Dances of places or periods studied
- 29. Construction of summaries by students
- 30. Dressing dolls
- 31. Required term paper
- 32. Panel discussion
- 33. Biographical reports given by students
- 34. Reports on published research studies and experiments by students
- 35. Library research on topics or problems
- 36. Written book reports by students
- 37. Flags
- 38. Jigsaw puzzle maps
- 39. Hall of Fame by topic or era (military or political leaders, heroes)
- 40. Flannel boards
- 41. Use of pretest
- 42. Gaming and simulation
- 43. Flash cards
- 44. Flowcharts
- 45. Interviews
- 46. Maps, transparencies, globes
- 47. Mobiles
- 48. Audio-tutorial lessons (individualized instruction)
- 49. Models
- 50. Music



- 51. Field trips
- 52. Drama, role playing
- 53. Open textbook study
- 54. Committee projects--small groups
- 55. Notebook
- 56. Murals and montages
- 57. Class projects
- 58. Individual projects
- 59. Quiz down gaming
- 60. Modeling in various media
- 61. Pen pals
- 62. Photographs
- 63. Laboratory experiments performed by more than two students working together
- 64. Use of dramatization, skits, plays
- 65. Student construction of diagrams, charts, or graphs
- 66. Making of posters by students
- 67. Students drawing pictures or cartoons vividly portray principles or facts
- 68. Problem solving or case studies
- 69. Puppets
- 70. Use of chalkboard by instructor as aid in teaching
- 71. Use of diagrams, tables, graphs, and charts by instructor in teaching
- 72. Use of exhibits and displays by instructor
- 73. Reproductions
- 74. Construction of exhibits and displays by students
- 75. Use of slides
- 76. Use of filmstrips
- 77. Use of motion pictures, educational films, videotapes
- 78. Use of theater motion pictures



- 79. Use of recordings
- 80. Use of radio programs
- 81. Use of television
- 82. Role playing
- 83. Sand tables
- 84. School affiliations
- 85. Verbal illustrations: use of anecdotes and parables to illustrate
- 86. Service projects
- 87. Stamps, coins, and other hobbies
- 88. Use of community or local resources
- 89. Story telling
- 90. Surveys
- 91. Tutorial: students assigned to other students for assistance, peer teaching
- 92. Coaching: special assistance provided for students having difficulty in the course
- 93. Oral reports
- 94. Word association activity
- 95. Workbooks
- 96. Using case studies reported in literature to illustrate psychological principles and facts
- 97. Construction of scrapbooks
- 98. Applying simple statistical techniques to class data
- 99. Time lines
- 100. "Group dynamics" techniques
- 101. Units of instruction organized by topics
- 102. Non directive techniques applied to the classroom
- 103. Supervised study during class period
- 104. Use of sociometric text to make sociometric analysis of class
- 105. Use of technology and instructional resources
- 106. Open textbook tests, take home tests



- Put idea into picture
- Write a caption for chart, picture, or cartoon 108.
- Reading aloud 109.
- Differentiated assignment and homework 110.
- Telling about a trip 111.
- 112. Mock convention
- 113. Filling out forms (income tax, checks)
- 114. Prepare editorial for school paper
- Attend council meeting, school board meeting
- Exchanging "things" 116.
- Making announcements 117.
- 118. Taking part (community elections)
- 119. Playing music from other countries or times
- 120. Studying local history
- Compile list of older citizens as resource people 121.
- 122. Students from abroad (exchange students)
- Obtain free and low cost materials 123.
- Collect old magazines 124.
- Collect colored slides 125.
- Visit an "ethnic" restaurant 126.
- Specialize in one country 127.
- 128. Follow a world leader (in the media)
- Visit an employment agency 129.
- Start a campaign 130.
- 131. Conduct a series
- 132. Investigate a life
- 133. Assist an immigrant
- 134. Volunteer (tutoring, hospital)



- 135. Prepare an exhibit
- 136. Detect propaganda
- Join an organization 137.
- 138. Collect money for a cause
- Elect a "Hall of Fame" for males
- 140. Elect a "Hall of Fame" for females
- Construct a salt map 141.
- 142. Construct a drama
- 143. Prepare presentation for senior citizen group
- Invite senior citizen(s) to present local history to class including displaying artifacts (clothing, tools, objects, etc.) 144.
- Prepare mock newspaper on specific topic or era 145.
- Draw a giant map on floor of classroom 146.
- 147. Research local archaeological site
- 148. Exchange program with schools from different parts of the state
- In brainstorming small group, students identify a list of techniques and strategies that best fit their class. 149.

http://teaching.uncc.edu/learning-resources/articles-books/best-practice/instructional-methods/150teaching-methods#sthash.yM7PA7xP.dpuf



THE LAWS OF TEACHING - by John Milton Gregory

THE SEVEN FACTORS

1. Teaching has its natural laws as fixed as the laws of the planets or of growing organisms. It is a process in which definite forces are employed to produce definite results, and these results follow as regularly and certainly as the day follows the sun. What the teacher does, he does through natural agencies working out their natural effects. Causation is as certain -- if not always so obvious nor so easily understood -- in the movements of mind as in those of matter.

The laws of mind are as fixed as material laws.

2. To discover the laws of any process, whether of mind or of matter, makes it possible to bring that process under the control of one who knows the laws and can command the conditions. Knowledge of the laws of electric currents has made it possible to send messages through the oceans; and he who masters the laws of teaching may convey to the minds of others the experience of the race. He who would gain harvests must obey nature's laws for the growing of corn, and he who would teach a child successfully must [16] follow the laws of



teaching. Nowhere, in the world of mind or in the world of matter, can man produce any effects except as he employs the means upon which those effects depend.

3. Teaching, in its simplest sense, is the communication of experience. This experience may consist of facts, truths, doctrines, ideas, or ideals, or it may consist of the processes or skills of an art. It may be taught by the use of words, by signs, by objects, by actions, or by examples; but whatever the substance, the mode, or the aim of the teaching, the act itself, fundamentally considered, is always substantially the same: it is a communication of experience. It is painting in the mind of another the picture in one's own -- the shaping of the thought and understanding to the comprehension of some truth which the teacher knows and wishes to communicate. Further on we shall see that the word "communication" is used here, not in the sense of the transmission of a mental something from one person to another, but rather in the sense of helping another to reproduce the



same experience and thus to make it common to the two.

- 4. To discover the law of any phenomenon, we must subject that phenomenon to a scientific analysis and study its separate parts. If any complete act of teaching be so analyzed, it will be found to contain seven distinct elements or [17] factors: (1) two personal factors -- a teacher and a learner; (2) two mental factors -- a common language or medium of communication, and a lesson or truth or art to be communicated; and (3) three functional acts or processes -that of the teacher, that of the learner, and a final or finishing process to test and fix the result.
 - 5. These are essential elements in every full and complete act of teaching. Whether the lesson be a single fact told in three minutes, or a lecture occupying as many hours, the seven factors are all present, if the work is effective. None of them can be omitted, and



no others need be added. If there is a true science of teaching, it must be found in the laws and relations of these seven factors.

6. To discover their laws, let us pass the seven factors again in careful review: (1) a teacher; (2) a learner; (3) a common language or medium of communication; (4) a lesson or truth; (5) the teacher's work; (6) the learner's work; (7) the review work, which organizes, applies, perfects, and fastens the work which has been done. Each of these seven factors are distinguished from the rest by some essential characteristics; each is a distinct entity or fact of nature. Since every fact of nature is the product and proof of some law of nature, each element here described has its own [18] great law of function, and these taken together constitute The Seven Laws of Teaching.

7. It may seem trivial so, to insist upon all this. Some will say: "Of course there can be no teaching without a teacher and a pupil, without a language and a lesson, and unless the teacher teaches and



the learner learns; or, finally, without a proper review, if any assurance is to be gained that the work has been successful. All this is too obvious to need assertion." So also is it obvious that when seeds, soil, heat, light, and moisture come together in proper measure, plants are produced and grow to the harvest; but the obviousness of these common facts does not prevent their hiding among them some of the most profound and mysterious laws of nature. So, too, a simple act of teaching may hide within it some of the most potent and significant laws of mental life.



Teaching Mathematics through Games

Fraction Activity - Solution

Fraction Activity - Solution

1/16	9/32	5/8	1/32
1/4			3/8
1/2			7/ ₁₆
3/16	17/32	1/8	5/32



Teaching Mathematics through Games

Investigations & their Responses

1. Identify the numbers that cannot be formed from the sum of consecutive whole numbers.

1	0+1	17	8+9
2		18	5+6+7; 3+4+5+6
3	1 + 2	19	9 + 10
4		20	2+3+4+5+6
5	2 + 3	21	10 + 11; 6 + 7 + 8
6	1 + 2 + 3	22	4+5+6+7
7	3 + 4	23	11 + 12
8		24	7 + 8 + 9
9	4+5; $2+3+4$	25	12 + 13; 3 + 4 + 5 + 6 + 7
10	1+2+3+4	26	5+6+7+8
11	5 + 6	27	13 + 14; 8 + 9 + 10
12	3 + 4 + 5	28	1+2+3+4+5+6+7
13	6 + 7	29	14 + 15
14	2+3+4+5	30	9+10+11; 6+7+8+9
15	7 + 8; $4 + 5 + 6$; $1 + 2 + 3 + 4 + 5$	31	15 + 16
16		32	

The numbers 2, 4, 8, 16, 32 are identified as not being able to be formed from the sum of consecutive whole numbers. The next in the series should be 32. But note that these are all powers of 2. So *powers of 2* cannot be formed from the sum of consecutive whole numbers.



2. Integer triangles are triangles with sides being whole numbers. Identify the length of sides for integer triangles whose perimeter is 9. Then find those for 10, 11, 12, and 13. Note that the sum of any two sides must be greater than the third side.

Peri				Possil	ole Combin	ations			
7	1 + 3 + 3	2 + 2 + 3							
8	2 + 3 + 3								
9	3 + 3 + 3	2 + 3 + 4	4 + 4 + 1						
10	2 + 4 + 4	3 + 3 + 4							
11	3 + 4 + 4	3 + 3 + 5	2 + 4 + 5	1 + 5 + 5					
12	2 + 5 + 5	3 + 4 + 5	4 + 4 + 4						
13	5 + 4 + 4	3 + 5 + 5	3 + 4 + 6	1 + 6 + 6	2 + 5 + 6				
14	2 + 6 + 6	4 + 5 + 5	6 + 4 + 4	3 + 5 + 6					
15	5 + 5 + 5	4 + 5 + 6	3 + 5 + 7	2 + 6 + 7	1 + 7 + 7	3 + 6 + 6			
16	4 + 5 + 7	5 + 5 + 6	4 + 6 + 6	3 + 6 + 7	2 + 7 + 7				
17	1 + 8 + 8	2 + 7 + 8	3 + 6 + 8	5 + 5 + 7	4 + 6 + 7	4 + 5 + 8	3 + 7 + 7		
18	6 + 6 + 6	5 + 6 + 7	4 + 6 + 8	2 + 8 + 8	3 + 7 + 8	5 + 5 + 8			
19	4 + 9 + 6	3 + 9 + 7	2 + 9 + 8	5 + 5 + 9	3 + 8 + 8	4 + 8 + 7	5+8+6	6 + 7 + 6	5 + 7 + 7
20	2 + 9 + 9	4 + 8 + 8	6 + 7 + 7	8 + 6 + 6	3 + 9 + 8	4 + 9 + 7	5 + 9 + 6		`

3. What happens when you add any two, three, four etc consecutive whole numbers? Investigate.

Action	Response	Example	Generalization
Add two consecutive whole numbers	Always an odd number or one more than twice the first number	13 + 14 = 27	2n + 1
Add three consecutive	Three times the middle		
whole numbers	number	20 + 21 + 22 = 63	3(n+1)



Add four consecutive whole numbers	Even number that is six more than four times the first number	11 + 12 + 13 + 14 = 50	4n + 6
Add five consecutive whole numbers	Five times the middle number	7 + 8 + 9 + 10 + 11 = 45	5(n + 2)
Add six consecutive whole numbers	Odd number that is fifteen more than six times the first number	10 + 11 + 12 + 13 + 14 + 15 = 75	6n + 15
Add seven consecutive whole numbers	Seven times the middle number	22 + 23 + 24 + 25 + 26 + 27 + 28 = 175	7(n+3)
Add eight consecutive whole numbers	Even number which is 28 more than 8 times the first number	40 + 41 + 42 + 43 + 44 + 45 + 46 + 47 = 348	8n + 28

4. Write the factors of numbers and determine the number of odd and even factors of each. Any patterns?

Number	Factors	# of odd factors	# of even factors
2	2	0	1
3	3	1	0
4	2, 4	0	2
5	5	1	0
6	2, 3, 6	1	2
7	7	1	0
8	2, 4, 8	0	3
9	3, 9	2	0
10	2, 5, 10	1	2
11	11	1	0
12	2, 3, 4, 6, 12	1	4
13	13	1	0



	1		
14	2, 7, 14	1	2
15	3, 5, 15	3	0
16	2, 4, 8, 16	0	4
17	17	1	0
18	2, 3, 6, 9, 18	2	3
19	19	1	0
20	2, 4, 5, 10, 20	1	4
21	3, 7, 21	3	0
22	2, 11, 22	1	2
23	23	1	0
24	2, 3, 4, 6, 8, 12, 24	1	6
25	5, 25	2	0
26	2, 13, 26	1	2
27	3, 9, 27	3	0
28	2, 4, 7, 14, 28	1	4
29	29	1	0
30	2, 3, 5, 6, 15, 30	3	3
31	31	1	0
32	2, 4, 8, 16, 32	0	5
33	3, 11, 33	3	0
34	2, 17, 34	1	2
35	5, 7, 35	3	0
36	2, 3, 4, 6, 9, 12, 18, 36	2	6
37	37	1	0
38	2, 29, 38	1	2
39	3, 13, 39	3	0
40	2, 4, 5, 8, 10, 20, 40	1	6

[☐] Two raised to any power has only **even** factors.

[☐] All numbers with one odd and no even factor are primes.



5. When the sum of factors of a given number (excluding the number itself) equals the number itself, the original number is said to be a perfect number.

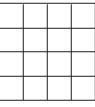
Number	Factors	Sum of factors
6	3+2+1	6
28	14 + 7 + 4 + 2 + 1	28

What are the next two perfect numbers?

6. Given that each cell is a square, find out how many squares are in the particular grids below. Use the table that follows to fill the responses.







2 x 2

3 x 3

Grid size	# of 1 x 1	# of 2 x 2	# of 3 x 3	# of 4 x 4	# of 5 x 5	Total
1 x 1	1	-	-	-	-	1



2 x 2	4	1	-	-	-	5
3 x 3	9	4	1	-	-	14
4 x 4	16	9	4	1	-	30
5 x 5	25	16	9	4	1	55
6 x 6	36	25	16	9	4	91
n x n	n²	$(n-1)^2$	$(n-2)^2$	$(n-3)^2$	$(n-4)^2$	

When two vertices of a polygon are joined, the resulting line segment is a diagonal. One condition is that the vertices do 7. not already share a side. Determine the number of diagonals of polygons with sides 4, 5, 6, 7, 8, 9, 10... Investigate to establish any pattern.

Number of sides	Breakdown of diagonals	Number of	
of polygon	(+ signs excluded)	diagonals	
4	11	2	
5	221	5	



6	3321	9
7	44321	14
8	554321	20
9	6654321	27
10	77654321	35
11		
12		
n		

The number of diagonals, as indicated in the last column, is 2, 5, 9, 14, 20, 27, 35 ... You will notice that you add 3, 4, 5, 6, 7, 8 to the preceding numbers to obtain the next in the series. It is clear then, that you will need to add 9 to 35 to get the number of diagonals for a polygon with 11 sides. That is 44. To that you add 10 to get the number of diagonals for a polygon of 12 sides. The now becomes 54. For a polygon with n sides the result is.......

8. A palindrome is a number that is read the same backwards and forwards. Hence, the numbers 232, 171 and 10601 are palindromes. Indeed, the year 2002 is a palindrome. Can you identify the year before 2002 that was a palindrome?



A number which is not a palindrome may be made into one using one or more steps. To make any number into a palindrome, the number is reversed and the sum of both is found. Hence 43 + 34 = 77. Forty-three takes one step to become a palindrome. 68 + 86 = 154; 154 + 451 = 605; 605 + 506 = 1111. The number 68 will take three steps to become a palindrome. Now try 86.

In the grid below identify all the numbers that will take one step to be made into a palindrome. Following that, identify those that will take two steps, then those that will take three steps and then those that will take four steps. Seek for patterns.

On a 0-99 chart indicate clearly the numbers that

- □ are already palindromes
- need one step to become a palindrome
- need two steps to become a palindrome need three steps to become a palindrome



0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99



Centre of Interest

The Centre of Interest should have basic supplies such as:

***	Pape	ľ

Crayons

Sharpeners

Plasticine

Magazines

Cuisenaire rods

***** Toys

Building blocks

Boxes

Cardboard

Cartridge paper

Counters

Straws

Used Toothpicks

Solids

❖ Worksheets

Books

Measuring tools

Strings/Cords Brown paper

Sand

Calculator

Geoboards

Graph/Squared paper

Puzzles

Mirrors

Water containers

Glue

❖ Scale/Balance

Egg cartons

Primary scissors



STUDENT PORT	FOLIOS
Mathematics Portfolios	Student portfolios are well-known in art and writing, but until now have rarely been used to keep a record of student progress in mathematics. Teachers have always kept folders of student work, but portfolios may now have more focus and be more important for assessment.
What is in a Portfolio?	Teachers and their students should be allowed to choose most of the items to include in portfolios, since it gives a good indication of what is valued. Occasionally it may be desirable, for the sake of comparisons, for some outside agency to ask for inclusion of a certain type of item, but this should be the exception. If possible, teachers and students should be able to present and explain their own portfolios to outside observers.
	Putting dates on all papers will become more important. First draft or revised writing should be acceptable, but with a note about which it is. The names of group members should probably be on papers done by a group, or at least an indication that it was group work.
	A portfolio might include samples of student-produced:
•	 written descriptions of the results of practical or mathematical investigations
	 pictures and dictated reports from younger students
	 extended analyses of problem situations and investigations
	 descriptions and diagrams of problem-solving processes
	 statistical studies and graphic representations
	 reports of investigations of major mathematical ideas such as the relationship between functions, coordinate graphs, arithmetic, algebra, and geometry
	 responses to open-ended questions or homework problems
	 group reports and photographs of student projects
	copies of awards or prizes
	 video, audio, and computer-generated examples of student work
	 other material based on project ideas developed with colleagues
Teachers and Portfolios	The definition and evaluation of portfolios are opportunities for teachers to share and learn with peers. Groups of teachers who have reviewed the contents together have found it an exciting and rewarding experience. On page 10 are some examples of teacher comments made during pilot assessments in the spring of 1989. Also, sharing with parents, administrators, and school boards will help emphasize student accomplishments.

This is a page from Assessment Alternatives in Mathematics, a booklet from the California Mathematics Council and EQUALS.



STUDENT PORTFOLIOS (continued)

Advantages of Portfolios

Student portfolios can provide:

- evidence of performance beyond factual knowledge gained
- assessment records that reflect the emphases of a good mathematics program
- a permanent and long-term record of a student's progress, reflecting the life-long nature of learning
- a clear and understandable picture, instead of a mysterious test score number
- opportunities for improved student self-image as a result of showing accomplishments rather than deficiencies
- recognition of different learning styles, making assessment less culture dependent and less biased
- an active role for students in assessing and selecting their work

Student Attitudes

A portfolio may also incorporate important information about student attitudes toward mathematics, such as:

- · a mathematical biography, renewed each year
- student self-report of what has been learned and/or what is yet to be learned
- a description of how the student feels about mathematics
- · work of the student's own choosing
- excerpts from a student's mathematics journal

Assessment of Portfolios

Educators should look at many portfolios before trying to establish a standard of assessment. Because portfolios should reflect the instructional goals of each situation, the "rubrics" (detailed descriptions of assessment standards) will vary.



This is a page from Assessment Alternatives in Mathematics, a booklet from the California Mathematics Council and EQUALS.



SAMPLE ACTIVITY

Rearrange the letters so that they spell mathematical words with which you are familiar.

e.g.	XIS	18	SIX			
1. '	unmreb					
2.	gnitelar					
3.	wyttne					
4.	qsraeu					
5.	nte					
6.	llaodr					
7.	e t m i					
8.	nmusi					
9.	lkiorgam					
10.	onyem					
11.	wot					
12.	rouf					
13.	videdi					
14.	neetxis					
15.	sirft					
16.	errul					
17.	scitameh	t a m				
18.	einn					
19.	ionun					
20.	ytmlpuil					······································
Prepare Mathem	d by atics Section - Core	Curriculur	m Unit			

12 Most Important Things You Can Do To Be A Teacher of Mathematics

Not too long ago, teachers saw the main goal of math instruction as helping children become proficient in paper and pencil computation. Today, mathematics instruction is less about teaching basic computation and more about helping students become creative thinkers who are comfortable with all areas of mathematics and are able to apply mathematical skills to a range of problem solving situations.

Making these goals a daily part of math instruction may require a shift in the way you think about mathematics and your role in teaching it. I also offer the following suggestions and examples from actual classroom lessons to help you rethink your teaching practices.

1. Set the following expectation for your students: Do only what makes sense to you.

Too often, students see math as a collection of steps and tricks that they must learn. This misconception leads to common recurring errors in arithmetic calculations – when subtracting, students will subtract the smaller from the larger rather than renaming; when dividing, they'll omit a zero and wind up with an answer that is ten times too small; when combining fractions, they'll erroneously add both the numerators and the denominators. In all instances, students arrive at answers that make no sense.

2. Have your students explain their reasoning in all instances.

It is insufficient and shortsighted to rely on quick right answers as indications of mathematical power. During Math lessons, probe children's thinking when they respond. Ask: Why do you think that? Why does that make sense? Convince us. Prove it. Does anyone have a different way to think about the problem? Does anyone have another explanation? When children are asked to explain their thinking they are forced to organize their ideas. They have the opportunity to develop, cement, and expand their understanding. Teachers are accustomed to asking students to explain their thinking when their responses are incorrect. It's important, however, to ask children to explain their reasoning at all times, even when their answers are correct.

3. Encourage children to talk with one another during math class.

Communication is essential for learning. Having students work quietly – and by themselves – limits their opportunity for learning. Interaction maximizes children's opportunities to talk about their ideas, get feedback for their thinking and hear other points of view. The challenge today is to have students engage in dialogue and work together to solve problems and bring meaning to mathematical ideas. Students can learn from one another, as well as from teachers.

Make writing an integral part of math learning. 4.

Communication in math class should include writing as well as talking. In his book, Writing to Learn, William Zinsser states: "Writing is how we think our way into a subject and make it our own." When children write in Math class, they have to revisit their thinking and reflect on their ideas. Students' writing gives teachers a way to assess how their students are thinking and what they understand. Writing in math class best extends from children's thinking. When small-group interaction or whole-group discussion precedes a writing assignment, students have a chance to formulate their ideas before they're expected to write. It's also helpful to write prompts on the board for the students to use to get started. For example: I think the answer is _____.

I think this because . .

5. Embed math activities in contexts.

When connected to situations, mathematics comes alive. Contexts give students access to otherwise abstract ideas. They stimulate students' interest and provide a purpose for learning mathematics. Contexts can draw on real life examples or they can be created from imaginary situations. Many children's books, for example, offer starting points for classroom mathematics lessons.

6. Use manipulative materials whenever possible.

Mathematics materials provide a concrete context for thinking about mathematics. They give children hands-on experiences for grabbing onto mathematics ideas, turning them around and viewing them in different ways. Manipulative materials can serve in several ways – to introduce concepts, to pose problems, and to serve as tools to figure out solutions. It is important that manipulative are not relegated only to young children, but that they are made available to students in every grade.

7. Bring the quality and richness often apparent in students' writing and art into their math work.

Typically in elementary classrooms, children's rich, varied and creative art and writing fill the walls, while the math work that is posted commonly consists of arithmetic worksheets or progress charts that track students' learning of basic facts. In Language Arts and art lessons, children's imaginative ideas are invited and applauded: unique and unexpected results are common. While in math lessons, students often learn and practice specific prescribed methods; consistency among student papers is desired.

Find ways to make math lessons and assignments as intriguing, rich, and motivating as they are in other areas of the curriculum. Give students the chance to use their creativity when thinking about mathematics. Encourage them to be inventive and trust that they will be.

8. Make Calculators available to children at all times.

Calculators are valuable tools for doing laborious mathematical computations. Owning a calculator is practically a birthright and a basic tool few adults do without. As stated in the NCTM Curriculum and Evaluation Standards for School Mathematics (page 8): Contrary to the fears of many, the availability of calculators...has expanded students' capability of performing calculations".

Calculators are not a replacement for students' thinking. In any problem situation, a child needs to know which buttons to push, whether the answer displayed makes sense, and what decision to do with the results. Calculators eliminate the drudge of complex calculations. They also help children solve problems they may not otherwise be able to tackle.

9. Let children push the curriculum rather than having the curriculum push the children.

Choose depth and breadth. David Hawkins has said: "You don't want to cover a subject: you what to uncover it" (The Having of Wonderful Ideas by Eleanor Duckworth, Teachers' College Press, 1987) There are many pressures on teachers, and the school year passes by quickly. But students' understanding is key and doesn't always happen according to the schedule suggested in text materials. Just as students should do only what makes sense to them, the

same is true for teachers. There is value in staying with a topic in which children are interested, pushing more deeply and taking the time for a side investigation that can extend a lesson in a different direction.

10. Keep an eye out for instructional activities that are accessible to students with different levels of interest and experience.

A wonderful quality of good children's books is that they delight adults as well. Of course, adults appreciate books for different reasons than children do, but enjoyment and learning can occur simultaneously at all levels. The same holds true for mathematical investigations. Teachers should search for activities that can engage children who have the least mathematical experience while challenging students with the most experience.

Remember that confusion and partial understanding are natural to the learning process. 11.

Do not expect all students to learn everything at the same time, and do not expect all children to get the same message from every lesson. Although teachers want all their students to be successful, they rarely reach every student with any one lesson. Learning should be viewed as a long-range goal, not as a lesson objective. It's important that children do not feel deficient, hopeless or excluded from learning mathematics. The classroom culture should reinforce the belief that errors are opportunities for learning and should support children taking risks without fear of failure or embarrassment.

12. Take delight in students' thinking.

There is no one way to think about any mathematical problem. Encourage students to think in different ways. After children respond to a question (and, of course, have explained their thinking), ask: Does anyone have a different idea? Keep asking until all children who volunteer has offered their ideas. By encouraging participation, you'll not only learn more about individual children's thinking, but you'll also send students the message that there is more than one way to look at any problem or situation.

Sequencing of Teaching and Learning Activities in the Mathematics 7`Uggfcca

@cfbU'D"H\ ca dgcbžD\ 8 `fB\$%&L

The following sequence of *five* activities has been described as the Japanese lesson pattern which we have adopted for the Jamaican classroom..

1. The Lesson Pattern

- 1. Reviewing the previous lesson
- 2. Presenting the problems for the day
- 3. Students working individually or in groups
- 4. Discussing solutions methods
- 5. Highlighting and summarizing the main point

2. Commonly used to describe teachers' key roles

a. "Hatsumon" ...at the presentation of the problem

"Hatsumon" means, asking a key question for provoking students' thinking at a particular point in a lesson. At the beginning of the lesson, the teacher may ask a question for probing or promoting students' understanding of the problem. In a whole-class discussion, on the other hand, he or she may ask, for example, about the connections among proposed approaches to the problem or the efficiency and applicability of each approach.

b. "Kikan-shido" ...during problem solving by students

"Kikan-shido" which means an "instruction at students' desk", includes a purposeful scanning by the teacher of students' problem solving on their own. The teacher moves about the classroom, monitoring the students and students' activities...mainly silently, doing these two important activities which are closely tied to the whole-class discussion that will follow. First, he or she assesses the progress of students' problem solving. In some cases, the teacher suggests a direction for students to follow or gives hints to the students for approaching the problem. Second, he or she will make a mental note of several students who made the expected approaches or other important approaches to the problem.

Students will be asked to present their solutions later. Thus, in this period of the purposeful scanning, the teacher considers questions like "which solution methods should I have students present first?" of "How can I direct the discussion towards an integration of students' ideas? Some of the answers to such questions are prepared in the planning phase but some are not.

c. "Neriage" or "Neriai".... in a whole-class discussion

There is a term for describing the dynamic and collaborative nature of a whole-class discussion during the lesson. The term "Neriage" or "Neriai" in Japanese refers to "kneading up" or polishing up". In the context of teaching the term works as a metaphor for the process of "polishing up" students' ideas and getting an integrated mathematical idea through a whole-class discussion.

Japanese teachers regard "Neriage or "Neriai" as critical for the success or failure of the entire lesson.

Based on his or her observations during "Kikan-shido", the teacher carefully calls on students, asking them to represent their method or solving the problem on the chalkboard, selecting the students in a particular order. The order is quite important to the teacher for both encouraging those students who found naïve methods and for showing students' ideas in relation to the mathematical connections that will be discussed later. In some case, even an incorrect method or error may be presented, if the teacher thinks it would be beneficial for the class. Students' ideas are presented on the chalkboard, to be compared with each other with oral explanations. The teacher's role is not to point out the best solution, but to guide discussion by students towards an integrated idea.

d. "Matome" as summing up

"Matome" means "summing up". Japanese teachers think that this stage is indispensable to any successful lesson. It is identified as a critical difference between U.S. and Japanese classroom activities. According to the U.S.-Japan, comparative analysis, at the Matome stage, Japanese teachers tends to make a final and careful comment on students' work in term of mathematical sophistication.

Generally speaking, in the Matome stage, what students have discussed in the whole-class discussion is reviewed briefly and what they have learned through the lesson is summarized by the teacher.

e. "Banshee": Effective Use of Chalkboard

Another important technique used the teacher relates to the use of chalkboard, which is referred as "Bansho" by Japanese teachers. Teachers usually try to keep all that is written during the lesson on the chalkboard without erasing if possible. From the learner's perspective, it is easier to compare multiple solution methods if they appear on the

chalkboard simultaneously. Also, the chalkboard can be a written record of the entire lesson, which gives both the students and teacher **a** *bird*'s-eye view of what has happened in the class at the end of each lesson.

	The Eight Mathematica	l Practices
1	I can solve problems without giving up.	DON'T
2	I can think about numbers in many ways.	9:00
3	I can explain my thinking and try to understand others.	· · · · · ·
4	I can show my work in many ways.	**************************************
5	I can use mathematics tools and tell why I chose them.	
6	I can work carefully and check my work	CHECK "VOKE" WORK? CHECK TO THE WORK? THE WORK TO TH
7	I can use what I know to solve new problems.	Want can
8	I can solve problems by looking for rules and patterns	()



MA	THEMATICAL THINKING
PROBLEM SOLVING	 ✓ Build new mathematical knowledge through problem solving. ✓ Solve problems that arise in mathematics and in other contexts. ✓ Apply and adapt a variety of appropriate strategies to solve problems. ✓ Monitor and reflect on the process of mathematical problem solving.
REASONING AND PROOF	 ✓ Recognize reasoning and proof as fundamental aspects of mathematics. ✓ Make and investigate mathematical conjectures. ✓ Develop and evaluate mathematical arguments and proofs. ✓ Select and use various types of reasoning and methods of proof.
COMMUNICATION	 ✓ Organize and consolidate mathematical thinking through communication. ✓ Communicate their mathematical thinking coherently and clearly to peers, teachers, and others. ✓ Analyze and evaluate the mathematical thinking and strategies of others. ✓ Use the language of mathematics to express mathematical ideas precisely.
CONNECTONS	 ✓ Recognize and use connections among mathematical ideas. ✓ Understand how mathematical ideas interconnect and build on one another to produce a coherent whole. ✓ Recognize and apply mathematics in contexts outside of mathematics.
REPRESENTATION	 ✓ Create and use representations to organize, record, and communicate mathematical ideas. ✓ Select, apply, and translate among mathematical representations to solve problems. ✓ Use representations to model and interpret physical, social, and mathematical phenomena.

WÙ**050ÖÁÓæ 88ÁÒ**å° 8æ64 }ÁÚ¦[b/86ÁÇ€F€D

- 1				1

