



## NATIONAL MATHEMATICS TEAM

## **GRADE 1 PLANNING TEMPLATE**

Strand: Number			
Topics/Objectives	Main Concept	Teaching/Learning Activities	Assessment/Homework Activities
<ol> <li>Identify numbers 0-10.</li> <li>Identify set with up to 19 members</li> <li>Place number 1–10 in serial order</li> <li>Use objects to create sets</li> <li>Identify objects which belong/do not belong in a set.</li> </ol>	<ul> <li>Numeral</li> <li>Number</li> <li>Sets</li> <li>Member</li> <li>Order</li> <li>Objects</li> </ul>	Identify numbers 0 - 10 Have students use counters to complete the Number box below.  1	Identify sets with up to 19 members Have students engage with Problem solving tasks (See page 6 of the Resource document)  Placing numbers in serial order Have students fill in the missing numbers on a grid. Students will be given a set of number cards (pre-packaged by the teacher) which they will place in the correct locations on the mat (for example 3, 5, 7, 9). Students would then place the remaining cards on the grid (for example 1, 2, 4, 6, 8, 10) to complete the sequence. (See page 2 of the Resource document)  Creating sets Students will be given two sets of counters (10 each): For example red and blue. They will create a third group. To create the third group they will pull (drag) markers from Sets 1 and 2 without counting.

Use rhythm/song and counting of objects to develop the stable order principle of counting. For example clapping hands or tapping on bench while counting up to 20.

### **Identify sets with up to 19 members**

## ICT Infusion

Identify numbers 0-20: Go to <a href="https://www.ixl.com/math/grade-1/counting-review-up-to-20">https://www.ixl.com/math/grade-1/counting-review-up-to-20</a>

In this interactive activity, students listen to the instructions, count the objects and input their response in the space provided.

#### **Creating sets**

Have students work in groups to form sets using information in their present environment. For example, given attributes (age, gender, height...) they could count the number of students in their class and use the information to create groups.

Count the number of pupils of the same age and make a set. In my class, there are 15 students that are 6 years old and 10 students that are 7 years old. In all there are ... students in my class.

Students may record information in their journals.

## Items that belongs/do not belong to a set

Provide students with scenarios, using elements in their surroundings to determine those that belong and those that do not belong to a particular group. For example: There are 10 boys in a race; 8 are from Grade One and 2 are from Grade Two. If the race is for boys in Grade One only, how many boys should stay in the race? How many of the boys do not belong to the race? Give reasons for your answer.

After forming the third group, they will report on the number of markers in Sets 1 and 2 (this can be done by counting the number of each colored markers used to form the new set — for example 3 blues and 4 reds made a set of 7 counters) and the total number of markers in the new set - third set.

(See page 4 of the Resource document)

## Items that belongs/do not belong to a set

Students will be given a set of Attribute blocks. These can be made by the teacher using the samples in the Resource Document. (See page 5 of the Resource document).

Students will decide on an attribute of focus: for example yellow. They will report on the number of Yellow pieces and the number of pieces that are not a part of the group.

They will then look for two attributes: for example Yellow and Squares following the same procedure as above.

They will then look for three attributes: Yellow, Square, Small following the procedure above.

At the end of the exercise they will report on their observations including what they noticed as the number of attributes increased.

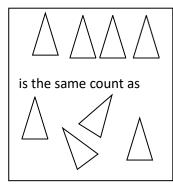
- 1. Count the number of objects in a set
- 2. Matching members of a set-same/fewer/more.
- 3. Compare sets
- 4. Partition 2 10 members in two or more sets
- 5. Identify whole set
- 6. Identify parts of a set
- 7. Identify the empty set

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- Numeral
- Number
- Whole
- Set
- Part
- Empty
- objects

### Count the number of objects in a set

Use the conservation counting principle to match same sets For example:



After observing the concept of the conservation counting principle teacher will engage students in a whole class discussion.

## ICT Infusion

Fishy Count: Go to

http://www.primarygames.com/math/fishycount/

Students will be required to count the numbers of fishes on the screen and choose the correct numerical representation from the list of numbers given.

## Matching members of a set-same /fewer /more

## ICT Infusion

Have students watch a short video on More, Fewer and same. Engage them with guided questions during and after the video.

https://www.eduplace.com/cgi-

bin/schtemplate.cgi?template=/math/mw/models/tm\_popup.t html&grade=1&chapter=1&lesson=1&title=More,+Fewer,+a nd+Same&tm=tmfb0101e

# Matching members of a set-same /fewer /more

#### ICT Infusion

Provide students with online games so they can compare sets.

https://www.sheppardsoftware.com/mathgames/earlymath/BalloonPopComparison.htm

#### **Identify parts of a set**

Sharon has six stars. How many ways can she split the stars among the blue and the red box?







(See resource document page 7 for a sample reporting sheet)

## <u>Partition 2 – 10 members in two or more sets</u>

Use a Mat and counters (base ten blocks, interlocking cubes) to share a set into 2 or more sets. After creating their first sets (8 in one, 4 in the other) they will be challenged to find other ways of breaking up their set so that each result is different.

(See resource document page 7 for a sample reporting sheet)

#### **Identify parts of a set**

Use manipulatives (e.g. counters, fudge stick, Cuisenaire rods...) to identify whole set and part of a set. Engage students in activities and scenarios that promotes this concept.

#### **ICT Inclusion**

3-2-1 Snack: Go to <a href="http://pbskids.org/peg/games/3-2-1-snack">http://pbskids.org/peg/games/3-2-1-snack</a>
This activity prompts students to identify sets of items on a farm up to ten numbers and follows an interesting narrative.

#### **Identify the empty set**

Have a set of students stand at the front of the class or outdoors if space is limited. Create 2 circles on the ground in front of the students using wool, rope, or cord. Inform the students that they will be forming two groups or sets based on the instructions given.

Begin the task with attributes that are obvious: Girls with brown shoe, girls with black shoes; boys with black belt, boys with brown belt. Then progress to sets that allow for an empty set. For example: Girls with black socks, and girls with red and white polka dot socks. Assuming that the latter is not allowed, then the students would be exposed to a set that is empty. Have students use the language to describe the sets: Look at this set. What would you call it? It is a set of girls with black socks. What about the other set? That set is empty.

Provide students with other 'active' scenarios where they will be able to identify an empty set.

#### Compare sets

Teacher will watch the following video and create the Bean Bag game for students to use to compare numbers.

https://learnzillion.com/lesson\_plans/2146-8-comparing-numerals-using-a-number-path-c