SUBJECT: Mathematics
GRADE: Two
STRAND: Number
DURATION: 60 Minutes
TOPIC: Number Operation-Multiplication
FOCUS QUESTION:
Select from Integrated Studies

STANDARD:

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**.**

ATTAINMENT TARGETS:

Use the basic operations with numbers and number patterns

BENCHMARKS:

Compute with whole numbers quickly and accurately; use these skills to find answers in realistic (problem) situations.

- *Model the number operation:* ***Multiplication***

MATERIALS:

Body parts, objects within the environment, picture representations

SPECIFIC OBJECTIVES:

By the end of the lesson, students will be able to:

- Join sets of the same size (same number of members) and tell how many members in all (repeated addition).
- Use multiplication to state the repeated addition of the same number twice or thrice e.g. 9+9 is the same as 2×9

PRIOR LEARNING

Students should already be able to:

- Add numbers
- Place numbers in groups
- Use number sentences to represent pictorial representations

CONTENT OUTLINE

Adding a number repeatedly can be written using multiplication facts. Repeated addition is the same as multiplying a number. The symbol used to represent multiplication is an X.

ENGAGE

Students will work in groups to complete a table which is asking them to list the following items:

a) The number of hands in your group
b) The number of hands on each body
c) The number of fingers on each hand
d) Number of groups of fingers
e) The total number of fingers in your group

EXPLAIN

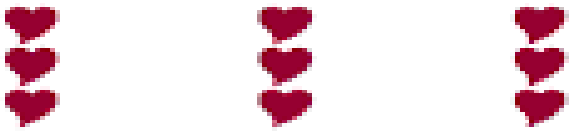
Students will share their responses with each other. They will say what they did to arrive at their answers. A discussion of their responses will follow

EXPLORE

Students will go outside to the parking lot. They will write down in their journals the number of cars seen. They will then write the number of car tires for each car. Ask students if they take out three of these cars how many car tires would the three cars have in all?
Students will be asked to use repeated addition to represent this information. Use the following questions to guide this activity: How many tires are on the first car? What would you do to get the total of the first and second car? Write what you would do to add the third car. What is your overall total?

EXTEND/ELABORATE

Students will examine the following picture



_____ + _____ + _____ = _____

_____ groups of _____ = _____

They will complete the empty spaces for the number sentences. Ask students to suggest a symbol that could be used to represent the words "groups of". Explain why
Help students to understand why the multiplication sign can be used to represent a number sentence which means the same as the repeated addition sentence.
Students will say how they would use the multiplication sentence to rewrite 6 + 6; 2 + 2 + 2

STUDENTS EVALUATION

Students will complete the worksheet below

Multiplying Acorns

Complete the addition and multiplication sentences for each picture.

2 + ____ + ____ + ____ = ____

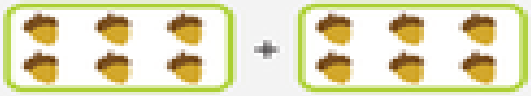
4 × 2 = ____

3 + ____ + ____ = ____

3 × 3 = ____

4 + ____ + ____ + ____ = ____

4 × 4 = ____



6 + ____ = ____

2 × 6 = ____

TEACHER EVALUATION

What percentage of students able to:	**0% - 50%**	**51% - 80%**	**81% - 100%**	
Join sets of the same size (same number of members) and tell how many members in all				
Use multiplication to state the repeated addition of the same number twice or thrice e.g. 9+9 is the same as 2 × 9				

COMMENTS:

Areas of strengths -

_____
_____
_____
_____

Areas of weaknesses

_____
_____
_____
_____

PLAN OF ACTION

- ☐ Reteach Concept
- ☐ Reinforcement of Concept
- ☐ Advance to new topic