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Mathematics

Quarter 2 – Module 1:
Visualizing Multiplication of
Numbers 1 to 10 by 6, 7, 8, and 9

ALTERNATIVE DELIVERY MODE

ADM

Mathematics – Grade 3
Alternative Delivery Mode
Quarter 2 – Module 1: Visualizing Multiplication of Numbers 1 to 10 by 6, 7, 8, and 9
First Edition, 2020

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Quarter 2 – Module 1:
Visualizing Multiplication of Numbers 1 to 10 by 6, 7, 8, and 9

DepED
DEPARTMENT OF EDUCATION

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.

What I Need to Know

This module was designed and written with you in mind to help you visualize multiplication of numbers 1 to 10 by 6, 7, 8, and 9. The scope of this module permits it to be used in many different learning situations. The language used recognizes your diverse vocabulary backgrounds. The lessons are arranged to follow the standard sequence of the course but the order in which you read them can be changed to correspond with the Mathematics Grade 3 learning materials you are using.

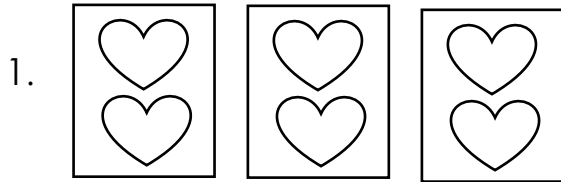After going through this module, you are expected to:

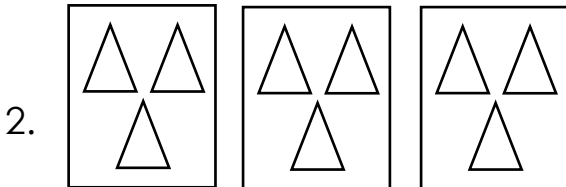- Visualize Multiplication of numbers 1 to 10 by 6, 7, 8, and 9 (M3NS-IIa41.2).
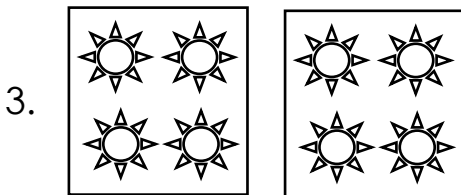
Enjoy your journey. Good luck!

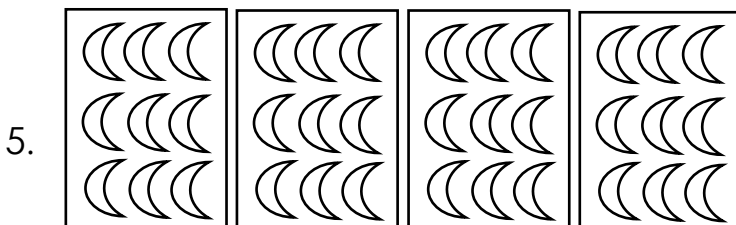Write a multiplication sentence for each illustration. Write your answers on separate sheet of paper.

1.

_____

2.

_____

3.

_____

4.

_____

5.

_____

2
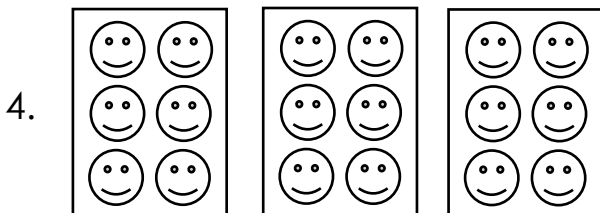
In this lesson you will be able to multiply the numbers 1 to 10 by 6, 7, 8, and 9. You will also know that multiplication is a repeated addition, and that the **Multiplier** tells the number of times a number is to be added or the number of sets/groups, while the **Multiplicand** is the number to be added or the number of elements in a set.

$$3 \times 3 = 9 \longrightarrow \text{Product}$$
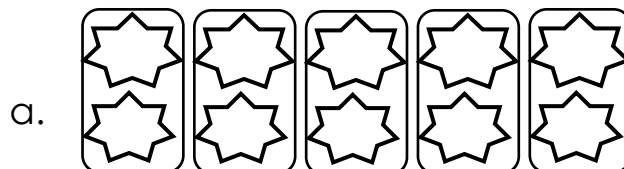
Multiplicand   Multiplier
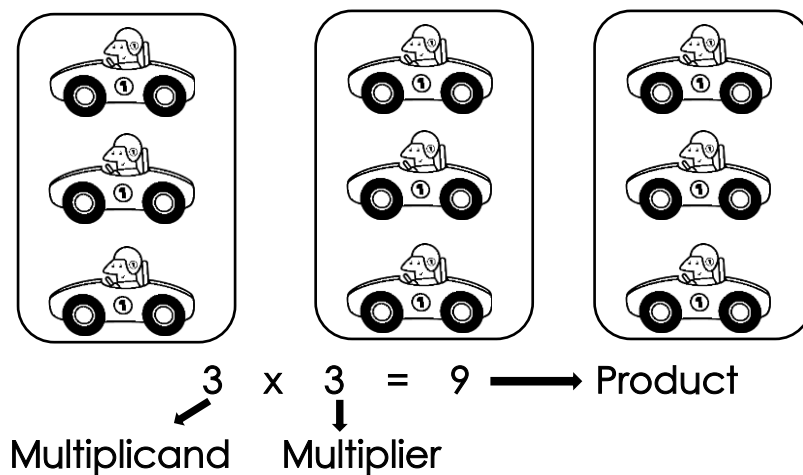
What's In

In your previous grade level, you already have knowledge on using the multiplication table from 1, 2, 3, 4 and 5. To test your prior knowledge answer the following questions.

Match the correct multiplication sentence from column A to the pictures on column B and write the product.
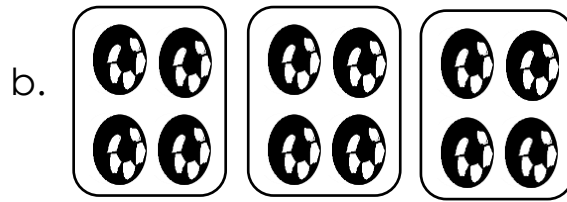
Column A   Column B

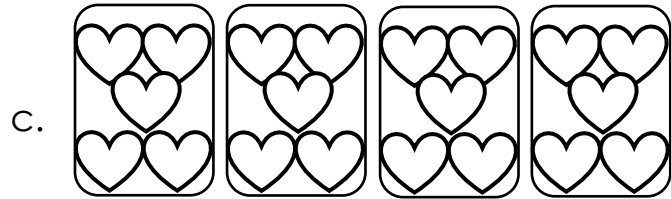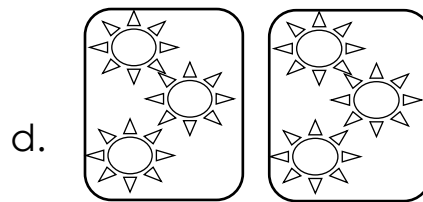1. 3 x 2 = ____   a.

3

2. 5 x 4 = _____   b.
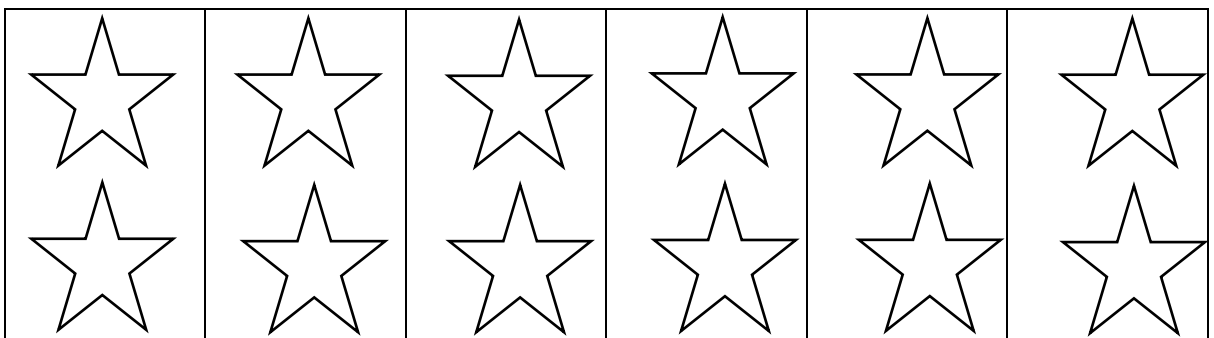
3. 4 x 1 = _____   c.

4. 2 x 5 = _____   d.

5. 4 x 3 = _____   e.

What's New

- ❖ How many groups of stars are there?
- ❖ How many stars are there in each group?
- ❖ How many stars are there in all?

![What is It icon] *What is It*

Let us answer the questions above.

There are **6 groups of stars** and there are **2 stars** in each group.

2 + 2 + 2 + 2 + 2 + 2 = <u>12</u>

When we add merely repeating a number several times, then we are doing multiplication.

So, 2 + 2 + 2 + 2 + 2 + 2 = <u>12</u> can be written in 2 x 6 = 12.

Multiplication – is one of the four elementary mathematical operations. The multiplication of whole numbers may be thought as a repeated addition.

Multiplier – tells the number of times a number is to be added or the number of groups

Multiplicand – is the number to be added or the number of elements in a set.

Product – is the result of multiplication.
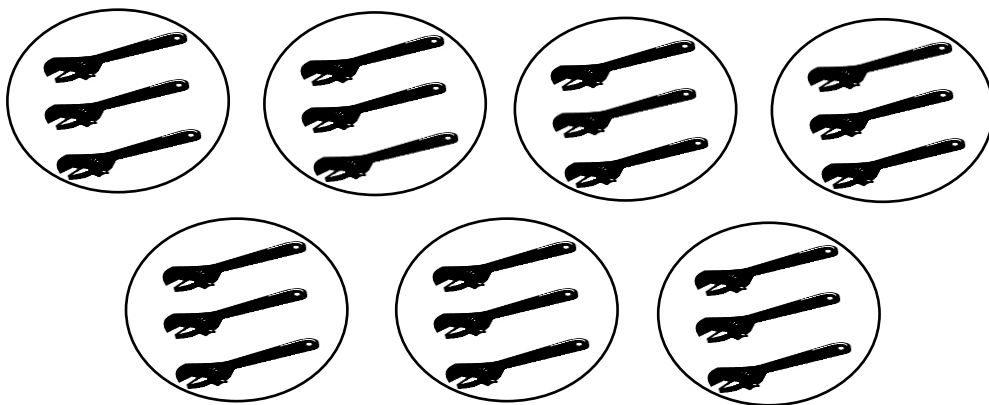
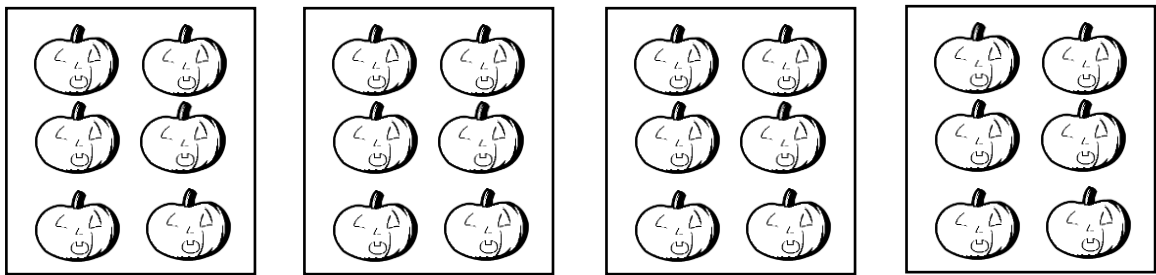Repeated addition sentence:

3 + 3 + 3 + 3 + 3 + 3 + 3 = 21

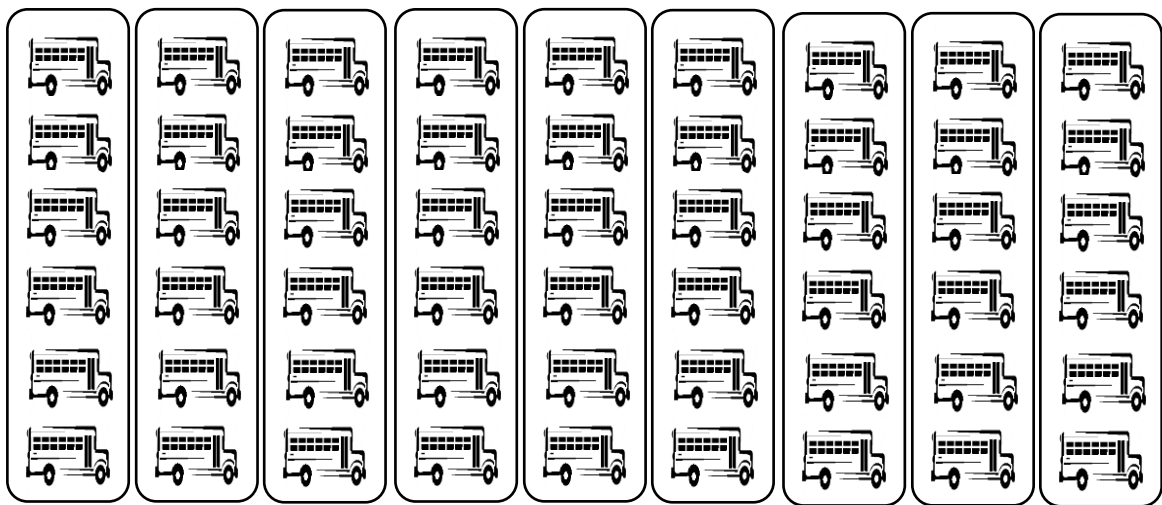Multiplication sentence:

3 x 7 = 21

Here's another example:

There are **4 boxes** of pumpkins and in each box, there are **6 pumpkins** so all in all there are **24 pumpkins.**
Repeated addition sentence:

    4 + 4 + 4 + 4 + 4 + 4 = 24
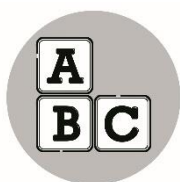
Multiplication sentence:

    6 x 4 = 24

There are **9 groups** of buses and in each group, there are **6 buses.** There are **54 buses** altogether.
Repeated addition sentence:

    6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = 54

Multiplication sentence:

    6 x 9 = 54

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What's More

Do the multiplication process by visualizing the repeated addition using objects like sticks or disc by answering the activity below. Complete the multiplication sentences in the box by visualizing using sticks and disc.
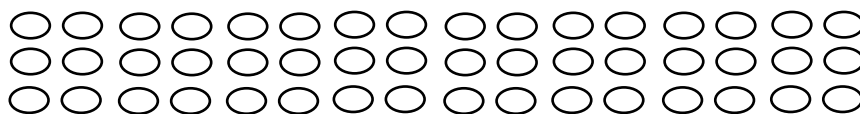Box the sticks or discs below to visualize the multiplication sentence in the box and write the product in the blank.

> 6 x 2 = ____   9 x 6 = ____   6 x 8 = ____
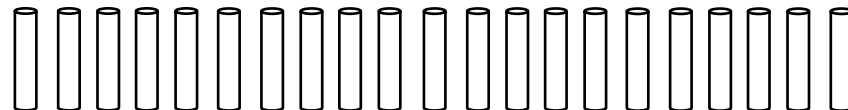>   7 x 3 = ____   5 x 6 =____
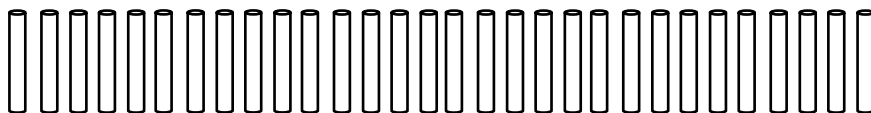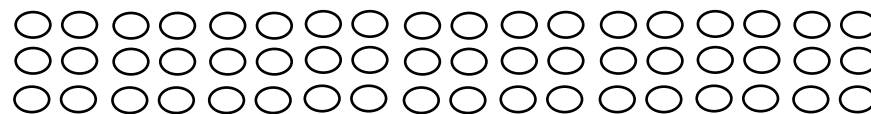
1. (6 groups of 5)

2. (8 groups of 6)

3. (3 groups of 7)

4. (6 groups of 9)

5. (2 groups of 6)

What I Have Learned

1. Multiplication is a repeated addition
2. To get the product in multiplication, visualize the multiplicand and the multiplier.

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3. **Multiplier** tells the number of groups while the **Multiplicand** is the number of elements in a group.
4. After visualizing the multiplier and the multiplicand, apply the repeated addition by adding the number of elements according to the number of groups.
5. The sum of the repeated addition is the product of the multiplication sentence.

What I Can Do

Find the product by writing the corresponding repeated addition sentence.

Repeated Addition Sentence

1. 6 x 4 = _____   _____

2. 7 x 4 = _____   _____

3. 8 x 6 = _____   _____

4. 9 x 5 = _____   _____
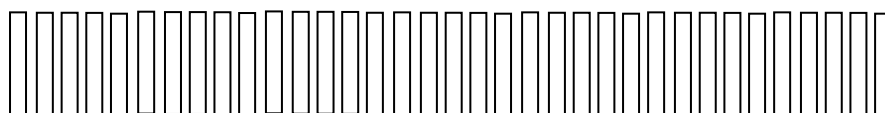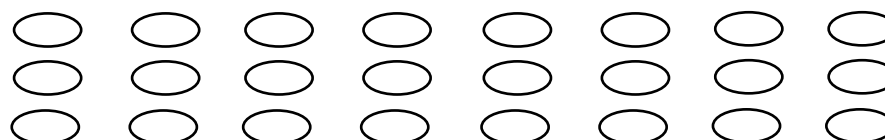
5. 7 x 7 = _____   _____

Assessment

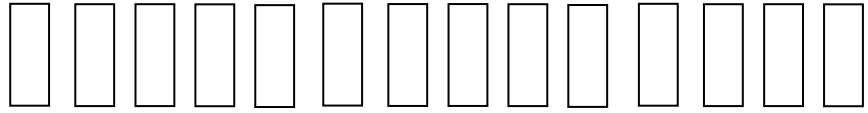Visualize multiplication of numbers using sticks or discs then write the product in the blank.

1. 5 x 7 =_____
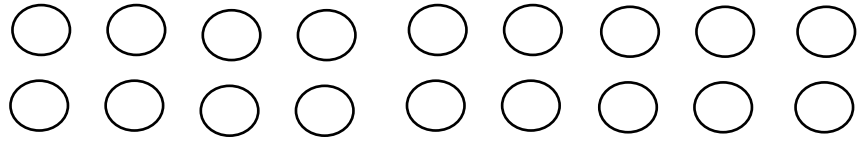
2. 3 x 8 = _____

3. $7 \times 2 =$ ___

☐☐☐☐☐☐☐☐☐☐☐☐☐☐

4. $2 \times 9 =$ ___

○○○○○○○○○
○○○○○○○○○

5. $5 \times 6 =$ ___

|||||||||||||||||||||||||||||||
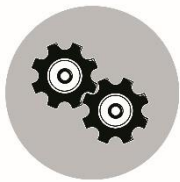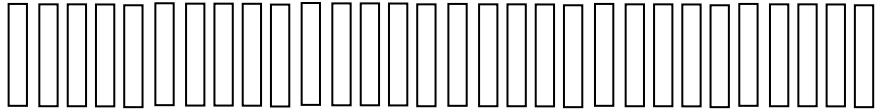
Additional Activities

Draw groupings of sticks or discs to find the value of **n.**

1. $8 \times 2 = n$

2. $6 \times 5 = n$

3. $9 \times 3 = n$

4. $7 \times 3 = n$

5. $4 \times 7 = n$

Answer Key

What I Know
1. $2 \times 3 = 6$
2. $3 \times 3 = 9$
3. $4 \times 2 = 8$
4. $6 \times 3 = 18$
5. $9 \times 4 = 36$

What's In
1. $3 \times 2 = 6$ d
2. $5 \times 4 = 20$ c
3. $4 \times 1 = 4$ e
4. $2 \times 5 = 10$ a
5. $4 \times 3 = 12$ b

What's More
1. 30
2. 48
3. 21
4. 54
5. 12

What I Can Do
1. $24 = 6+6+6+6$
2. $28 = 7+7+7+7$
3. $48 = 8+8+8+8+8+8$
4. $45 = 9+9+9+9+9$
5. $49 = 7+7+7+7+7+7+7$

Assessment
1. 7 groups of 5 → 35
2. 8 groups of 3 → 24
3. 2 groups of 7 → 14
4. 9 groups of 2 → 18
5. 6 groups of 5 → 30

Additional Activities
1. 16
2. 30
3. 27
4. 21
5. 28

References

Department of Education. Mathematics Grade 3: Teachers Guide, Pasay City: Department of Education, 119-125.

Number Smart Work Text in Mathematics, 143.

For inquiries or feedback, please write or call:

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