

## Kindergarten-Mathematics

Quarter 4 - Module 6: Addition and Subtraction of Quantities Up to 10

## First Edition, 2020

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## Mathematics

## Quarter 4

Self-Learning Module 6

## Addition and Subtraction <br> of Quantities up to 10

## Introductory Message

## For the Facilitator:

Welcome to the subject Mathematics-Kindergarten on Module on the lessons about Addition and Subtraction!
This Self-Learning Module was collaboratively designed, developed and reviewed by educators from the Schools Division Office of Pasig City headed by its Officer-in-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin, in partnership with the City Government of Pasig through its mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) in developing this instructional resource.

This learning material hopes to engage the learners in guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21 st century skills especially the 5 Cs, namely: Communication, Collaboration, Creativity, Critical Thinking, and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:


As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the Learner:

## Welcome to the Mathematics-Kindergarten on Module on the lessons about Addition and Subtraction!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:

Expectations - This points to the set of knowledge and skills that you will learn after completing the module.

Recap - This part of the module provides a review of concepts and skills that you already know about a previous

Lesson - This section discusses the topic in the module.


Activities - This is a set of activities that you need to perform.
楽
Wrap-Up - This section summarizes the concepts and application of the lesson.
$\cdots$
Valuing - This part integrates a desirable moral value in the lesson.

## EXPECTATIONS

By the end of this module the pupils will be able to:

1. Add numbers or quantities up to ten using concrete objects - (MKAT-00-8)
2. Subtract numbers or quantities up to ten using concrete objects - (MKAT-00-9)
3. Write addition and subtraction number sentences using concrete representations

- (MKAT-00-10)


## RECAP

Count and add the objects. Draw your answer in the box.

1. $\because \because \because \because$ add to $\because \because$ in all $\square$
2. $\square$
3. 


in all

 in all

5.

in all


## LESSON 1: Addition Using Concrete Objects

Look at the picture.


How many santols are in the basket $A$ ? $\qquad$
How many santols are in the basket $B$ ? $\qquad$
How many santols in all? $\qquad$


## 䍒 actrvitres

Activity 1: Count the objects and draw your answer on the line to find the sum.

2.




Activity 2: Count and add the objects. Write the number of the correct answers on the line.


## VI N WRAP-UP

Addition is putting together two or more objects or numbers. We can use concrete objects to find the sum. The numbers that we add are called addends. We use the plus sign (+) in addition. Sum is the answer in addition.

## VALUING

Write how many you see in all in the picture.



## LESSON 2

## RECAP

Tick ( $\sqrt{\text { the num }}$ ther with the correct sum and cross out $(\mathbf{X})$ the incorrect.


LESSON 2: Addition Using Real Objects

Let us learn addition using real objects.

Examples of real objects:
popsicle sticks
bottle caps
hanger

Add using real objects:

$$
4+3=
$$

$\qquad$

First, get $\mathbf{4}$ popsicle sticks and $\mathbf{3}$ more popsicle sticks.
Now, count all the popsicle sticks.
How many popsicle sticks are there?
The answer is $\underline{\mathbf{7}}$
So, $\mathbf{4 + 3} \mathbf{=} \underline{\mathbf{7}}$

## 䍗 <br> ACTIVITIES

Activity 1: Find the sum using the popsicle sticks.
Write your answer in the box.

1. $5+5=$ $\square$
2. $\mathbf{3 + 2}=\square$
3. $\mathbf{6 + 4}=\square$
4. $3+5=\square$
5. $2+7=\square$

Activity 2: Find the sum using the bottle caps. Encircle the number of the correct answer.

1. $6+3=978$
2. $\mathbf{4 + 4}=$

468
3. $7+3=1059$
4. $5+2=3 \quad 5 \quad 7$
5. $4+6=0510$

## 楽

Complete the table below. Find the sum by using real objects that you can see around you. Write the answer under each column.

| Add | Sum | Name of the <br> Object Used |
| :---: | :---: | :---: |
| $\mathbf{2 + 8 =}$ |  |  |
| $\mathbf{4 + 6}=$ |  |  |
| $\mathbf{1 + 5}=$ |  |  |
| $\mathbf{7 + 2}=$ |  |  |
| $\mathbf{3 + 3}=$ |  |  |

Add the objects and write the correct answer.

$\qquad$

$\qquad$


## LESSON 3

## RECAP

How many buttons
:: do you need to get the sum in each number? Draw your answer in the box.

4. $2+6=\square$
2. $5+1=\square$
5. $3+\mathbf{7}=\square$
3. $\mathbf{4 + 2}=\square$

## LESSON 3: Addition Using Counting on Strategy

Today you will learn to add using counting on strategy with the use of concrete objects and number line as tools. Counting on is a strategy in addition wherein we start with the bigger number of the two addends and count on with the other addend to get the answer or sum. For example, we will add $5+4$, you must start with number 5 as the bigger number and then count on four more- " $5 \ldots 6,7,8,9$. The answer is 9. Let us learn more by using an object in this illustration.

What is the sum of $5+4=$ $\qquad$ ?
Let us add by counting on
We will start with number 5 because it is bigger than 4 then count on


Let us have more examples
Add by counting on.


This time add by counting on using a number line


Do not forget that in counting on we always start with the bigger addend then count on


## 䍒 actrvities

Activity 1: Find the sum using counting on. Show your solution using the pictures in each number. (2 points each)

2. $5+5=$ $\qquad$

3. $7+2=$ $\qquad$


Activity 2: Add using counting on. Show your solution using the number line in each number. (2 points each) Do not forget to start with the bigger number.

3. $4+6=$ $\qquad$


## 椚 <br> WRAP-UP

Answer the question in each number.

1. What is the strategy in addition that we learned today?
2. If we will add $2+6$, in what number do we have to start in finding the sum using counting on strategy? $\qquad$
3. What are the tools that we used in addition using counting on strategy?

0

## VALUING

Now let us find out if you can apply the concept of counting on strategy in arriving at the correct sum by putting the bigger addend in your head then count on. Answer the follow up question for each number.

2. $7+3=$ $\qquad$

What is the addend that you put first in your head? $\qquad$

How much more did you count on after putting 7 in your head? $\qquad$

Illustrate your answer in number 3 using a number line.


## KEY TO CORRECTION



|  <br>  <br>  <br>  <br>  <br>  <br>  <br> dח-dVEM | $0 \mathrm{l}=9+\mathrm{t} \cdot \mathrm{t}$ <br>  <br>  |
| :---: | :---: |
| $O L=S+G \quad Z$ <br> $0 \mathrm{O}=\boldsymbol{=}+8 \quad \mathrm{l}$ <br> (чフDə stulod $z$ ) 'jequinu <br>  |  suotrng Kunu MOH |

## LESSON 4

## RECAP

Find the sum using counting on. (2 points each)


## LESSON 4: Subtraction Using Concrete Objects

Today we will learn to subtract within 10 by using concrete objects or representations of concrete objects.

Before we begin let us sing this song "Ten Little Honeybees"

Ten little honeybees buzzing around One went to the hive, one to a flower How many honeybees buzzing around? Eight little honeybees are left now.

Eight Little honeybees buzzing around One went to a hive, one to a flower How many honeybees buzzing around? Six little honeybees are left now.

Six little honeybees buzzing around One went to the hive one to a flower How many honeybees buzzing around? Four little honeybees are left now.

Four little honeybees buzzing around One went to the hive, one to a flower How many honeybees buzzing around? Two little honeybees are left now.

Two little honeybees buzzing around One went to the hive, one to a flower How many honeybees buzzing around? No more honeybees are left now.


Subtraction is taking away a number from another number. We use the minus sign (-) in subtraction. Subtraction problem have different parts, these are the minuend, subtrahend, and difference.


## 呆 activities

Activity 1: Write the difference on the blank.
1.



$$
7-4=
$$



Activity 2: Cross out the object to be taken away. Write the difference in the box.

2.

3.
4.

5.


## $\begin{array}{r}\square= \\ \hline N\end{array}$ WRAP-UP

How many were left if you take away the things that are encircled? Match each number to the correct difference.


## VALUING

Aiza have 10 bananas. She gave 5 bananas to her younger sister. How many bananas were left to her?


KEY TO CORRECTION

| ${ }^{=9,01} x^{*} x^{2}-8$ |  |
| :---: | :---: |
| = $4 \times \times \times x$ |  |
|  | \% $=\cdot 6$ xxxxxxx |
|  | $s=8.8 \times X X X X 1$ |
|  |  |



## LESSON 5

## RECAP

Tick ( $\checkmark$ ) the number with the correct difference and cross out ( $\mathbf{X}$ ) the incorrect.


## 㴍 <br> LESSON 5: Subtraction Using Real Objects

Let us learn subtraction using real objects.

Examples of real objects:
popsicle sticks
bottle caps
hanger

Subtract using real objects:
9-3 = $\qquad$

First, get 9 popsicle sticks
Then take away 3 popsicle sticks.
How many popsicle sticks were left?
The answer is $\underline{6}$
So, $9-3=\underline{6}$

## $\underset{\text { - ACTIVITIES }}{\square}$

Activity 1: Find the difference using popsicle sticks. Write your answer in the box.

1. $7-3=\square$
2. $10-4=\square$
3. $\mathbf{8 - 5}=$

4. $9-\mathbf{7 =}$


Activity 2: Find the difference using the bottle caps. Encircle the number of the correct answer.

| 1. | $9-2=$ | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- |
| 2. $8-7=$ | 3 | 2 | 1 |  |
| 3. $4-4=$ | 10 | 0 | 4 |  |
| 4. | $6-4=$ | 1 | 2 | 3 |
| 5. | $10-7=$ | 3 | 5 | 7 |

5. $10-7=$

3
5
7

## 椚 <br> WRAP-UP

What are the real objects that we use to find the difference?
Give more examples of real objects that we use to get the answer in subtraction.

## VALUING

Find the difference. Use the bottle alcohol as the real object.


1. $10-5=$ $\qquad$
2. $\mathbf{1 0 - 8}=$ $\qquad$
3. $10-7=$ $\qquad$
4. $10-6=$ $\qquad$

## KEY TO CORRECTION








## LESSON 6

## RECAP

Find the difference by using facemask as the real object


1. $10-4=$ $\qquad$
2. $10-0=$ $\qquad$
3. $10-9=$ $\qquad$
4. $10-2=$ $\qquad$
5. $10-3=$ $\qquad$

## LESSON 6: Subtraction Using Number Line

Let us learn to subtract using a number line
8-4 = $\qquad$
Using a number line, start with number $\mathbf{8}$ then count backward $\mathbf{4}$ times
In what number did you stop? $\qquad$


Therefore, 8-4=4

## 䍒 actrvities

Activity 1: Subtract each number. Show your solution using the number line in each number. (2 points each)

2. $10-8=$ $\qquad$

3. $8-5=$ $\qquad$


Activity 2: Match each subtraction equation to the correct number line.

1. $6-5=1$
2. $8-3=5$
3. $7-1=6$
4. $9-5=4$
5. $10-8=2$


## 楽 wrap.up

What is the tool that we used today to get the difference?
How to use the number line in subtraction?

## VALUING

Tick ( $\sqrt{ }$ ) the number with the correct number line and cross out ( $\mathbf{X}$ ) the incorrect.

2. $5-4=1$
3. $8-2=6$


## - KEY TO CORRECTION

$$
\begin{aligned}
& \text { פnintun }
\end{aligned}
$$




## LESSON 7

## RECAP

Find the difference using a number line


1. $7-4=$ $\qquad$ 2. 5-2 = $\qquad$ 3. $10-5=$ $\qquad$

## N/: LESSON 7: Addition: Number Sentence

Today, we are going to learn about writing number sentence in addition.
Peter have 4 balls. If John gives him 3 balls, how many balls does Peter have in total?

| Therefore, the |
| :--- |
| Number sentence is |
| $\mathbf{4 + 3}=\mathbf{7}$ |

## 呆 activities

Activity 1: Write the number sentence for each row of objects.


Activity 2: Color the box yellow of the correct addition number sentence that matches the picture.



## 楽 <br> WRAP-UP

Write the addition number sentence for each word problem.

There are 3 butterflies on the flower and 4 butterflies flying. How many butterflies are there in all?


There are 2 plates on the table. 7 plates are in the sink. How many Plates are there in all?

Lisa has 3 pencils. Ana has 3 pencils. How

There are 8 green hats and 2 orange hats. How many hats are there in all?
many pencils are there in all?

## $\bigoplus$ valuing

Vicky has 3 barbie dolls and Bella has 2 Barbie dolls. They are happily playing together. How many Barbie dolls do they have?

Number Sentence: $\qquad$
Always remember that it is good to have a friend to share and play with.


## LESSON 8

## RECAP

Find the difference using the picture story.


$$
\begin{gathered}
2 . \square \square \square \square \square \square \mathbf{X} \\
5-1=\square
\end{gathered}
$$

5. 

$$
3-1=\square
$$

4-2 = $\square$

LESSON 8: Number Sentence - Subtraction

Today, we will learn about writing number sentence in subtraction.
Example: Amy has 7 cookies. She gave 2 cookies to Ana. How many cookies were left?

Therefore, the number sentence is $\mathbf{7 - 2 = 5}$.

Activity 1: Write the number sentence in the box.


$$
-\ldots=
$$


$\square$

$$
\ldots
$$

Activity 2: Encircle the correct number sentence for each row.

|  |  |  |
| :---: | :---: | :---: |
| 10-7 = 3 | 10-6 = 4 | 10-5 = 5 |
|  |  |  |
| $6-1=5$ | $6-0=6$ | $6-6=0$ |

$$
8-3=5
$$

$8-2=6$
$8-4=4$
$9-2=7$
$9-5=4$
$9-4=5$

$5-2=3$
$5-3=2$
$5-4=1$

## 楽 wrap-up

Write Yes on the blank if the subtraction sentence is correct and No if incorrect.


## $\oplus$ <br> VALUING

Ana has 6 lollipops. She gave $\mathbf{3}$ lollipops to her friend Lisa. How many lollipops left for Ana?


Remember: Sharing is Caring
KEY TO CORRECTION


## LESSON 9

## RECAP

Write the subtraction number sentence for each row.


## LESSON 9: Writing Addition and Subtraction Number Sentence Using Concrete Representations

## Mother Went to the Market

One morning, Aling Maria went to the market to buy some food for breakfast. In the market, she buys 4 large eggs and 3 medium sized eggs. She also buys 3 red apples and 2 green apples. When she came home, she cooks 5 eggs and makes a scrambled egg. Aling Maria also slices 2 red apples. Her kids had a happy breakfast.


## ACTIVITIES

Write the number sentence in the box.

1. How many eggs did Aling Maria buy in the market?

2. How many apples did Aling Maria buy?

3. There are 7 eggs, how many eggs were left after Aling Maria cooked 5 eggs?
$\square-\ldots$
4. There are 5 apples. Aling Maria sliced 2 apples, how many apples were left?
$\square$

## Vニ WRAP-UP V WRA

Encircle the correct number sentence.

1. There are 6 green ribbons and there are 2 red ribbons. How many ribbons are there in all?


$$
8+1=9 \quad 8-1=7
$$

2. Danny has 10 marbles in the jar. He gets 5 marbles. How many marbles were left in the jar?

3. We ate 6 muffins. After a while, we ate 2 more muffins. How many muffins did we eat in all?


$$
6+2=8 \quad 6-2=4
$$

## $\square$

## VALUING

There are four girls playing soccer. Two boys came over. How many kids are playing soccer?


Jamie had 5 marbles. He gave 3 marbles to his friend. How many marbles are left to him?


## KEY TO CORRECTION


https://samuiholiday.com/wp-content/uploads/2017/03/Santol.jpg

- https://gallery.yopriceville.com/var/resizes/Free-Clipart-Pictures/Decorative-Elements-PNG/Leaf PNG Clipart.png?m=1558487738
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