



Republic of the Philippines Department of Education Regional Office IX, Zamboanga Peninsula





MATHEMATICS 4th QUARTER – Module 8: SOLVING PROBLEM WITH PICTOGRAPHS



Name of Learner: Grade & Section: Name of School:

Mathematics – Grade 1 Alternative Delivery Mode Quarter 4 - Module 8: SOLVING PROBLEM WITH PICTOGRAPHS First Edition, 2020

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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 can proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for a 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. 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 written as an aid in the lesson of the fourth quarter of Grade I Mathematics. The module was designed to help pupils solve routine and non – routine problems using data presented in pictographs without scales. (M1SP–IVh–4.1)

It covers the key concepts in solving problems with pictographs.

Believe that learning can continue amidst health crises. Good luck, stay safe and God bless.



What I Know

"Maria went to visit her friend. On her way, she passed by and saw some animals on the farm. Help her identify and count the animals on the farm."



Directions: The pictograph shows the number of animals Maria saw on the farm. Use the pictograph to answer the following questions on a separate sheet.

Frog	Carabao	Horse	Goat	Duck	Questions:
	THE			₹ _	most in number?
				₹ J	animals were there?
			S-D	V	than carabaos were seen
				V	4. How many frogs and
				I	farm?
					5. How many animals did Maria see in all?

LESSON

Solving Routine and Non-routine Problems using Data Presented in Pictograph without Scales

What's In



Can you still remember what a pictograph is? A pictograph shows data that represents objects in a story. A pictograph has a title and data needed for interpretation.



What's New

Look at this pictograph.

	" Number of Basketball S	<u>ho</u> ot "
	NUMBER OF BALLS	Q
Ben		H" H
Jimmy	$\bigcirc \bigcirc $	sh
Alex	$\bigcirc \bigcirc $	
Mario		
Pedro	$\bigcirc \bigcirc $	

QUESTION:

"How many balls did the boys shoot in all? "



What is It

F

How are we going to answer the given question in the pictograph above?

In the given pictograph, the **title** is "Number of Basketball Shoot ". It is really important that we look at the data provided in the pictograph and know what is asked in the problem. Once we know this, we can easily solve the problem.

Let's give it a try!

These were the party hats Joel bought on his birthday. Let us identify and count them.

	Joel's Party Hats
Color	Number of Party Hats Bought
Red	
Blue	
Green	
Yellow	

Here is a pictograph that tells us the number of party hats Joel bought. For instance, to get the number of blue and red party hats, we simply count/add blue and red party hats together. So, 5 blue party hats plus 3 red party hats is equal 8 blue and red party hats. We write:

5 + 3 = 8.

Let's solve the problem with the same pictograph.

" How many more blue party hats than green party hats were bought by Joel? "

So, let us look for the number of blue hats. The same thing with green hats.

- Blue hats = 1,2,3,4,5. There were 5 blue hats in all.
- Green hats = 1, 2. There were 2 green hats in total.

Since we want to know how many more blue hats were there than green hats, we will subtract the number of green hats from the number of blue hats.

Thus, there were 3 more blue party hats than green party hats.



What's More

Directions: Study the pictograph and answer the following questions on a separate sheet.

"Students	Fa	vor	ite	Сс	olor	,"	C
Red						; () (1
Orange							2
Pink							Ĵ
Green		Ĩ	R				4
Blue		Ş					5

Questions:

- . What was the most favorite color? least favorite?
- 2. How many colors were there?
- 3. How many students chose pink and red as their favorite colors?
- 4. How many more students chose blue than orange?
- 5. How many students were there in all?



What I Have Learned

REMEMBER

- A pictograph is a graph that shows numerical information by using picture symbols or icons to represent sets of data or information.
- We can easily answer the problem if the data collected is neatly presented using a pictograph and if we understand what is asked in the problem.



What I Can Do

- > Why is pictograph important in solving problems?
- How important is it to know what is asked in the problem and to know the data correctly in the pictograph?



Assessment

Directions: Study the pictograph and answer the following questions that follow. Write the letter that corresponds to the correct answer on a separate sheet.

	Numl	ber of Stars Jei	nny Receive	d
Monday	Tuesday	Wednesday	Thursday	Friday
$ \begin{array}{c} \bigstar \\ \bigstar \end{array} $			$\begin{array}{c} \swarrow \\ \swarrow \\ \swarrow \\ \swarrow \\ \swarrow \\ \swarrow \\ \checkmark \\ \checkmark \\ \checkmark \\ \checkmark \\$	$\begin{array}{c} \swarrow \\ \swarrow \\ \swarrow \\ \swarrow \\ \bigstar \\ \bigstar \\ \bigstar \\ \bigstar \\ \bigstar \end{array}$
			\sim	

- On what day did Jenny receive the greatest number of stars?
 A. Monday
 B. Wednesday
 C. Thursday
 D. Friday
- 2. How many more stars did Jenny receive on Monday than on Tuesday?

A. 2	B. 4	C. 6	D. 8
How many store	did lanny raadi	vo op Thursday	and Erid

3. How many stars did Jenny receive on Thursday and Friday? A. 10 B. 11 C. 12 D. 13

- **B.** 11 **C.** 12 **D.** 13
- 4. How many more stars did Jenny receive on Thursday than on Wednesday?

A. 2	B. 3	C. 4	D. 5
5. How many	[,] stars did Jenny r	receive in all?	

A. 25 **B.** 26 **C.** 27 **D.** 28

Answer Key
What I Know: 1. duck 2. 6 3. 2 4. 11 5. 17
What's New: What's New:
What is 3 (given) The answer is 3 (given)
What's More: 1. red/orange 2. 5 3. Pink - 4/red - 6 4. 3 5. 20
What I Have Learned: I learned what pictograph is and its importance in solving problems he
 What I Have Learned: Pictograph is and What I Have Learn What I Can Do: Pictograph is important because it shows numerical information by using picture symbols or icons to represent sets of data and information. It helps us easily answer the problem.
J.C. 2.B. 3.D. 4.B. 5.A.

References:

Danilo S. Padilla, Rodrigo V. Pascua, Lolita P. Dacuba, Marivic M. Calelao, Dahlia L. Silvania and Maybellene A Garlejo, *Mathematics 1- Kagamitan ng Mag-aaral (Chavacano)*, 2017, 290-294.

Laura Lee B. De Garcia, Discovering Mathematics Today, Textbook for Mathematics Grade 1, 2006, 154-155.

Ellen T. Ongdueco, Roberto J. Degolacion, Milagros A. Endo, Benson S. Tan Soaring 21st Century Mathematic K to 12 Curriculum Compliant 2013, 388-39.