JANUARY
Makugihon

FEBRUARY
Mahigugmaon

MARCH
Matinabangon

APRIL
Matinahuron

MAY
Mahapsay og Malinipyo

JUNE
Maabtik og Musunod sa Ihsaktong Oras

JULY
Mauntigo og Maabilidad

AUGUST
Maginhunahunaon para sa Uban

SEPTEMBER
Madaginoton

OCTOBER
Matinud-anon

NOVEMBER
Masaligan

DECEMBER
Maalampuon

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

*Z*est for *P*rogress
*Z*eal of *P*artnership

3
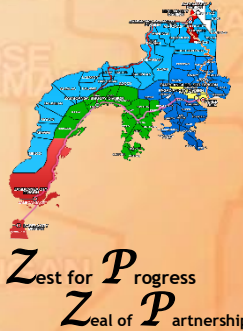
MATHEMATICS
4th QUARTER – Module 8:
SOLVING PROBLEM USING BAR GRAPH

Name of Learner: _____

Grade & Section: _____

Name of School: _____

Mathematics – Grade #
Alternative Delivery Mode
Quarter 4 - Module #: Title
First Edition, 2020

Development Team of the Module	
Writer:	**Maylene C, Francisco**
Editors:	**Loida E. Fabian**
	Jane Marie A. Añasco
Layout Artist:	**Jhissa Lae DL. Cataylo**
Reviewers: EPS, Mathematics	**Vilma A. Brown, Ed. D.**
Master Teacher	**Elsa T. de Leon**
Management Team: SDS	**Roy C. Tuballa, EMD, JD, CESO VI**
ASDS	**Jay S. Montealto, CESO VI**
ASDS	**Norma T. Francisco, DM, CESE**
EPS Mathematics	**Vilma A. Brown, Ed. D.**
EPS LRMS	**Aida F. Coyme, Ed. D.**

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 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.
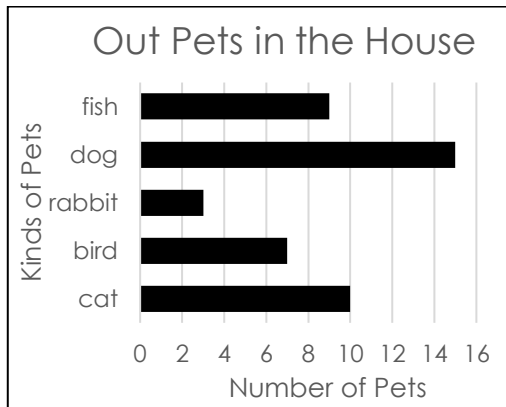
Thank you.

What I Need to Know

LEARNING COMPETENCY:

Solves routine and non-routine problems using data presented in a single bar graph.

What I Know

Directions: Use the bar graph to answer the questions that follow. Write the letter of the correct answer on a separate sheet.

Out Pets in the House

(bar graph showing Kinds of Pets on y-axis: fish, dog, rabbit, bird, cat; Number of Pets on x-axis: 0 2 4 6 8 10 12 14 16)

1. Which pet is the least in number?

   A. bird   B. cat   C. rabbit

2. How many more dogs are there than cat?

   A. 5   B. 10   C. 15

3. How many are 4-legged pets?

   A. 16   B. 28   C. 25

4. How many fish and cats are there in all?

   A. 20   B. 19   C. 21

5. How many pets are there in all in the graph?

   A. 44   B. 54   C. 64

LESSON 1	SOLVING ROUTINE AND NON-ROUTINE PROBLEMS PRESENTED IN A SINGLE BAR GRAPH

What's In

Directions: Answer the question. Write the answer on a separate sheet.
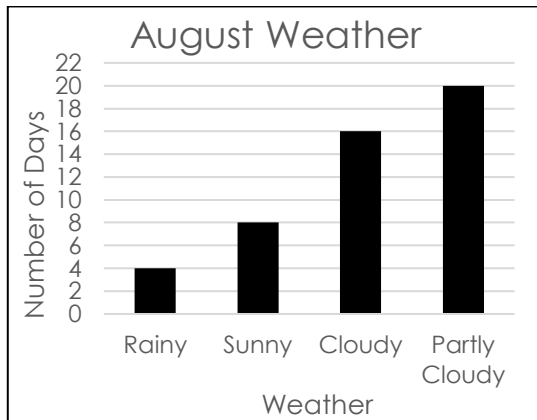
What are the two kinds of bar graphs?

What's New

Directions: Study the situation, bar graph and answer the questions on a separate sheet.

Liza wants to find out which of the four weather takes place most of the time. Let's analyze her data.

August Weather

(Bar graph: Number of Days vs Weather)
- Rainy: 4
- Sunny: 8
- Cloudy: 16
- Partly Cloudy: 20

Questions:

1. How many more times does cloudy happen than rainy?

   A. 14   B. 12   C. 16

2. How many times do cloudy and partly cloudy happen?

   A. 24   B. 26   C. 36

3. How many more sunny days than rainy days were there?

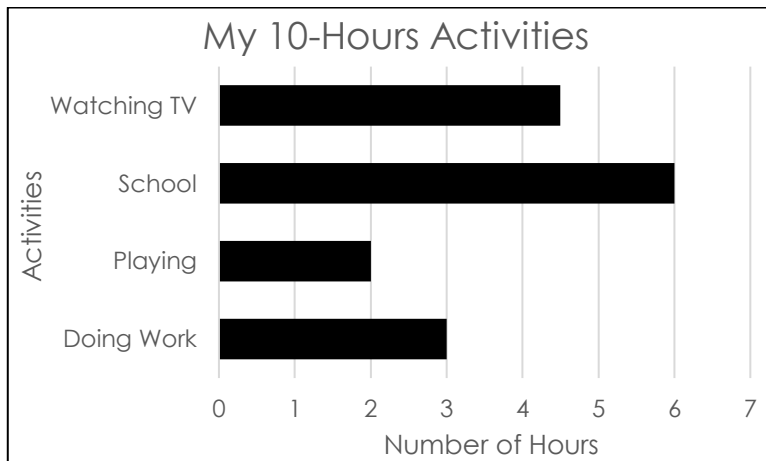   A. 2   B. 4   C. 6

What is It

The data are being presented in a form of a single bar graph of which all the information is also presented in the **horizontal axis** and in the **vertical axis.**

What's More

Kelly conducted an interview with her classmate Kay, to find out how she used her 10 hours in a day.

Directions: Study the data of her classmate, using the data in the bar graph below. Write 5 sentences about the data. Write your answers on a separate sheet.

My 10-Hours Activities

Watching TV — 4.5
School — 6
Playing — 2
Doing Work — 3

Activities (vertical axis)
Number of Hours (horizontal axis: 0 1 2 3 4 5 6 7)

What I Have Learned

How do we solve routine and non-routine problems using data presented in a single bar graph?

To solve routine and non-routine problems using data presented in a single bar graph, read, understand, and analyze the information given in the horizontal and vertical axis.

What I Can Do

Directions: Read and analyze the situation below. Write your answers on a separate sheet.

The pizza store had decided to know how many sales there are in 6 days. They presented the result in a bar graph.
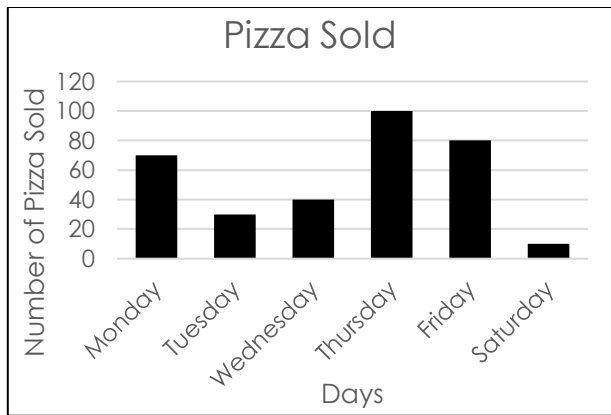
Pizza Sold

1. How many pizzas were sold on a Friday?
   A. 70   B. 80   C. 90
2. How many more pizza was sold on Tuesday than on Saturday?
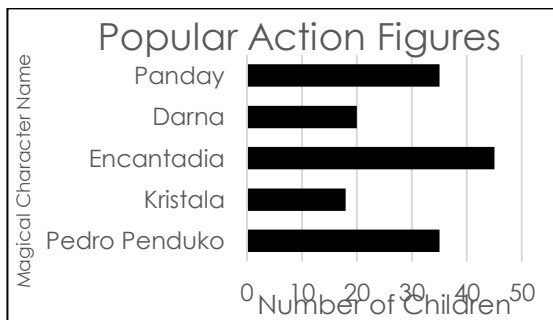   A. 10   B. 20   C. 30
3. How many pizzas were sold on Tuesday?
   A. 10   B. 20   C. 30
4. How many pizzas were sold on Wednesday and Friday?
   A. 145   B. 80   C. 120

 Assessment

Directions: Use the data presented in a single bar graph in answering the questions.

1. Which magical character is liked by 20 children?
   A. Pedro Penduko
   B. Encantadia
   C. Darna
2. What is the difference between children who liked Panday and Darna?
   A. 10   B. 15   C. 2
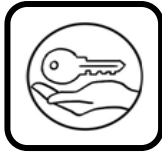3. Which magical character is liked by 35 children?
   A. Kristala   B. Darna   C. Panday
4. Which magical character is most liked by people?
   A. Pedro Penduko   B. Encantadia   C. Panday
5. How many more children like Encantadia than Panday?
   A. 5   B. 10   C. 15

Answer Key

What I Know:

1. C   2. A   3. B   4. B   5. A

What's In:

1. Horizontal and Vertical Bar graphs

What's New:

1. B   2. C   3. B

What's More: Activity (possible answers)

1. Kay spends 6 hours in school
2. Kay spends 2 hour playing
3. Kay spends 3 hours doing work
4. Kay spends most of the time in school
5. Kay spends less time watching tv

What I Can Do:

1. B   2. B   3. C   4. C

Assessment:

1. C   2. B   3. C   4. B   5. B

References:

Mathematics 3Teachers Guide – First Edition 2015

Mathematics 3 Learners Material – First Edition 2014

Unpacked LC's in Mathematics lll of Zamboanga City Division

MELC – Zamboanga City Division

Ma. Laarni T. Villanueva, et .al. Mathematics 3 Teachers Guide Pasig City Vibal Publishing House Inc. 2013.

Ma. Laarni T. Villanueva, et .al. Mathematics 3 Learning Materials Pasig City Vibal Publishing House Inc. 2013.