

- JANUARY**
Makugihon
- FEBRUARY**
Mahigugmaon
- MARCH**
Matinabunon
- APRIL**
Matinahuron
- MAY**
Mahapsay og Malimpyo
- JUNE**
*Maabtik og Masunod sa
Dhaklong Oras*
- JULY**
Maantigo og Maabilidad
- AUGUST**
*Maginhuhunon
para sa Urban*
- SEPTEMBER**
Madaginton
- OCTOBER**
Matinud-anon
- NOVEMBER**
Masaligan
- DECEMBER**
Maalampunon



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



4



MATHEMATICS

4th QUARTER – Module 6: INTERPRETING DATA AND SOLVING PROBLEM



Name of Learner: _____

Grade & Section: _____

Name of School: _____

Mathematics – Grade 4
Alternative Delivery Mode
Quarter 4 - Module 6: Interpreting Data and Solving Problem

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 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 instruction carefully before performing each task.

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

Thank you.



What I Need to Know

The module was written for the Grade Four learners and are expected to learn and develop the most learning competencies, different processes, numeracy skills at the end of the lessons which are fundamental to practical and real- life situation as emphasized in the curriculum.

After going through the module, you are expected to:

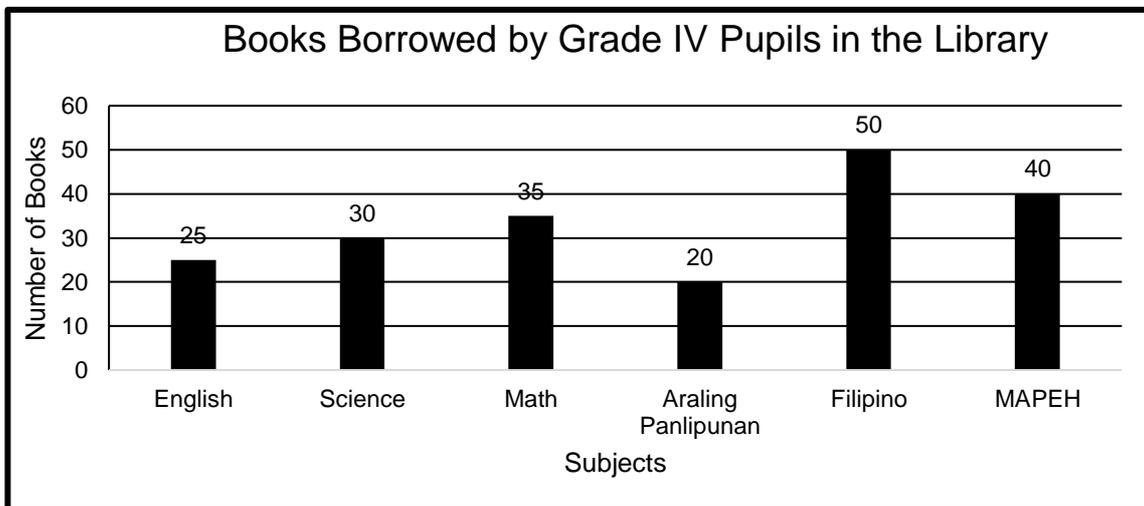
- Interpret data presented in different kinds of bar graphs (vertical/horizontal, single/double bars).
(M4SP-IVg-3.4)
- Solve routine and non-routine problems using data presented in a single or double- bar graph.
(M4SP – IVh-4.4)

Amidst of global health crisis, values and attitudes among learners are likewise encouraged for meaningful learning.



What I Know

Directions: Study the vertical bar graph. Answer the following questions that follow. Write the letter of the correct answer on a separate sheet.



1. What was the graph all about?
 - a. books borrowed by Grade 3 pupils in the library
 - b. books borrowed by Grade 4 pupils in the library
 - c. books borrowed by Grade 5 pupils in the library
 - d. books borrowed by Grade 6 pupils in the library
2. What subject had the least number of books borrowed in the library?
 - a. Science
 - b. MAPEH
 - c. Araling Panlipunan
 - d. English
3. How many more pupils borrowed Filipino than English books?
 - a. 25
 - b. 30
 - c. 35
 - d. 40
4. What subject has the greatest number of books borrowed by pupils?
 - a. Math
 - b. Science
 - c. English
 - d. Filipino
5. How many books were borrowed from the library altogether?
 - a. 400
 - b. 300
 - c. 200
 - d. 100

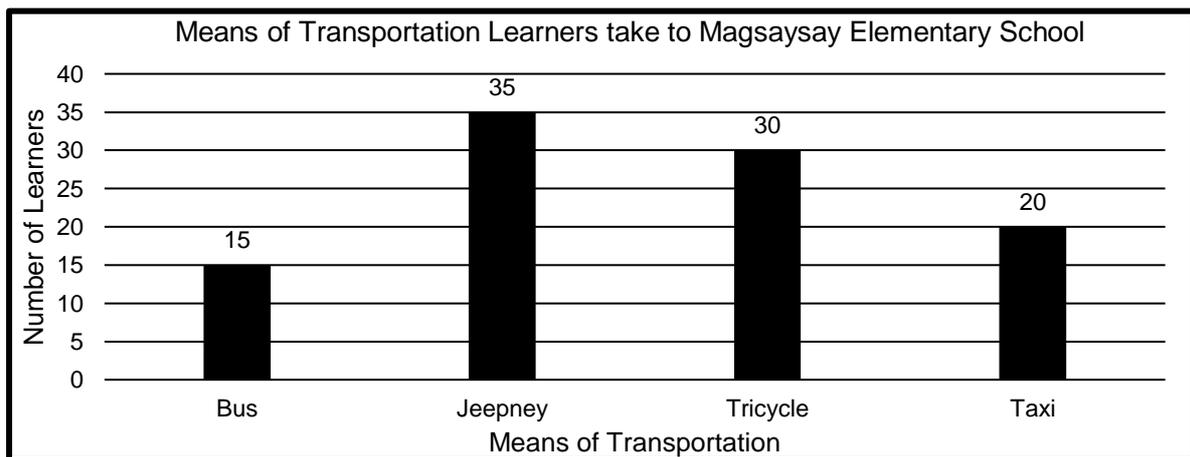
LESSON

INTERPRETING DATA AND SOLVING PROBLEM



What's In

Directions: Study the graph. Write the letter of the correct answer on a separate sheet.

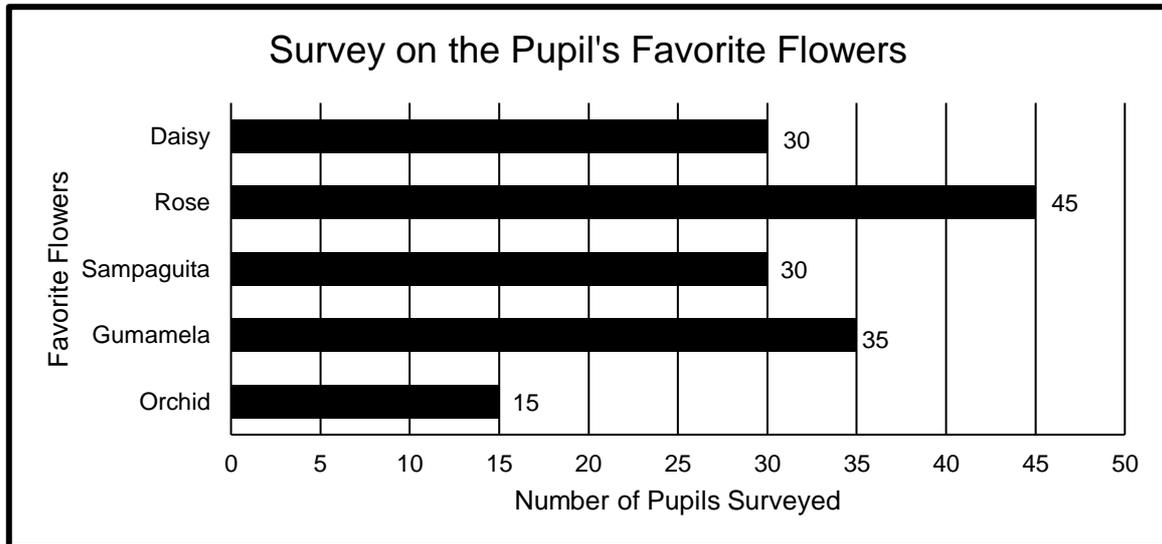


1. What is the title of the graph?
 - a. means of transportation learners take to Magsaysay Elementary School
 - b. means of transportation learners take to Zamora Elementary School
 - c. means of transportation learners take to Garcia Elementary School
 - d. means of transportation learners take to Mabini Elementary School
2. What do the numbers on the left side refers to?
 - a. number of schools
 - b. number of learners
 - c. number of transportations
 - d. number of graphs
3. How many learners prefer to ride on a bus?
 - a. 20
 - b. 15
 - c. 20
 - d. 25



What's New

Miss Belmonte conducted a survey on the favorite flowers of the pupils in their school. The data she gathered are presented in the graph.



1. What was the most favorite flower?
2. What was the least favorite?
3. How many more pupils' preferred daisy than orchids?
4. How many pupils liked rose and gumamela flowers?
5. How many pupils participated in the survey made by Miss Belmonte?



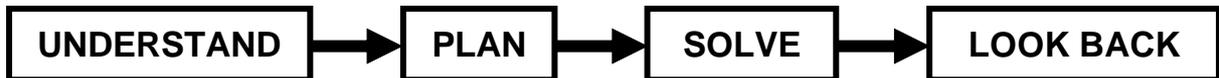
What is It

To interpret a graph, follow the steps below.

- Read the title

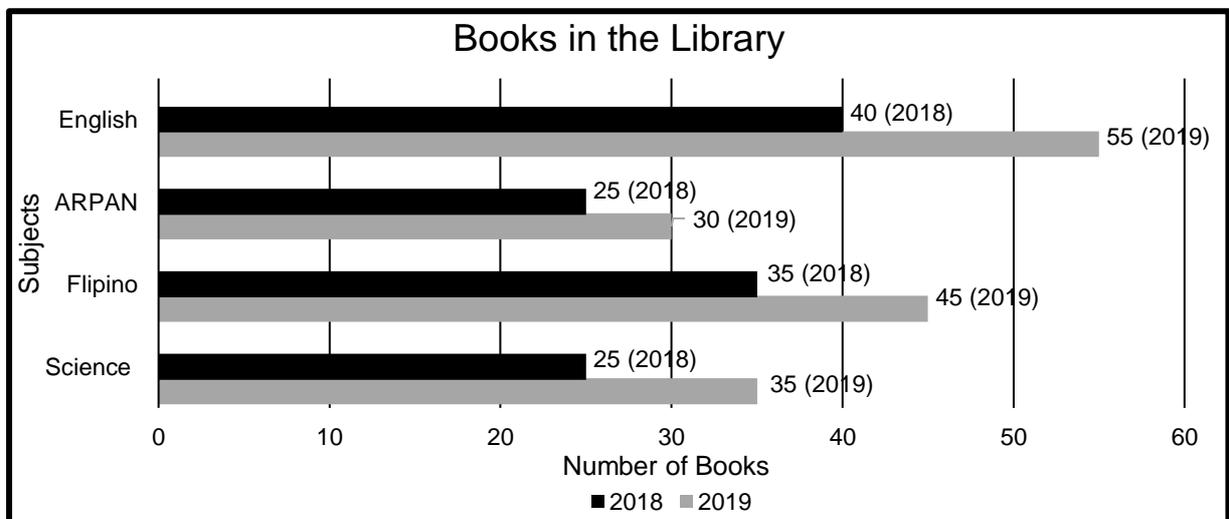
- Read and understand the labels
- Make a thorough analysis of the data presented
- Use the data in the graph to answer questions as a way of interpretation
- Understand the story behind the data presented in the graph

To solve routine and non-routine problems using the data presented in a graph follow the steps:



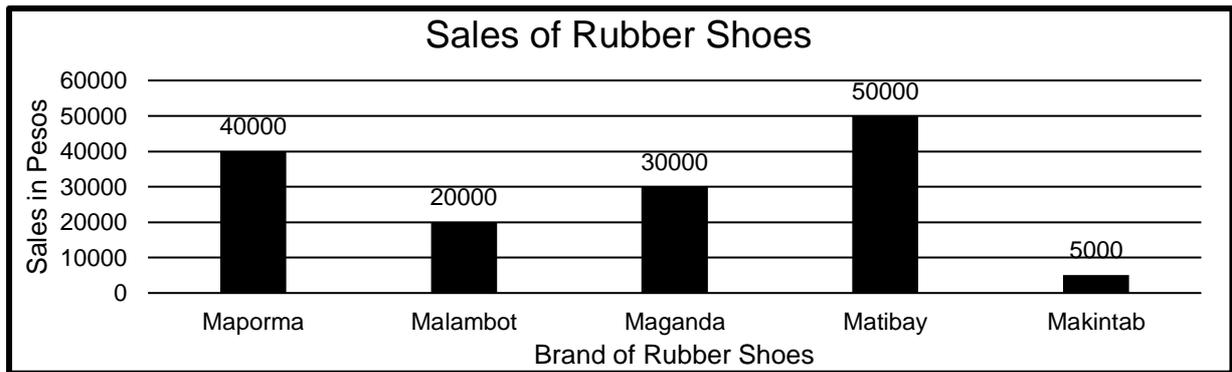
Let us try to study and interpret the given bar graph below.

A. ROUTINE PROBLEM



1. What is the title of the double horizontal bar graph?
- **Books in the Library**
2. How many Science books were borrowed in school year 2018?
- **25 Books**
3. Which books had the most number borrowed?
- **English**

B. NON – ROUTINE PROBLEM

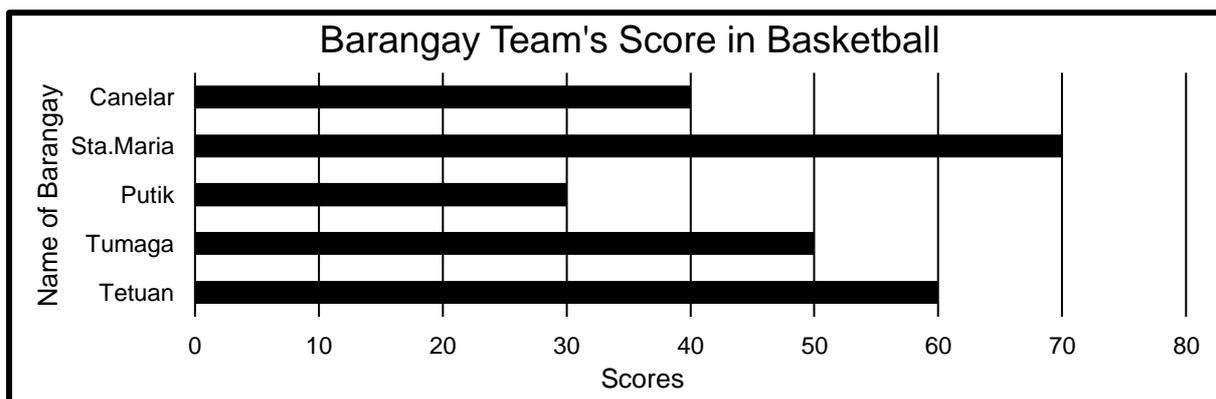


1. What is the graph all about?
- **Sales of Rubber Shoes**
2. How much more sales have Maporma shoes than Malambot shoes?
- **20, 000**
3. If the sales of Makintab is tripled, how much will be its total sales?
- **15, 000**
4. If the sales of Maporma and Matibay shoes are put together, how much will it cost?
- **90 000**



What's More

Directions: Study the graph. Use separate sheet to answer the questions below.



1. What is the title of the graph?

2. Which barangay team got the highest score?
3. How many more points does Barangay Tumaga have than Barangay Putik?



What I Have Learned

Directions: Complete the table below.

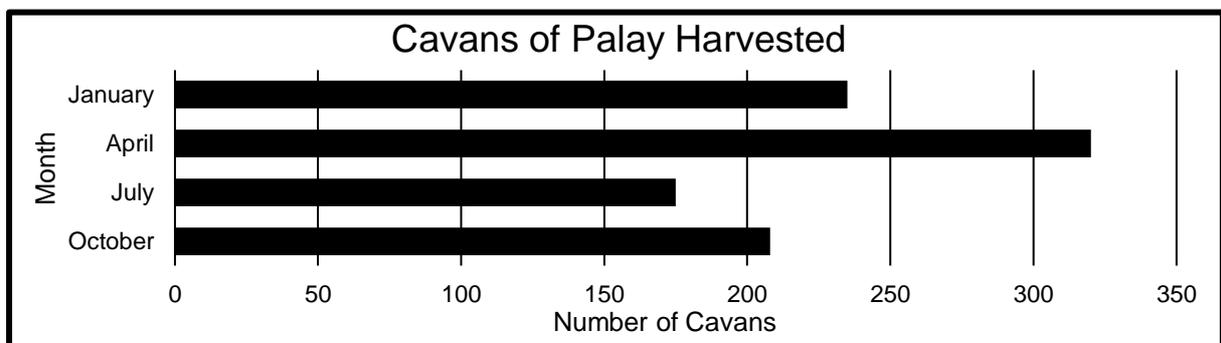
How to Interpret Graph
1.
2.
3.
4.
5.

Steps in Solving Routine and non-routine Word Problems
1.
2.
3.
4.



What I Can Do

Directions: Use the data in the graph to solve the problem.



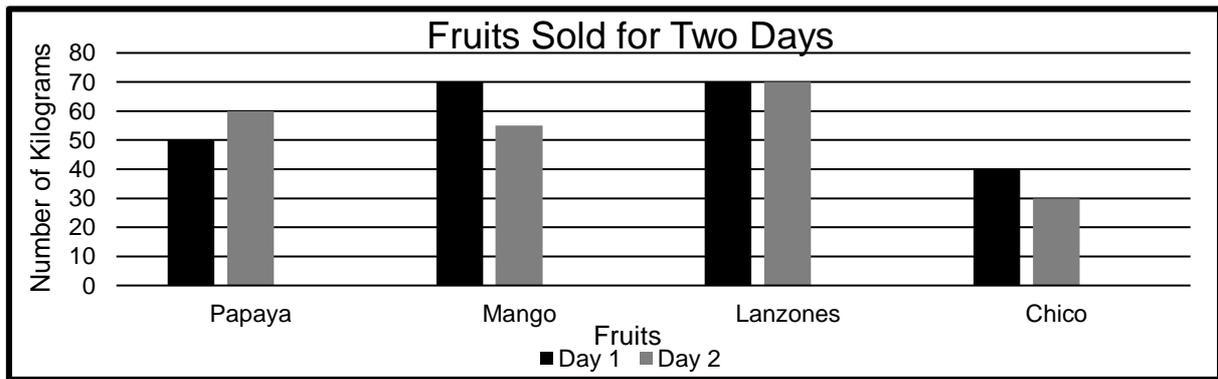
1. What is the title of the graph?
2. What month registered the highest harvest?

3. How many cavans were harvested for the month of April?

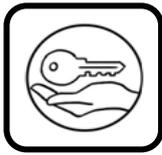


Assessment

Directions: Study the graph below. Choose the letter of the correct answer. Write your answer on a separate sheet.



- Which fruit has the greatest number of kilograms sold in 2 days?
a. Lanzones b. chico c. papaya d. mango
- How many kilograms of fruits were sold in Day 1?
a. 220 b. 230 c. 240 d. 250
- How many kilograms of fruits were sold in Day 2?
a. 210 b. 220 c. 230 d. 240
- 4-5. Which had more kilograms of fruits sold, Day 1 or Day 2? How many kilograms more?
a. Day 1, 40kgs b. Day 1, 20kgs c. Day 2, 20kgs d. Day 2, 40kg



Answer Key

What I Know: 1. b 2. c 3. a 4. d 5. c

What's In: 1. A 2. b 3. b

What's New: 1. Rose 2. Orchids 3. 15 pupils 4. 80 pupils 5. 155 pupils

What's More: 1. Barangay Team's Score in Basketball 2. Sta. Maria 3. 20 points

What I Have Learned:

<ul style="list-style-type: none"> • Understand • Plan • Solve • Look Back 	<ul style="list-style-type: none"> • Read the title. • Understand the labels. • Analyze the data presented. • Use the data in the graph to answer questions • as a way of interpretation. • Understand the story behind the data presented in the graph.
<p>Steps in Solving Routine and non-routine Word Problems</p>	<p>How to Interpret Graph</p>

What I Can Do: 1. Cavans of Palay Harvested 2. April 3. 335

Assessment: 1. a 2. c 3. a 4-5. b

References:

Ofelia G. Chingcuangco, M.A.Ed. Federico C. Castillo, Ed.D. Mathematics 4 Soaring High with Mathematics Textbook, Pasig City, SAINT MATTHEW'S PUBLISHING, Philippines Copyright, 2019, 288-298.

I AM A FILIPINO

by Carlos P. Romulo

I am a Filipino – inheritor of a glorious past, hostage to the uncertain future. As such, I must prove equal to a two-fold task – the task of meeting my responsibility to the past, and the task of performing my obligation to the future.

I am sprung from a hardy race – child many generations removed of ancient Malayan pioneers. Across the centuries, the memory comes rushing back to me: of brown-skinned men putting out to sea in ships that were as frail as their hearts were stout. Over the sea I see them come, borne upon the billowing wave and the whistling wind, carried upon the mighty swell of hope – hope in the free abundance of the new land that was to be their home and their children’s forever.

This is the land they sought and found. Every inch of shore that their eyes first set upon, every hill and mountain that beckoned to them with a green and purple invitation, every mile of rolling plain that their view encompassed, every river and lake that promised a plentiful living and the fruitfulness of commerce, is a hollowed spot to me.

By the strength of their hearts and hands, by every right of law, human and divine, this land and all the appurtenances thereof – the black and fertile soil, the seas and lakes and rivers teeming with fish, the forests with their inexhaustible wealth in wild and timber, the mountains with their bowels swollen with minerals – the whole of this rich and happy land has been for centuries without number, the land of my fathers. This land I received in trust from them, and in trust will pass it to my children, and so on until the world is no more.

I am a Filipino. In my blood runs the immortal seed of heroes – seed that flowered down the centuries in deeds of courage and defiance. In my veins yet pulses the same hot blood that sent Lapulapu to battle against the alien foe, that drove Diego Silang and Dagohoy into rebellion against the foreign oppressor.

That seed is immortal. It is the self-same seed that flowered in the heart of Jose Rizal that morning in Bagumbayan when a volley of shots put an end to all that was mortal of him and made his spirit deathless forever; the same that flowered in the hearts of Bonifacio in Balintawak, of Gregorio del Pilar at Tirad Pass, of Antonio Luna at Calumpit, that bloomed in flowers of frustration in the sad heart of Emilio Aguinaldo at Palanan, and yet burst forth royally again in the proud heart of Manuel L. Quezon when he stood at last on the threshold of ancient Malacanang Palace, in the symbolic act of possession and racial vindication. The seed I bear within me is an immortal seed.

It is the mark of my manhood, the symbol of my dignity as a human being. Like the seeds that were once buried in the tomb of Tutankhamen many thousands of years ago, it shall grow and flower and bear fruit again. It is the insigne of my race, and my generation is but a stage in the unending search of my people for freedom and happiness.

I am a Filipino, child of the marriage of the East and the West. The East, with its languor and mysticism, its passivity and endurance, was my mother, and my sire was the West that came thundering across the seas with the Cross and Sword and the Machine. I am of the East, an eager participant in its struggles for liberation from the imperialist yoke. But I know also that the East must awake from its centuried sleep, shake off the lethargy that has bound its limbs, and start moving where destiny awaits.

For I, too, am of the West, and the vigorous peoples of the West have destroyed forever the peace and quiet that once were ours. I can no longer live, a being apart from those whose world now trembles to the roar of bomb and cannon shot. For no man and no nation is an island, but a part of the main, and there is no longer any East and West – only individuals and nations making those momentous choices that are the hinges upon which history revolves. At the vanguard of progress in this part of the world I stand – a forlorn figure in the eyes of some, but not one defeated and lost. For through the thick, interlacing branches of habit and custom above me I have seen the light of the sun, and I know that it is good. I have seen the light of justice and equality and freedom, my heart has been lifted by the vision of democracy, and I shall not rest until my land and my people shall have been blessed by these, beyond the power of any man or nation to subvert or destroy.

I am a Filipino, and this is my inheritance. What pledge shall I give that I may prove worthy of my inheritance? I shall give the pledge that has come ringing down the corridors of the centuries, and it shall be compounded of the joyous cries of my Malayan forebears when first they saw the contours of this land loom before their eyes, of the battle cries that have resounded in every field of combat from Mactan to Tirad Pass, of the voices of my people when they sing:

“I am a Filipino born to freedom, and I shall not rest until freedom shall have been added unto my inheritance—for myself and my children and my children’s children—forever.”