



Republic of the Philippines

# **Department of Education**

Regional Office IX, Zamboanga Peninsula



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Z<sub>est for</sub> P<sub>rogress</sub> Z<sub>eal of</sub>

# **Mathematics**

Quarter 3 - Module 3

Mental Division

With Inverse Operations



Name of Le	earner:
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**Grade & Section:** 

Name of School:



#### What I Need to Know

#### LEARNING COMPETENCY

In this module, you will be able to:

\* Divides mentally numbers by 2, 3, 4, 5 and 10 using appropriate strategies (multiplication table of 2, 3, 4, 5 and 10).

 ${}^*\,Illustrates\,that\,multiplication\,and\,division\,are\,inverse\,operations$ 

**MELC Code:** M2NS-IIIb-52.1 M2NS-IIIc-53



# What I Know

Directions: Encircle the letter of the correct answer.

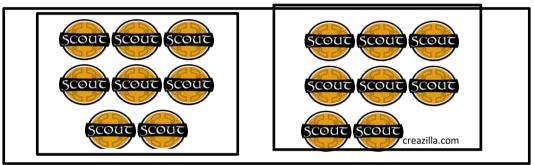
- 1.) What is the answer called in DIVISION ?  $(40 \div 2 = 20)$ 
  - A. Sum
  - B. Difference
  - C. Product
  - D. Quotient
- 2.) What do you call the number that is being divided? ( $12 \div 2 = 6$ )
  - A. dividend
  - B. divisor
  - C. minuend
  - D. subtrahend
- 3.) Which number used to divide another number?  $(15 \div 3 = 5)$ 
  - A. dividend
  - B. divisor
  - C. minuend
  - D. subtrahend

#### What's In

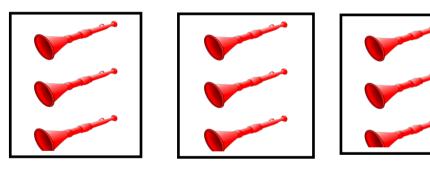
## Activity 1 "Fill Me Up"

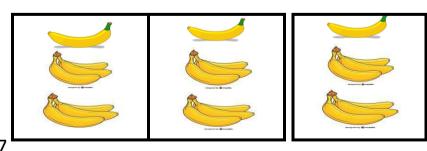
Directions: Fill in the missing number parts of each number sentence below.

|--|



3.) 
$$\div 2 = 8$$







#### WHAT'S NEW

Dividing mentally numbers found in the multiplication tables of 2, 3, 4, 5, and 10,

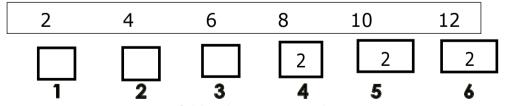
**Example 1:** (Using division by formation of equal groups of objects.)

Look at the pictures and take note of your observations.

Zion, an honest Boy Scout of Buayan Elementary School has two dogs. As a scout, he is responsible and loving to everyone and most especially to his pets. He loves feeding them with bones. If Zion has 12 bones and wanted to give them equally, how many bones each one will receive?



**Example 2** \* Another way to get the answer is through <u>Skip</u> <u>Counting</u> by two's up to 12.



How many groups of 2's do you see?  $\underline{6}$ The answer or quotient is (6) = six (6) bones each dog.

# **Example** Using Repeated Addition in solving Division Problem



Mary is a generous grade 2 GSP member in her troop. She donated 36 trash cans to her Scoutmaster for the 9 troops to maintain cleanliness. How many trash cans each troop had received?

- \*What is asked? How many trash cans each troop had received?
- \* What are given? 36 trash cans for 9 troops
- \* What operation to be used? **Division using Repeated Addition**

\* Division sentence: 36 ÷ 9 = N

\*Addition sentence: 9 + 9 + 9 + 9 = 36

36÷9= N (Skip counting) 9	18	27	36
Repeated addition <b>9 +9</b>	<b>+ 9</b>	<b>+ 9</b>	
18	27	36	

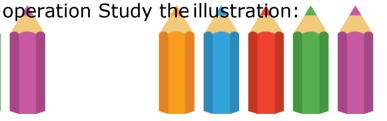
How many times 9 is being added? Answer is 4,

36÷9=**4 (quotient)** 

Example 4: (

Multiplication and Division as inverse





Multiplication Sentence

$$2 \times 5 = 10$$
  
 $5 \times 2 = 10$ 

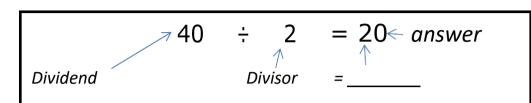
**Division Sentence** 

$$10 \div 2 = 5$$
  
 $10 \div 5 = 2$ 

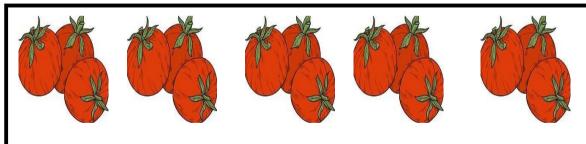
### **Assessment**

Multiple Choice Test

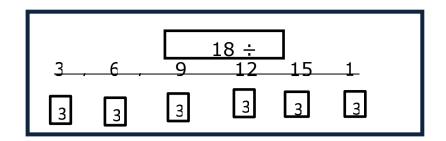
Directions: Choose the letter of the best answer. Write the chosen letter on the space provided for you.



- \_\_\_\_1. What is the answer called in *DIVISION*?
  - A. Quotient
  - B. Product
  - C. Sum
  - D. Difference
- $\underline{\hspace{1cm}}$  2. What is the quotient of  $40 \div 2 = \underline{\hspace{1cm}}$ ?
  - A.10
  - B. 20
  - C. 30
  - D. 40



- $\underline{\phantom{a}}$  3. What is the division sentence of  $\underline{5 \times 3}$ ?
  - A.  $15 \div 5 = 3$
  - B.  $15 \div 3 = 3$
  - C.  $15 \div 5 = 5$
  - D.  $15 \div 1 = 15$



- \_\_\_4. What is the meaning of the skip counting used in getting the quotient?
  - **A.** 2's in 18
  - **B.** 3 's in 18
  - C. 4's in 18
  - **D.** 5'S in 18
  - \_\_\_ 5. What will you put in a blank in  $8 \div _ = 2$ 
    - **A**. 2
    - **B.**4
    - **C**. 6



#### **References**

Alvarez, C.et al (2017). Phoenix Math for the 21<sup>st</sup> Century Learners, 927 Quezon Avenue, Quezon City: Phoenix Publishing House Inc.

Morandante, Larry J., et.al. 2013. Kagamitan ng Mag-aaral Sinugbuanong Binisaya Mathematics 2. 2<sup>nd</sup> Floor DORM G, PSC Complex Meralco Avenue, Pasig City, Philippines 1600: Published and distributed by Vibal Publishing House, Inc.

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**Development Team** 

Writer: CRISILYN M.MAKASIAR

Buayan Elementary School

Editors/QA: Crislyn M. Makasiar

Romar P. Navarro Jennifer F. Gadian Lea M. Indayo

Reviewer: Gina I. Lihao

**EPS-Mathematics** 

Illustrator:

Layout Artist:

Management Team: Evelyn F. Importante

OIC- CID Chief EPS

Dr. Aurelio A. Santisas, CESE

OIC- Assistant SDS

Dr. Jenealyn A. Aleman, CESO VI

OIC- Schools Division Superintendent