

7

Lesson Exemplar for Mathematics

Quarter 1

Week

5

Lesson Exemplar for Mathematics Grade 7 Quarter 1: Week 5

This material is intended exclusively for the use of teachers in the implementation of the MATATAG K to 10 Curriculum. It aims to assist in delivering the curriculum content, standards, and lesson competencies.

The Intellectual Property Code of the Philippines states that “No copyright shall subsist in any work of the Government of the Philippines. However, prior approval of the government agency or office wherein the work is created shall be necessary for exploitation of such work for profit. Such agency or office may, among other things, impose as a condition the payment of royalties.”

Borrowed materials (e.g., texts, illustrations, musical notations, photos, and other copyrightable, patentable contents) included in this learning resource are owned by their respective copyright and intellectual property right holders. Where applicable, DepEd has sought permission from these owners specifically for the development and printing of this learning resource. As such, using these materials in any form other than agreed framework requires another permission and/or licensing.

No part of this material, including its original and borrowed contents, may be reproduced in any form without written permission from the Department of Education.

Every care has been taken to ensure the accuracy of the information provided in this material. For inquiries or feedback, please call the Department of Education - Regional Office via telephone number (02) 85229412 or send an email to ncr@deped.gov.ph.

Published by the Department of Education
Secretary: Sara Z. Duterte
Undersecretary: Gina O. Gonong

Development Team

Writer:	Leonard S. Evangelista, Alberto J. Tiangco
Content Reviewer:	Alberto J. Tiangco, Resty I. Rodelas, Marilyn B. Soriano, Evelyn C. Callada, Dominador J. Villafria
External Content Validator:	Dr. Errol Matthew C. Garcia, Dr. Winston S. Sirug
External Language Validator:	Rafael John Sotto
Illustrator:	
Layout Artist:	Vergel Junior C. Eusebio

Management Team

JOCELYN DR ANDAYA, *CESO IV*, Director IV
CRISTITO A. ECO, *CESO III*, Assistant Regional Director
MICAH G. PACHECO, OIC-Chief Education Program Supervisor, CLMD
DENNIS M. MENDOZA, Regional EPS/Learning Resource Management Section Head
RESTY I. RODELAS, Regional Mathematics Education Program Supervisor
DAISY L. MATAAC, SDO Taguig City & Pateros LRMS Education Program Supervisor
ELSA R. MATA, SDO Navotas LRMS Education Program Supervisor

MATATAG K to 10 Curriculum Weekly Lesson Log	School	Grade Level	Grade 7
	Name of Teacher	Learning Area	Mathematics
	Teaching Dates and Time	Quarter	1

	DAY 1	DAY 2	DAY 3	DAY 4
--	-------	-------	-------	-------

I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES

<i>A. Content Standards</i>	The learners demonstrate knowledge and understanding of the application of percentages.			
-----------------------------	---	--	--	--

<i>B. Performance Standards</i>	By the end of the quarter, the learners are able to use percentages in different contexts.			
---------------------------------	--	--	--	--

<i>C. Learning Competencies</i>	The learners 1. solve money problems involving percentages (e.g., discount, commission, sales tax, simple interest) and 2. create a financial plan.			
---------------------------------	---	--	--	--

<i>D. Learning Objectives</i>	At the end of the lesson, the learners will be able to: 1. define percentage, discount, and sale. 2. solve money problems involving percentages specifically on: a. discounts; and b. sales, and 3. participate actively in class discussions.	At the end of the lesson, the learners will be able to: 1. define commission and sales tax. 2. solve money problems involving percentages specifically on: a. commission; and, b. sales tax; and, 3. participate actively in class discussions.	At the end of the lesson, the learners will be able to: 1. define simple interest. 2. solve money problems involving percentages specifically on simple interest; and, 3. participate actively in class discussions.	At the end of the lesson, the learners will be able to: 1. be familiar with the terms related to financial planning. 2. create a 1-day budget plan; and 3. create a formula for a daily personal financial plan.
-------------------------------	---	--	---	---

II. CONTENT	Application of Percentages • Discounts • Sales	Application of Percentages • Commission • Sales Tax	Application of Percentages • Simple Interest	Financial Plan
--------------------	--	---	---	----------------

III. LEARNING RESOURCES

<i>A. References</i>				
----------------------	--	--	--	--

<i>B. Other Learning Resources</i>				
------------------------------------	--	--	--	--

IV. TEACHING AND LEARNING PROCEDURES

Before/Pre-Lesson Proper

<p><i>Activating Prior Knowledge</i></p>	<p>In the previous lesson, the students learned about solving problems involving percentage increase and percentage decrease.</p> <p>To assess their understanding of these concepts, learners must answer Activity 1. In this activity, the learners will determine whether the given situation shows a percentage increase or decrease. The teacher will ask the learners to cite specific reasons to justify their answers. Learners are expected to spill out on the process of percent.</p> <p>Refer to Activity 1 on the Worksheet for complete instructions and visual aids that might make the activity more engaging. The teacher may also ask the students to justify their answers.</p> <p>To enhance the learning experience, teachers can engage students by asking questions that relate to their existing knowledge:</p>	<p>In the previous lesson, the students learned how to solve money problems that involve discounts and sales.</p> <p>Previously, you learned the rate, base, and percentage. To test their understanding of these concepts, they will be given a problem involving finding rate, base, and percentage.</p> <p>For instructions and visual aids that may help make the activity more engaging, please refer to Activity 1 on the worksheet.</p> <p>To enhance the learning experience, you can engage students' existing knowledge by posing the following questions:</p> <ol style="list-style-type: none"> 1. How did you find the activity? 2. Were you able to answer the given problem correctly? 3. How did you arrive at your answer to the problem? 	<p>In the previous lessons, the students learned how to solve money problems involving discounts, sales, commission, and sales tax.</p> <p>To assess their understanding of these concepts, they will be asked to solve a given word problem.</p> <p>Refer to Activity 1 on the Worksheet for complete instructions and visual aids that might make the activity more engaging. In the previous lesson, the students learned how to solve money problems that involve simple interest.</p> <p>To test their understanding of these concepts, they will be given a word problem to solve. For instructions and visual aids that may help make the activity more engaging, please refer to Activity 1 on the worksheet.</p>	<p>In the previous lessons, the students learned how to solve money problems involving percentages, discounts, sales, commission, sales tax, and simple interest.</p> <p>To assess their understanding of these concepts, they will be asked to answer Activity 1 on the Worksheet. The teacher may present this activity as a game to make it more interesting.</p> <p>To enhance the learning experience, teachers can engage students by asking questions that relate to their existing knowledge:</p> <ol style="list-style-type: none"> 1. How did you find the activity? 2. Were you able to answer each item logically? 3. How did you arrive at your answer for each? <p>Can you explain the importance of this activity in real life?</p>
--	--	--	--	--

	<p>1. How can we determine a percentage? 2. Were you able to determine whether the problem involves an increase or decrease?</p> <p>What mathematical operations/ skills are needed to decide whether to increase or decrease?</p> <p>For concept development, the teacher will assign Activity 2 of the worksheet to review converting decimals to percentages and vice versa.</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <p>1. Given the decimal, how do we convert it into percent? 2. Given the percentage, how do we convert it into decimal?</p>	<p>To assess learners' comprehension of the lesson, ask the following questions:</p> <p>1. Did you understand the concepts?</p> <p>Is there a concept that needs clarification?</p>	<p>To enhance the learning experience, teachers can engage students by asking questions that relate to their existing knowledge:</p> <p>1. How did you find the activity? 2. Were you able to answer the given problem correctly? 3. How did you arrive at your answer to the problem? 4. Can you explain the importance of this activity in real life?</p> <p>To check if the learners have grasped the key ideas of the lesson, you may ask the following questions to the learners:</p> <p>1. Are these concepts clear to you? 2. What concept needs clarification?</p>	
<p><i>Lesson Purpose/Intention</i></p>	<p>Following the completion of the activity, the teacher will provide an overview of the expected outcomes, focusing on the distinctions between the concepts learned in the previous lesson and the deeper understanding to be gained from the</p>	<p>Once Activity 1 has been completed, the teacher will provide an overview of the expected outcomes of the current lesson. This overview will focus on distinguishing between the concepts learned in the previous lesson and the more in-depth</p>	<p>After Activity 1 is completed, the teacher will provide an overview of the expected outcomes, focusing on the distinctions between the concepts learned in the previous lesson and the deeper understanding gained from the current</p>	<p>After the execution of Activity 1, the teacher will provide an overview of the expected outcomes, focusing on the distinctions between the concepts learned in the previous lesson and the deeper understanding gained from the current</p>

	<p>current lesson. The key objective of this portion of the lesson is to solidify the understanding of the application of percentages in real life, specifically on discounts and sales, while highlighting their significance in more advanced contexts. Once the activity is finished, the teacher will summarize the intended outcomes, emphasizing the differences between the concept taught in the previous lesson and a more comprehensive discussion of the current lesson.</p> <p>The primary goal of this section of the lesson is to strengthen their understanding of computing percentages in practical situations, particularly about discounts and sales, while also emphasizing their importance in more challenging contexts.</p>	<p>understanding that can be gained from the current one. The main objective of this portion of the lesson is to reinforce the application of percentages in real-life situations and emphasize their significance in more advanced contexts.</p>	<p>lesson. The key objective of this portion of the lesson is to solidify the knowledge of applying percentages in real life while highlighting their significance in more advanced contexts.</p>	<p>lesson. The key objective of this portion of the lesson is to solidify the knowledge of applying percentages in real life while highlighting their significance in real-life financial situations.</p>
<p><i>Lesson Language Practice</i></p>	<p>To aid language development, learners will participate in a jumbled letter activity. Please refer to Activity 3 of the worksheet for complete</p>	<p>To facilitate language development, learners will answer Activity 3 of the Worksheet. To make this activity more interesting,</p>	<p>To facilitate language development, learners will answer Activity 3 of the Worksheet. To make this activity more interesting, the teacher may present it</p>	<p>To facilitate language development, learners will answer Activity 2 of the Worksheet. To make this activity more interesting,</p>

	<p>instructions. To add fun, the activity can be presented as a game.</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. How are these words related to each other? 2. Define/describe each. 3. How is it related to your daily activities? <p>After the activity, you need to emphasize that the learners will realize the relevance of these words to the lesson throughout the discussion.</p>	<p>the teacher may present it through a game.</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. What is your understanding of the following terms: <ol style="list-style-type: none"> a. Discount b. Mark-up c. Commission d. Sales Tax e. Sales Price f. Discount Rate <p>The teacher will let the learners understand the terminologies by presenting it</p> <ol style="list-style-type: none"> a. Discount – is a decrease in the price of an item. It is the amount deducted from the original price. b. Mark-up – is the amount to be added on items or goods that they sell for profit c. Commission – is the amount of money a person receives for selling something. d. Sales Tax – a tax imposed on the sale of goods and services. This is in the form of Value Added 	<p>through a game entitled WORD SEARCH</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. How did you find the activity? 2. How did you guess the words? 3. How are these words related to each other? 4. What topic/s do you think we'll discuss today in relation to these terms? Why do you say so? <p>After the activity, you need to emphasize that the learners will realize the relevance of these words to the lesson throughout the discussion.</p>	<p>the teacher may present it through a game entitled “Guess the Word.”</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. How did you find the activity? 2. How did you guess the words? 3. What came into your mind while doing the activity? Please explain your answer. 4. How are these words related to each other? 5. What do you think is our lesson for today? <p>After the activity, you need to emphasize that the learners will realize the relevance of these words to the lesson throughout the discussion.</p>
--	---	---	---	---

		<p>Tax (VAT)</p> <p>e. Sales Price—also known as the net price or discount price, it is the price of the item after the discount has been deducted.</p> <p>f. Discount Rate -is the percentage taken off from the original price.</p> <p>3. How are these words related to each other?</p> <p>After the activity, you need to emphasize that the learners will realize the relevance of these words to the lesson throughout the discussion.</p>		
--	--	--	--	--

During/Lesson Proper

<p><i>Reading the Key Idea/Stem</i></p>	<p>During the concept development, the teacher will ask the students to provide situations where percentages and/or interest may be heard/used (e.g., discounts or sales offered by Shopee/ Lazada/ TikTok Shops or in malls.</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. Can you immediately compute how much 	<p>During the concept development, the teacher will provide situations/scenarios where the application of percentages involving commission and sales tax may be heard/used in businesses. (e.g., Shopee/Lazada/ TikTok Shops and malls offer discounts/sales, commission, sales tax, taxes, etc.).</p> <p>To connect this activity to the succeeding</p>	<p>During the concept development, the teacher will ask the students to cite situations where percentages/simple interest may be heard/used in businesses (e.g., bank loans, etc.).</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. What do you feel when you see these things in different businesses? 2. What do you feel upon 	<p>During the concept development, the teacher will ask the students to cite budgeting situations.</p> <p>To connect this activity to the succeeding tasks, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. How much is your daily allowance/baon? 2. How do you feel about it? 3. Is it enough for you as a student? Why or why not?
---	---	--	--	---

	<p>discount you can get when you buy an item under discount/ sale?</p> <p>2. How do you do it?</p> <p>Discount – is a decrease in the price of an item. It is the amount deducted from the original price.</p> <p>Sale- Available for purchase at reduced prices.</p>	<p>scenario/situation, the teacher may ask to perform the following tasks/questions to the learners.</p> <ol style="list-style-type: none"> 1. Calculate the commission. 2. Determine the total cost and <p>Compare the total cost for the customer (including commission and sales tax)</p>	<p>knowing about it?</p> <ol style="list-style-type: none"> 3. Can you immediately compute how much tax you should pay when you buy an item from any store? <p>How do you do it?</p>	<ol style="list-style-type: none"> 4. Were you able to save an amount from your allowance? Why or why not? 5. What would you do in order to make your budget enough for the family? <p>If you were a parent, how can you make your children's allowance enough for their everyday needs? Why?</p>
<p><i>Developing Understanding of the Key Idea/ Stem</i></p>	<p>To develop learners' understanding of the key ideas presented in the activity above, the teacher will let the learners answer the questions in Activity 4 in the Worksheet. This can be done in pairs or groups.</p> <p>For immediate feedback, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. How did you feel about the activity? 2. What concepts did you apply in answering the questions in the activity? <p>Did the activity help you understand better the concept of solving money problems involving discounts? Sales?</p>	<p>To develop the learners' understanding of the key ideas presented in the activity above, the teacher will let the learners answer the questions in Activity 4 on the Worksheet. This can be done in pairs or groups.</p> <p>For immediate feedback, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. Can you tell me about your experience with the activity? 2. What concepts did you apply in doing the tasks/activity? <p>Did the activity help you understand the concept of solving money problems involving the Commission? Sales Tax?</p>	<p>To develop learners' understanding of the key ideas presented in the activity above, the teacher will let the learners answer the questions to be found in Activity 3 on the Worksheet. This can be done in pairs or a group.</p> <p>For immediate feedback, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. Can you tell me about your experience with the activity? 2. What concepts did you apply in answering the questions in the activity? <p>Did the activity help you understand better the concept of solving money problems involving discounts? Sales?</p>	<p>To develop learners' understanding of the key ideas presented in the activity above, the teacher will let the learners answer the questions in Activity 3 on the Worksheet. This can be done in pairs or a group.</p> <p>For immediate feedback, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. How did you find the activity? 2. Was it easy or hard to do? Why? 3. What problems did you encounter while doing such an activity? Why? 4. What concepts did you apply to be able to do the activity? 5. Did the activity help you understand the

				concept of budgeting? Explain.
<i>Deepening Understanding of the Key Idea/ Stem</i>	<p>For a better understanding, the learners shall be asked to accomplish Activity 5 on the Worksheet. This can be done in a group or pairs.</p> <p>To identify which part of the lesson the learners still find confusing, the teacher may facilitate the questions.</p> <ol style="list-style-type: none"> 1. Were you able to accomplish all the given tasks correctly? 2. What part of the activity are you still confused about? <p>What ideas or concepts do we still need further discussion?</p>	<p>For a better understanding, the learners shall be asked to accomplish Activity 5 on the Worksheet. This can be done in a group or pairs.</p> <p>To identify which part of the lesson the learners still find confusing, the teacher may facilitate the process questions.</p> <p>Were you able to accomplish all the given tasks correctly? What part of the activity are you still confused about?</p> <p>What ideas or concepts do we still need further discussion?</p>	<p>For a better understanding, the learners shall be asked to accomplish Activity 4 on the Worksheet. This can be done in a group or pairs.</p> <p>To identify which part of the lesson the learners still find confusing, the teacher may facilitate the questions.</p> <ol style="list-style-type: none"> 1. Were you able to accomplish all the given tasks correctly? 2. What part of the activity are you still confused about? <p>What ideas or concepts do we still need further discussion?</p>	<p>For a better understanding, the learners shall be asked to accomplish Activity 4 in the Worksheet. This can be done in a group or pairs.</p> <p>For immediate feedback, the teacher may ask the following questions:</p> <ol style="list-style-type: none"> 1. How did you find the activity? 2. What were the problems that you encountered while doing the activity? Why? 3. What concepts did you apply to be able to do the activity? <p>Did the activity help you understand the concept of budgeting? Explain.</p> <p>To identify learners' confusion about the activities, you may facilitate the process questions.</p> <ol style="list-style-type: none"> 1. Have you accomplished all the given tasks? 2. What part of the activity were you still confused about?

				What ideas or concepts do we still need further discussion?
After/Post-Lesson Proper				
<i>Making Generalizations and Abstractions</i>	As a concluding part of the lesson, the learners will do Activity 6 in their Worksheet.	As a concluding part of the lesson, the learners will do Activity 6 in their Worksheet.	As a concluding part of the lesson, the learners will do Activity 5 in their Worksheet.	As a concluding part of the lesson, the learners will do Activity 5 and 6 in their Worksheet.
<i>Evaluating Learning</i>	<ul style="list-style-type: none"> Indicate how the learner's understanding will be assessed based on the completed activity. Suggest reflection questions or prompts for learners to write about their learning. <p>To determine the learning outcomes, learners will answer Activity 7 of the provided Worksheet.</p>	<p>To determine the learning outcomes, learners will answer Activity 7 of the provided Worksheet.</p>	<p>To determine the learning outcomes, learners will answer Activity 6 of the provided Worksheet.</p> <ul style="list-style-type: none"> As we conclude this lesson, reflecting on the valuable skills we've developed is essential. We have navigated the complexities of applying percentages to solve money problems. Initiate a Reflective Discussion by asking open-ended questions like, "What was the most important concept you learned today?" or "How can you apply today's lesson in real-life situations?" Encourage students to think about how the lesson connects to practical scenarios like entrepreneurship or business. Encourage self-assessment by asking, "What did you find challenging about this 	<p>To determine the learning outcomes, learners will answer Activity 7 of the provided Worksheet.</p>

			<p>lesson, and how did you overcome it?" or "What skill do you feel you improved the most?"</p> <ul style="list-style-type: none"> • Conclude the session by summarizing the key takeaways of the lesson, highlighting how each point contributes to a broader understanding of mathematics and its application. Let the learners enumerate the knowledge gained from the lesson. 	
<i>Additional Activities for Application or Remediation (if applicable)</i>	For the learners who cannot reach 75% of the assessment, Activity 8 is provided for intervention.	For the learners who cannot reach 75% of the assessment, Activity 8 is provided for intervention.	For the learners who cannot reach 75% of the assessment, Activity 7 is provided for intervention.	For the learners who cannot reach 75% of the assessment, Activity 8 is provided for intervention.
<i>Remarks</i>	<p>The lesson focuses on solving money problems involving discounts and sales. The following day, solving money problems involving commission and sales tax will be discussed.</p> <p>Note: Other remarks can be noted as the need arises.</p>	<p>The lesson focuses on solving money problems involving commission and sales tax.</p> <p>Solving money problems involving percentages and simple interest will be discussed the following day.</p> <p>Note: Other remarks can be noted as the need arises.</p>	<p>The lesson focuses on solving money problems involving commission and sales tax. Solving money problems involving percentages and simple interests will be discussed the following day.</p> <p>Note: Other remarks can be noted as the need arises.</p>	<p>The lesson focuses on budgeting. This prepares the learner for financial planning, which will be discussed the following day.</p> <p>Note: Other remarks can be noted as the need arises.</p>
<i>Reflection</i>				