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DepED
DEPARTMENT OF EDUCATION

Learning Activity Sheet for Mathematics

Quarter 2
Lesson
3

Worksheet for Mathematics Grade 7
Quarter 2: Lesson 3 (Week 3)
SY 2024-2025

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LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	**Quarter:**	2
Lesson No.:	3	**Date:**	
Lesson Title/Topic:	Unit Conversion		
Name:		**Grade & Section:**	

I. Pre-lesson Activity: MKW Chart

II. Objective: At the end of the activity, the learners reflect on what they measure, what they already know about measurement, and what they want to learn about measurement concepts.

III. Materials Needed: Printed or digital MKW chart

IV. Instructions:

1. Fill out the MKW chart to reflect on your experiences with measurement.
2. In the "What I Measure" column, list objects, quantities, or daily situations requiring measurement. Consider different aspects, such as length, weight, volume, time, etc.
3. In the "What I Know About Measurement" column, write down what you already know about measurement concepts, units, or tools.
4. In the "What I Want to Learn About Measurement" column, identify any specific questions or topics related to measurement that you are curious about or would like to explore.
5. Share your MKW chart with the whole class.

What I Measure	What I Know About Measurement	What I Want to Learn About Measurement

V. Synthesis:

1. What is the importance of measurement in various contexts?

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2. How does your understanding of measurement concepts help you in your daily lives and future studies?

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I. Pre-lesson Activity: Measurement Situation Analysis

II. Objective: At the end of the activity, the learners analyze real-life situations requiring measurements.

III. Materials Needed:

- Printed or digital handout with measurement situations
- Worksheets for learners to record their analyses

IV. Instructions:

1. Choose one scenario from the handout (provided by your teacher).
2. Analyze the situation and identify the measurement concepts involved.
3. Describe how measurement and unit conversion would be essential to solving the problem or making an informed decision in that scenario.

What real-life situation did you select, and why did you choose it?		
What are the measurements involved in the situation?	Describe any challenges or complexities related to measurements in the situation. Are there different measurement systems or units that need to be considered?	How might unit conversions be necessary to solve the challenges or complexities related to measurements in the situation?

V. Synthesis:

1. Can you think of any real-life experiences where you've encountered unit conversion needs?

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2. In your analysis, did you identify any additional information or resources that might be useful for someone facing the same situation? What would you recommend?

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Learning Area:	Mathematics	**Quarter:**	2
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Lesson Title/Topic:	Unit Conversion		
Name:		**Grade & Section:**	

I. **Activity No. 1:** Metric Conversion Practice

II. **Objective:** At the end of the activity, the learners apply their understanding of metric-to-metric conversions by solving practice exercises.

III. **Materials Needed:** Printed Metric Conversion Practice Worksheets, Calculators (Optional)

IV. **Instructions:** Solve the conversion problems below by applying your knowledge of metric-to-metric units and conversions.

LENGTH	MASS/WEIGHT	VOLUME
a. Convert 5.5 meters to centimeters.	a. Convert 3.5 kilograms to grams.	a. Convert 1.5 liters to milliliters
Solution:	Solution:	Solution:
b. A ribbon is 42 centimeters long. Convert this length to millimeters.	b. A bag of rice weighs 2.25 kilograms. Convert this weight to milligrams.	b. A pitcher contains 750 milliliters of mango juice. Express this volume to liters.
Solution:	Solution:	Solution:
c. A basketball court is 28 meters long. Express this length in millimeters.	c. A fruit weighs 60 grams. Express this weight in kilograms.	c. A fish tank holds 30,000 milliliters of water. Convert this volume to liters.
Solution:	Solution:	Solution:

V. Synthesis:

1. Why do we need to convert one metric unit of measurement to another?

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2. Give two or more instances where you convert measurement units in your daily life.

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Learning Area:	Mathematics	**Quarter:**	2
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Lesson Title/Topic:	Unit Conversion		
Name:		**Grade & Section:**	

I. Activity No. 2: Unit Conversion Relay

II. Objective: At the end of the activity, the learners practice converting measurements between the English system and the metric system through a fun and engaging relay race.

III. Materials Needed: index cards or small pieces of paper, marker or pen, stopwatch or timer

IV. Instructions:

1. Each team will take turns racing to the halfway point, where they will pick a card, read the measurement and unit on the card, and then convert it to the specified system. For example, if the card reads “12 inches convert to centimeters”, the student must convert it to centimeters (“30.48 cm”). They then write the converted value on the back of the card and return it to their team.
2. The next team member in line will take the card, check the conversion, and run to the halfway point to pick up a new card.
3. Continue this relay until all cards have been correctly converted. Each team must work together to ensure that the conversions are accurate.
4. The first group to complete the conversion of measurement on all the cards will be the winner.

V. Synthesis:

1. What are your strategies for converting measurements between the English system and the metric system?

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Name:		**Grade & Section:**	

I. **Activity No. 3:** Conversion Challenge: Real-world Problems

II. **Objective:** At the end of the activity, the learners solve word problems that require unit conversion.

III. **Materials Needed:** Worksheet with word problems

IV. **Instructions:** Work collaboratively with your group members in solving the given problems/scenarios. Write your answer in the appropriate box.

Scenario	Solution
1. Length Conversion Scenario: - "Your friend is planning a trip, and they have a map that provides distances in kilometers (km). However, they prefer to understand distances in meters (m). Help your friend by converting 5.6 kilometers to meters."	
2. Volume Conversion Scenario: - "You are preparing a recipe for a traditional Filipino dish that calls for 3 liters (L) of coconut milk. However, the coconut milk you have is measured in milliliters (mL). Convert 3 liters to milliliters."	
3. Weight Conversion Scenario: - "You are shopping for vegetables in the local market, and the vendor provides you with the weight of vegetables in kilograms (kg). You prefer to understand the weight in grams (g). Convert 2.5 kilograms to grams."	

4. Distance Conversion Scenario: - "You are planning a road trip across the beautiful countryside of the Philippines. Your car's speedometer displays speeds in miles per hour (mph), but road signs in the Philippines often indicate speed limits in kilometers per hour (km/h). You are driving at 60 mph and want to know the equivalent speed in km/h. Convert 60 mph to km/h."	
5. Weight Conversion Scenario: - "You are shopping for fruits in a local market, and the vendor provides you with the weight of fruits in pounds (lb). However, you prefer to understand the weight in kilograms (kg) since it is commonly used in the Philippines. Convert 5.5 pounds to kilograms."	
6. Capacity Conversion Scenario: - "You are purchasing a bottle of refreshing soda from a convenience store. The label on the bottle indicates the volume in fluid ounces (fl oz), but you want to know the equivalent volume in milliliters (mL) as it is used in many recipes in the Philippines. Convert 16 fl oz to mL."	
7. Speed Conversion Scenario: - "You are watching a thrilling Formula 1 race on television, and the speed of the race cars is announced in miles per hour (mph). You want to understand the speed in feet per second (ft/s) since this unit is commonly used in American sports. Convert a car's speed of 200 mph to feet per second (ft/s)."	

V. Synthesis:

Each group will present the seven problems and their solutions to the class. They will also share their reflections on their experiences in solving the problems.