

5

Worksheet for Science

Quarter 1

Week

7

Worksheet for Science Grade 5
Quarter 1: Lesson 7
SY 2023-2024

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LEARNING ACTIVITY SHEET NO. 1

Learning Area:	Science	Quarter:	1st Quarter
Lesson No.:	1	Date:	
Lesson Title/ Topic:	Using Appropriate Units for Measuring Mass and Temperature		
Name:		Grade & Section:	

I. **Activity No. 1: Measurement Matters**

- II. **Objective(s):** *At the end of the activity, learners are expected to:*
- measure the masses of the objects and arrange them in increasing masses;
 - measure the temperature of materials using a thermometer; and
 - identify which unit for measurement is more appropriate to use.

III. **Materials Needed:**

Electronic Balance/ weighing scale (the teacher will be providing one)

Five objects of different sizes (eraser, pencil, paperclip, etc.)

Thermometer (the teacher will be providing one)

3 glasses

Water

IV. **Instructions:**A. **Mass Matters**

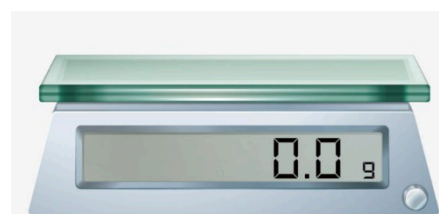
- In a group of 5 members, collect five (5) objects of different sizes. Can you guess which one has the most mass?
- Write your prediction by arranging the objects from the one with the greatest mass to the one with the smallest mass.

Most Mass - _____, _____, _____, _____, _____ - least mass
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- To confirm your prediction, make use of the balance or the weighing scale.
Place the object one at a time. Just like reading time on a watch, a manually operated weighing scale is read by looking at the number where the hand is pointing.

Example: The small watermelon weighs 1 kg while the bigger one weighs 2kg.

But if you are using an electronic balance, you just read to record immediately the measurement displayed on the screen after placing the object on the pan.



Note: Do not forget to identify what unit is used by the scale or balance.

4. Measure each object using the electronic balance/ weighing scale. Record your measurements, including the number and unit, in the data table.
5. Arrange the objects from the heaviest to lightest based on the measured masses of the object. (Rank 1 – heaviest; Rank 5 – lightest)
6. Compare your prediction and the actual measurement. Identify which unit is best fit to use in measuring the masses of the chosen objects.

Data Table

Mass Matters			
OBJECT	MASS (Number + Unit)	RANK (1-5)	Convert to a more Appropriate Unit (if applicable)
1.			
2.			
3.			
4.			
5.			

B. Temperature Test

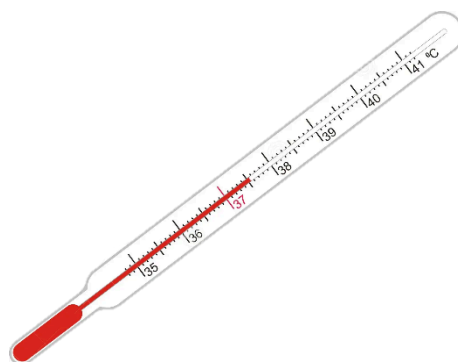
1. The teacher will provide three (3) sets of glasses with water. Can you guess which one has a higher temperature?
2. Write your prediction by arranging the glasses from the one with the greater temperature to the least. Label the glasses first.

Highest Temperature Glass ____ <div style="text-align: right; padding-right: 20px;">Glass ____</div> Lowest Temperature Glass ____

3. How do we use the thermometer?

This is a thermometer with a unit in degrees Celsius (°C). The red bulb at the bottom expands when exposed to any matter, even the air. The value corresponding to the increase of the red line is the temperature of the object.

Example: The red line is located between the 37°C and 38°C marks. Count the number of small divisions between 37 and 38. In this instance, there are 9 small lines, with the 10th line being 38°C. Therefore, each small line represents 0.1°C. Counting up to the 5th small line indicates a temperature of **37.5°C**. Always measure the temperature at eye level.



4. Measure the temperature of the water by submerging the thermometer into the water without touching the bottom of the glass. Do this for all glass containers.
5. Compare and rank the glasses of water in terms of their temperature. Rank 1 – highest temperature; Rank 3 – lowest temperature.

TEMPERATURE TEST		
GLASS	TEMPERATURE (Number + Unit)	RANK (1-3)
1.		
2.		
3.		

Guide Questions:

1. Were your predictions correct regarding the mass of the objects? Why or why not?

2. Were your predictions correct regarding the temperature of the water? Why or why not?

3. Is it important to use an appropriate unit when measuring? Why or why not?

V. Synthesis/Extended Practice/Differentiation (if needed):

Provide not less than 100 words of reflection about the activity you conducted, answering the question *“What is the importance of knowing units of measurement in your daily life?”*

LEARNING ACTIVITY SHEET NO. 2

Learning Area:	Science	Quarter:	1st Quarter
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Lesson No.:	1	Date:	
Lesson Title/ Topic:	Appropriate Unit to Use in Measurement		
Name:		Grade & Section:	

I. Activity No. 2: Show me the measurement

II. Objective(s): *At the end of the activity, learners are expected to:*

- identify which unit is more appropriate to use in measuring mass; and
- display the correct reading of measurement for mass and temperature.

III. Materials Needed:

Worksheet
Crayons
Pencil

IV. Instructions:

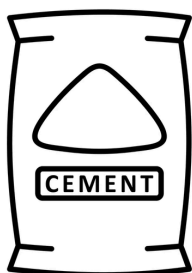
- You will work on this worksheet with your groupmates. Group yourselves into 6 and work simultaneously or collaboratively for Parts A, B and C.

A. Appropriate Unit to Use

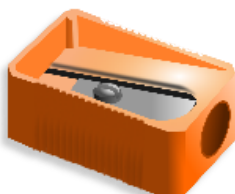
Which unit is appropriate to use to measure the following? Choose between grams, kilograms, and milligrams.



1. _____



2. _____



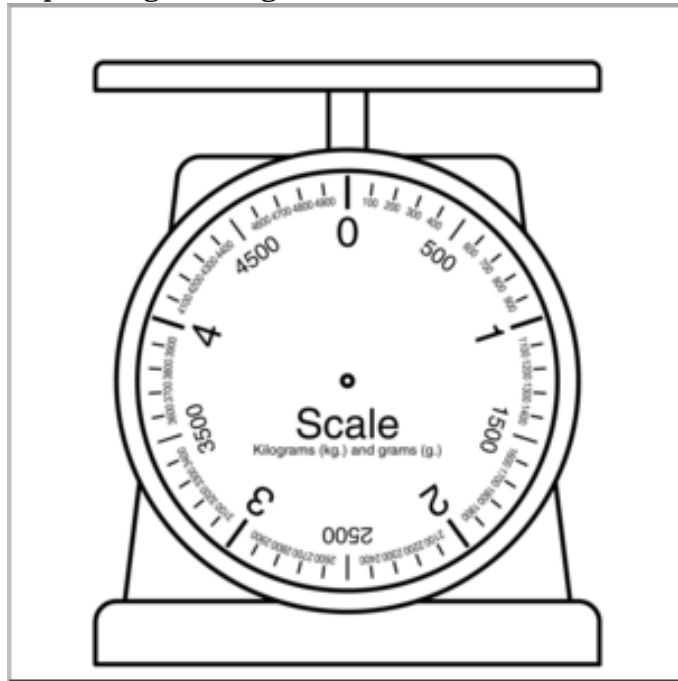
3. _____

B. Show the Mass

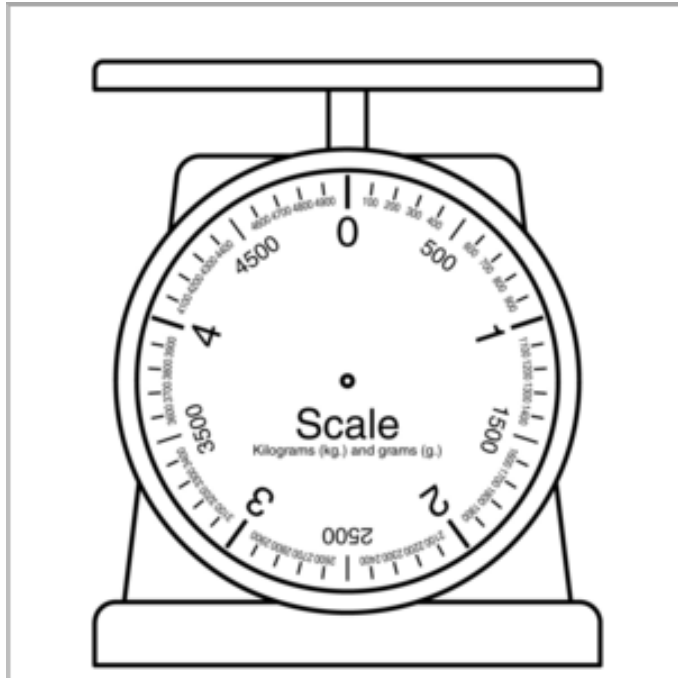
Display the correct measurement of the mass using a weighing scale by drawing the hand of the scale corresponding to the measurement given.

Draw the hand corresponding to the given mass.

1. 4 kilograms



2. 2500 grams

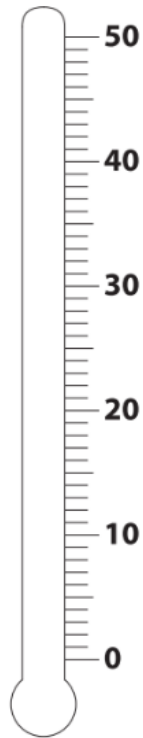


C. Show the Temperature

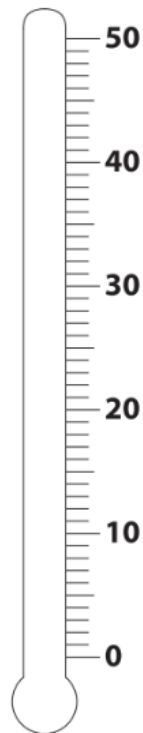
Display the correct measurement of temperature using a thermometer by coloring the thermometer corresponding to the measurement given.

Color the thermometer to show the given temperatures below.

1. 10°C



2. 45°C



Guide Questions:

1. How do you know which unit is appropriate to use in measuring the mass of a material?

2. How do you determine the mass of an object if the scale hand is not exactly on a numbered line?

V. Synthesis/Extended Practice/Differentiation (if needed):

Provide not less than 100 words of reflection about the activity you conducted answering the question “*What is the importance of using appropriate units of measurement in your daily life?*”

ANNEX A

Rubric for Grading Final Output of Experiment about Soil Types and Plant Growth

Criteria	Excellent (5 points)	Good (3-4 points)	Fair (2 points)	Needs Improvement (1 point)
Content Knowledge	Clearly explains the scientific method steps used in the experiment.	Explains most of the scientific method steps used in the experiment.	Explains some of the scientific method steps used in the experiment, but with some confusion.	Lacks clear explanation of the scientific method steps used in the experiment.
Analysis and Conclusions	Draws strong conclusions from the data, explains why the results support or refute the hypothesis, and connects findings to the importance of soil for plants.	Draws some conclusions from the data, but explanation of how the results connect to the hypothesis or the importance of soil may be weak.	Draws weak conclusions from the data, or explanation is unclear. May not connect findings to the importance of soil.	Does not draw conclusions from the data or connect findings to the importance of soil.