| GROUP #: | Date: |
|----------|------------|
| SECTION: | SCAFFOLD 2 |

MEASUREMENT OLYMPICS

Directions: The Measurement Olympics consists of 4 challenges that you need to accomplish at home. This group activity aims to challenge your skills in giving accurate and precise measurements to successfully carry out a scientific investigation.

Materials:

- Ruler or measuring tape
- Measuring cups or any container with volume markings
- Kitchen scale
- Thermometer

Challenge 1: Length Measurement

Objective: Measure the length of 3 different objects around your home.

Materials: Ruler or measuring tape.

Procedure:

- Select 3 objects of varied lengths (e.g., a book, a pencil, a table).
- Measure the length of each object.
- Record your measurements in centimeters (cm) or millimeters (mm).

Data Table:

| Object | Length (cm) |
|--------|-------------|
| 1. | |
| 2. | |
| 3. | |

Challenge 2: Volume Check

Objective: Measure the volume of 2 different containers with irregular shapes.

Materials: Measuring cups or any container with volume markings.

Procedure:

- Fill each container with water.
- Pour the water into a measuring cup to determine the volume.
- Record your measurements in milliliters (mL).

Data Table:

| Container | Volume (mL) |
|-----------|-------------|
| 1. | |
| 2. | |

Challenge 3: Mass Measurement

Objective: Measure the mass of 2 different objects around your home.

Materials: Kitchen scale.

Procedure:

Select 2 objects of varied masses (e.g., an apple, a book).

- Place each object on the kitchen scale to measure its mass.
- Record your measurements in grams (g).

Data Table:

| Object | Mass (g) |
|--------|----------|
| 1. | |
| 2. | |

Challenge 4: Temperature Investigation

Objective: Measure the temperature of 3 different water samples.

Materials: Thermometer.

Procedure:

- Prepare 3 water samples at different temperatures (e.g., cold, room temperature, warm).
- Use the thermometer to measure the temperature of each water sample.
- Record your measurements in degrees Celsius (°C).

Data Table:

| Water Sample | Temperature °C |
|--------------|----------------|
| Sample 1 | |
| Sample 2 | |
| Sample 3 | |

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| What did you learn about measuring different physical quantities | 1. | . What did you | u learn about | measuring | different | ohysical (| quantities? |
|--|----|----------------|---------------|-----------|-----------|------------|-------------|
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- 2. Why is it important to use standard units when recording measurements?
- 3. How did this activity help you understand the process of scientific investigation?

(Please include your documentation of every experiment, put it on a separate sheet of paper.)

GROUP #: ____ GROUP MEMBERS: (please list below your group members)