

Name: _____ Date: _____

Unstoppable Measurement Pro: The 4th Grade Metric Challenge

Can you accurately measure the world around you? Use tools and units to solve real-world problems from the size of an ant to the weight of a chef's cake.

1. A scientist is tracking the length of a monarch butterfly's wing. Which unit would provide the most precise measurement for this small insect?

- A. Kilometers
- B. Millimeters
- C. Liters
- D. Kilograms

2. True or False: A graduated cylinder is the best tool to use if you want to find the exact mass of a solid rock sample.

- A. True
- B. False

3. If a baker has a bag of flour that weighs 3 kilograms, how many total grams is she carrying to her mixing bowl?

- A. 30 grams
- B. 300 grams
- C. 3,000 grams
- D. 30,000 grams

4. An oceanographer is recording the temperature of a coral reef. Why is it important that they use a standardized unit like Celsius or Kelvin?

- A. So they can use a longer thermometer
- B. To make the numbers look more impressive
- C. Because standard units have no numbers
- D. To ensure other scientists can compare the data accurately

5. You are measuring the height of a sunflower that is exactly 2 meters tall. This is the same as _____ centimeters.

- A. 20
- B. 200
- C. 2,000
- D. 2

6. True or False: If you step on a scale to find your weight, you are technically measuring the force of gravity on your mass.

- A. True

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B. False

7. A track coach wants to time a runner's 100-meter dash. Which tool and unit combination is the most appropriate for this task?

- A. A ruler and minutes
- B. A stopwatch and seconds
- C. A thermometer and degrees
- D. A scale and grams

8. During a rainstorm, a meteorologist uses a rain gauge to collect 45 milliliters of water. Milliliters are a unit used to measure _____.

- A. Volume
- B. Mass
- C. Length
- D. Weight

9. True or False: Precision in measurement means you get the same result every time you measure the same object.

- A. True
- B. False

10. You need to measure out exactly 250ml of milk for a recipe. Which action ensures your measurement is accurate?

- A. Looking at the cup from high above
- B. Holding the measuring cup in the air
- C. Placing the cup on a flat surface and checking at eye level
- D. Estimating based on how heavy the milk feels