

Topic: Measurement Worksheet

Summary: Students learn to use SI units.

Goals & Objectives: Students will be able to convert SI units. Students will be able to make measurements using the metric system.

Standards: CA Investigation and Experimentation: *1.* Analyze situations and solve problems that require combining and applying concepts from more than one area of science.

Time Length: 30 minutes

Materials:

- Pencils
- Scratch paper for calculations
- Handout

Procedures:

1. Students fill in the table where the measurement, unit, or symbol is missing.
2. Students convert prefixes by answering questions 6 – 11. The data table can be used to help students with the conversions.
3. In questions 12- 20, students convert the numbers into scientific notation. Students keep the SI units the same (grams stay grams, not kilograms).

Accommodations:

Students with an IEP can have extra time or do questions 1-5, 5-6, 12-13, 17-18. ESL students can work with, but not copy, a student fluent in English.

Evaluation:

Each question is worth 1 point. This assignment is worth a total of 20 points.

Measurement Worksheet

Fill in the table for some SI units:

Measurement	Unit	Symbol
1. Length	meter	
2. Mass		g
3. Volume		L
4. Temperature	Celsius	
5.	second	s

Use the data below to answer questions 6 – 11. Make sure to write the units.

1000	Kilo
1	Base unit
.01	Centi
.001	Milli

6. How many centimeters are in three meters? _____
7. 2000 grams equals how many kilograms? _____
8. A line 20 millimeters long is how many centimeters long? _____
9. If a student is one meter tall. What is the height in kilometers? _____
10. A paperclip's mass is 15 grams. What is its mass in milligrams? _____
11. How many milliliters are in a two liter bottle? _____

Express the following numbers using scientific notation. Write the unit symbol.

Example: 100 g = 1.0×10^2 g

12. 200,000 L = _____
13. .003 m = _____
14. _____ = 3.4×10^{-5} kg
15. 500,000,000 m = _____
16. .00074 g = _____
17. .00000081 cm = _____
18. _____ = 9.56×10^4 ml
19. _____ = 8.6×10^6 cm
20. _____ = 1.2×10^{-2} km