

Conversion Challenge

Write the correct abbreviation for each metric unit.

1) Kilogram _____

4) Milliliter _____

7) Kilometer _____

2) Meter _____

5) Millimeter _____

8) Centimeter _____

3) Gram _____

6) Liter _____

9) Milligram _____

Compare using $<$, $>$, or $=$.

16) 63 cm 6 m17) 5 g 508 mg18) 1,500 mL 1.5 L19) 536 cm 53.6 dm20) 43 mg 5 g21) 3.6 m 36 cm

Example: width of a hand
10 centimeters

1. liquid in a spoon

5 _____



2. height of a first grader

1 _____



3. mass of a pencil

4 _____



4. length of a foot

30 _____



5. soda in a can

355 _____



6. capacity of a bathtub

400 _____



7. mass of a person

60 _____



8. soup in a bowl

960 _____



Metric M

Name _____

LENGTH:

1. What is the basic unit for length? _____
2. Circle the best unit for measuring each distance:
 - a. Thickness of an eyelash: mm cm m
 - b. Length of a pencil: cm m km
3. Use a meter stick or metric ruler to find each measurement.
 - a. Width of this page _____ mm or _____ cm
 - b. Length of an unsharpened pencil _____ cm
4. Convert the following measurements:
 - a. 34 mm = _____ cm
 - b. 3 km = _____ m
 - c. 234 cm = _____ m
 - d. 35 m = _____ mm

MASS:

5. What is the basic unit for mass? _____
6. Circle the best unit for measuring each mass:
 - a. Amount of spices in a batch of cookies: mg g kg
 - b. Your mass: mg g kg
 - c. Mass of 10 pennies: mg g kg
7. Use a triple-beam balance to find each measurement.
 - a. Mass of an ink pen _____ g
 - b. Mass of a can of soda _____ g
8. Convert the following measurements:
 - a. 16 mg = _____ g
 - b. 4.7 kg = _____ g
 - c. 12,345 g = _____ kg
 - d. 2 g = _____ mg

TEMPERATURE:

15. What is the basic unit for temperature? _____
16. What are the freezing and boiling points for water on this scale? _____
17. Circle the best choice:
 - a. Temperature on a hot summer's day: 0 ° 35 ° 90 °
 - b. Room temperature: -20 ° 0 ° 20 °
18. Convert the following measurements.
 - a. 90° F = _____ ° C
 - b. 450 F = _____ ° C

VOLUME:

19. What is the basic unit for volume? _____
20. Circle the best unit for measuring each volume:
 - a. Amount of soda in 1 can: mL L
 - b. Water in a bathtub: mL L
21. Determine the volume for each object.
 - a. Use $L \times W \times H$ to find the volume of a chalkboard eraser _____ cm^3
 - b. Use water displacement to find the volume of four marbles _____ ml or _____ cm^3
22. Convert the following measurements:
 - a. 160 mL = _____ L
 - b. 23 kL = _____ L
 - c. 456 cL = _____ mL
 - d. 120 mL = _____ cm^3

TIME:

23. What is the basic unit for measuring time? _____
24. How many seconds are in:
 - a. 1 minute? _____
 - b. 6 hours? _____
 - c. 2 days? _____

DENSITY:

28. Would the objects with the following densities float, sink, or remain suspended in tap water?
 - a. 0.85 g/mL _____
 - b. 1.0 g/mL _____
 - c. 1.4 g/mL _____
 - d. 0.92 g/mL _____