

## 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 _____  |

Try these conversions.

- |                       |                      |                       |
|-----------------------|----------------------|-----------------------|
| 10) 2000 mg = _____ g | 15) 5 L = _____ mL   | 20) 16 cm = _____ mm  |
| 11) 104 km = _____ m  | 16) 198 g = _____ kg | 21) 2500 m = _____ km |
| 12) 480 cm = _____ m  | 17) 75 mL = _____ L  | 22) 65 g = _____ mg   |
| 13) 5.6 kg = _____ g  | 18) 50 cm = _____ m  | 23) 6.3 cm = _____ mm |
| 14) 8 mm = _____ cm   | 19) 5.6 m = _____ cm | 24) 120 mg = _____ g  |

Compare using <, >, or =.

- |                          |                      |                          |
|--------------------------|----------------------|--------------------------|
| 25) 63 cm _____ 6 m      | 27) 5 g _____ 508 mg | 29) 1,500 mL _____ 1.5 L |
| 26) 536 cm _____ 53.6 dm | 28) 43 mg _____ 5 g  | 30) 3.6 m _____ 36 cm    |

Try these conversions.

- |                        |                        |                         |
|------------------------|------------------------|-------------------------|
| 31) 20.4mg = _____ dag | 36) .05 L = _____ mL   | 41) 16.56 cm = _____ mm |
| 32) 4.6 km = _____ dm  | 37) 198.7 g = _____ kg | 42) 2500 m = _____ cm   |
| 33) 80.5 cm = _____ hm | 38) 753 mL = _____ L   | 43) 6.5 g = _____ kg    |
| 34) 5,600 kg = _____ g | 39) 510 cm = _____ hm  | 44) 6.3 cm = _____ m    |
| 35) 81.7 mm = _____ m  | 40) 5.6 m = _____ km   | 45) 1.2 mg = _____ g    |

Answer these questions.

- 46) What is the difference between mass and weight?
- 47) How would you measure the volume of an irregularly shaped object?
- 48) What is the basic unit of volume in the metric system?
- 49) What is the basic unit of length in the metric system?

50) David measured the length of the heater to be 200 cm. The actual length of the heater is 205 cm. What is the percent error in David's measurement of the heater? Would this be considered acceptable? Why or Why not.