

Metric Mania

Name _____

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) Lier _____ | 9) Milligram _____ |

Try these conversions, using the ladder method.

- | | | |
|----------------------|----------------------|-----------------------|
| 1) 2000 mg = _____ g | 6) 5 L = _____ mL | 11) 16 cm = _____ mm |
| 2) 104 km = _____ m | 7) 198 g = _____ kg | 12) 2500 m = _____ km |
| 3) 480 cm = _____ m | 8) 75 mL = _____ L | 13) 65 g = _____ mg |
| 4) 5.6 kg = _____ g | 9) 50 cm = _____ m | 14) 6.3 cm = _____ mm |
| 5) 8 mm = _____ cm | 10) 5.6 m = _____ cm | 15) 120 mg = _____ g |

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

- | | | |
|--|--------------------------------------|--|
| 16) 63 cm <input type="radio"/> 6 m | 17) 5 g <input type="radio"/> 508 mg | 18) 1,500 mL <input type="radio"/> 1.5 L |
| 19) 536 cm <input type="radio"/> 53.6 dm | 20) 43 mg <input type="radio"/> 5 g | 21) 3.6 m <input type="radio"/> 36 cm |

Metric Conversion (A)

Convert each measurement to the unit indicated.

0.1 km to cm

1 km to m

7.3 cm to mm

855.2 km to cm

413.7 cm to km

4246.6 m to km

3560.8 m to cm

9 mm to km

1882.7 mm to cm

4814.8 cm to km

26.7 m to mm

5.3 cm to mm

15.5 cm to km

4.3 mm to cm

9433.9 km to cm

0.6 m to mm

1.6 m to km

8.8 mm to m

6.1 m to km

0.4 mm to m

8856.9 mm to m

9691.8 m to cm

8.9 cm to m

97.8 m to cm

Beyond the Basic Ladder

Complete these metric conversions using the full metric ladder handout you have been given.

22. 12.5km = _____ nm
23. 250,000 μ m = _____ km
24. 250 GL = _____ mL
25. 5,000,000,000pm = _____ m

Use your conversion knowledge to answer the following questions. SHOW YOUR WORK PLEASE!

26. One cereal bar has a mass of 37g. What is the mass of 6 cereal bars. Is that more or less than 1 kg? Explain your answer.
27. Wanda needs to move 110 kg of rocks. She can carry 10hg each trip. How many trips must she make?
28. Weather satellites orbit the Earth at an altitude of 1,400,000 meters. What is that altitude in kilometers?
29. Circle the more reasonable unit of measure:
- | | |
|----------------------------|------------------|
| a) length of an ant | 5 mm or 5 cm |
| b) length of an automobile | 5 m or 50 m |
| c) distance from NY to LA | 450km or 4,500km |
30. Will a tablecloth that is 155 cm long cover a table that is 1.6 meters long? Explain your answer.