📄 metric_conversion_pp

Metric Mania
Conversion Practice

Name_____

Prefix

"Kilometer 1000 m"
1000 x larger than 1m

Kilo 1000 units
?km ÷1000

Hecto 100 units

Deka 10 units

Metric Basic Unit

Deci 0.1 units

Centi 0.01 unit

Milli 0.001 units

5m (m)metre (L)Litre (g)gram

160cm ×10

5m

"1mm = 0.001m a mm is 1000 x smaller than a metre"

×1000 5m = 5000mm

To convert to a smaller unit, move decimal point to the right or multiply.

To convert to a larger unit, move decimal point to the left or divide.

Try these conversions, using the ladder method.

Conversion Factor
∴ Then divide

1000 mg = **1** g   1 L = **1000** mL

$\frac{1cm}{10mm} = \frac{160cm}{?mm}$ 160 cm = **1600** mm   ×10

cross multiply

14 km = **14000** m $\frac{1km}{1000m} = \frac{14km}{?m}$ ÷

$\frac{1000g}{1kg} = \frac{100g}{?kg}$ 109 g = **0.109** kg   Kilo = 1000

250 m = **0.250** km

① "Proportional Reasoning"   ② "Unit Analysis" (conversion factors)

$250m × \frac{1 km}{1000 m} = 0.250 km$

1000m = 1km   conversion factor   units I want

Compare using <, >, or =.

56 cm ◯ 6 m   7 g ◯ 698 mg

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2000.m = ___2___ km

3972 in = ___331___ ft.

$\frac{12 in}{1 ft} = \frac{3972 in}{[?] ft.}$

equivalence statement.

12 in = 1 ft.

$\frac{20}{3} = \frac{5}{?} = 0.75$

$\frac{20}{3} = \frac{5}{0.75}$

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) Liter _____   9) Milligram _____

Try these conversions, using the ladder method.

1) 2000 mg = _____ g   6) 5 L = _____ mL   11) 16 cm = _____ mm

$\frac{1g}{1000mg} = \frac{? g}{2000 mg}$

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 ◯ 6 m   17) 5 g ◯ 508 mg   18) 1,500 mL ◯ 1.5 L

19) 536 cm ◯ 53.6 dm 20) 43 mg ◯ 5 g   21) 3.6 m ◯ 36 cm

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Metric Mania Answer Keys

Conversion Practice
NOTE: See overhead copy for the stairstep boxes.
1000 mg = 1 g
160 cm = 1600 mm
109 g = 0.109 kg
1 l = 1000 ml
14 km = 14000 m
250 m = .250 km
56 cm < 6 m
7 g > 698 mg

Conversion Challenge
1. kg
2. m
3. g
4. ml
5. mm
6. l
7. km
8. cm
9. mg

1. 2 g
2. 104000 m
3. 4.8 m
4. 5600 g
5. .8 cm
6. 5000 ml
7. 0.198 kg
8. 0.075 l
9. 0.5 m
10. 560 cm
11. 160 mm
12. 2.5 km
13. 65000 mg
14. 63 mm
15. 0.12 g

16. <
17. >
18. =
19. =
20. <
21. >

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