

Name: _____ Section: _____
Metric System Conversions

Directions: Using your “Metric Map,” complete the following questions.

Kilo ↔ Hecto ↔ Deka ↔ UNITS ↔ deci ↔ centi ↔ milli
(*g-L-m*)

Steps

1. Start at the unit given to you.
2. Count the number of places to the unit you want.
3. Move the decimal point the same number of spaces in the same direction.

Part A – Convert each mass as indicated.

- | | | |
|---------------------|----------------------|-----------------------|
| 1) 50 mg = _____ g | 2) 93 mg = _____ g | 3) 183 cg = _____ kg |
| 4) 35 g = _____ mg | 5) 19 dg = _____ hg | 6) 0.25 kg = _____ g |
| 7) 100 g = _____ kg | 8) 0.55 g = _____ mg | 9) 1 g = _____ kg |
| 10) 14 kg = _____ g | 11) 1 kg = _____ mg | 12) 0.005 kg _____ cg |

Part B – Convert each length as indicated.

- | | | |
|-----------------------|-----------------------|----------------------|
| 1) 0.25 m = _____ cm | 2) 73 cm = _____ m | 3) 1000 m = _____ km |
| 4) 1.2 km = _____ m | 5) 1 km = _____ cm | 6) 0.05 m = _____ cm |
| 7) 200 cm = _____ hm | 8) 500 m = _____ km | 9) 22 km = _____ mm |
| 10) 0.5 km = _____ cm | 11) 100 km = _____ mm | 12) 43 m = _____ km |

Part C – Convert each volume as indicated.

- | | | |
|----------------------|-----------------------|-----------------------|
| 1) 1 L = _____ mL | 2) 1,100 mL = _____ L | 3) 4.5 L = _____ mL |
| 4) 50 cL = _____ L | 5) 0.66 kL = _____ L | 6) 50 hL = _____ cL |
| 7) 100 L = _____ mL | 8) 1.39 L = _____ mL | 9) 5,000 mL _____ kL |
| 10) 15 dL = _____ hL | 11) 18 mL = _____ cL | 12) 0.1 cL = _____ kL |