

# Converting Metric Measures

## Changing from one metric unit to another:

To change from a larger unit to a smaller unit, multiply by a power of ten.

$$3.8 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$$

A liter is a larger unit than a milliliter. To change from liters to milliliters, multiply.

$$1 \text{ L} = 1,000 \text{ mL}$$

$$3.8 \times 1,000 = 3,800$$

$$3.8 \text{ L} = 3,800 \text{ mL}$$

To change from a smaller unit to a larger unit, divide by a power of ten.

$$100 \text{ m} = \underline{\hspace{2cm}} \text{ km}$$

The meter is a smaller unit than the kilometer. To change from meters to kilometers, divide.

$$1,000 \text{ m} = 1 \text{ km}$$

$$100 \div 1000 = 0.1$$

$$100 \text{ m} = 0.1 \text{ km}$$

Name the most appropriate metric unit for each measurement.

1. mass of a cow

2. length of a carrot

3. capacity of a thimble

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Complete.

4.  $45 \text{ g} = \underline{\hspace{2cm}} \text{ mg}$

5.  $3450 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$

6.  $4.5 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$

7.  $1.68 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

8.  $28 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

9.  $7,658 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$

10.  $600 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$

11.  $5,000 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

12.  $5.1 \text{ km} = \underline{\hspace{2cm}} \text{ m}$

13.  $1.780 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

14.  $0.780 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

15.  $4,300 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

16.  $9,000 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$

17.  $8,000 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

18. **Reasoning** It is recommended that people have 1 g of calcium each day. How many milligrams of calcium is that?

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