

## Le Système International d'Unités

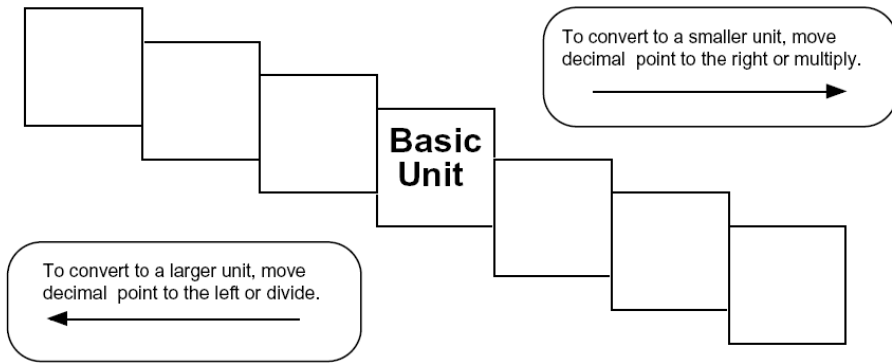
## The International System of Units

### SI

Name: \_\_\_\_\_

1. An exact quantity that people agree to use for comparison is a \_\_\_\_\_.
2. The system of measurement used worldwide in science is \_\_\_\_\_.
3. SI is based on units of \_\_\_\_\_.
4. The first system of measurement that was based on units of ten was the \_\_\_\_\_ system.
5. In SI, \_\_\_\_\_ are used with the names of the base unit to indicate the multiple of ten that is being used with the base unit.
6. The metric system does not use \_\_\_\_\_ but does use decimals.
7. The French invented the \_\_\_\_\_ based on the distance from the North Pole to the Equator.
8. One \_\_\_\_\_ was equal to  $1/10,000,000$  the distance from the North Pole to the Equator.
9. The \_\_\_\_\_ is the only major country that still uses a measuring system that is based on body parts.

Write the correct prefix in each box.



Try these conversions, using the ladder method.

- 1) 1000 mg = \_\_\_\_\_ g    3) 1 L = \_\_\_\_\_ mL    5) 160 cm = \_\_\_\_\_ mm  
 2) 14 km = \_\_\_\_\_ m    4) 109 g = \_\_\_\_\_ kg    6) 250 m = \_\_\_\_\_ km

Compare using <, >, or =.

56 cm ○ 6 m

7 g ○ 698 mg

Write the correct symbol for each metric unit.

- 1) Kilogram \_\_\_\_\_    4) Milliliter \_\_\_\_\_    7) Kilometer \_\_\_\_\_  
 2) Meter \_\_\_\_\_    5) Millimeter \_\_\_\_\_    8) Centimeter \_\_\_\_\_  
 3) Gram \_\_\_\_\_    6) Liter \_\_\_\_\_    9) Milligram \_\_\_\_\_

What common base units will we be using in science?

1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_

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

In SI, the base unit of length is the meter. Use this information to arrange the following units of measurement in the correct order from smallest to largest. Write the number 1 (smallest) through 7 (largest) in the spaces provided.

- \_\_\_\_\_ a. kilometer  
 \_\_\_\_\_ b. centimeter  
 \_\_\_\_\_ c. meter  
 \_\_\_\_\_ d. decameter  
 \_\_\_\_\_ e. hectometer  
 \_\_\_\_\_ f. millimeter  
 \_\_\_\_\_ g. decimeter