

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

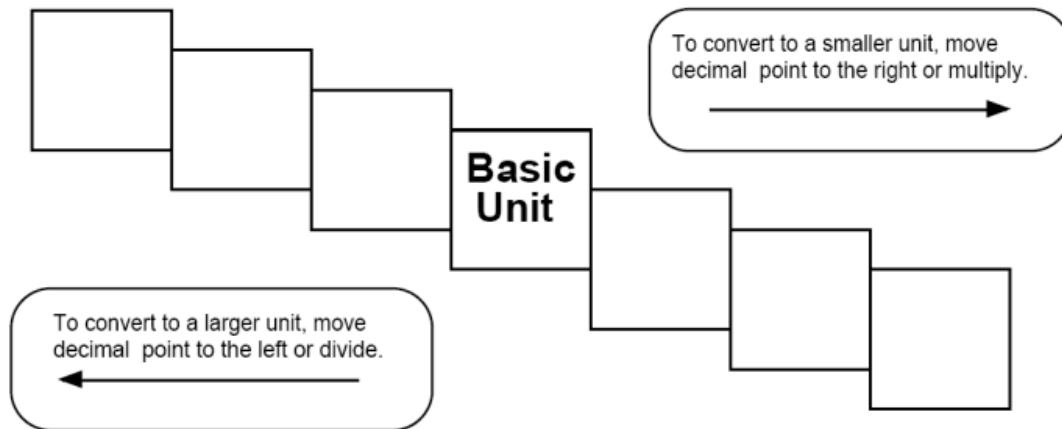
Metric Conversions

**Metric Conversion: Stair-Step Method**

The **Metric System** of measurement is based on multiples of \_\_\_\_\_.

The **3 base units** are : \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

The **6 prefixes** are: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.



To use the **Stair-Step method**, you will move the \_\_\_\_\_ the direction you have to move on the stairs.

**Write the equivalent measurements:**

1. 5 dm = \_\_\_\_\_ m

2. 38.2 dkg = \_\_\_\_\_ cg

3. 2500 dL = \_\_\_\_\_ kL

4. 2 mL = \_\_\_\_\_ L

5. .03 km = \_\_\_\_\_ cm

6. 6035 mg = \_\_\_\_\_ hg

7. 75 mL = \_\_\_\_\_ kL

8. 6.5 m = \_\_\_\_\_ cm

9. 2007 mg = \_\_\_\_\_ g

10. 480 cm = \_\_\_\_\_ dkm

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**Compare the measurements using  $<$ ,  $>$ , or  $=$ . \*\*SHOW YOUR WORK\*\***

11. 63 cm \_\_\_\_\_ 6 m

12. 43 mg \_\_\_\_\_ 5 g

13. 5 g \_\_\_\_\_ 508 mg

14. 3.6 m \_\_\_\_\_ 36 cm

15. 1500 mL \_\_\_\_\_ 1.5 L

16. 7 g \_\_\_\_\_ 698 mg

17. 536 cm \_\_\_\_\_ 53.6 dm

18. 1.1 hL \_\_\_\_\_ 110 dL

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**Answer the following questions using metric conversions.**

19. One cereal bar has a mass of 37 g. What is the mass of 6 cereal bars? Is that more or less than 1 kg? Explain your answer.
20. Wanda needs to move 110 kg of rocks. She can carry 10 hg each trip. How many trips must she make?
21. Dr. O is playing in her garden again. She needs 1 kg of potting soil for her plants. She has 750 g. How much more does she need?
22. Will a tablecloth that is 155 cm long cover a table that is 1.6 m long? Explain.
23. A dollar bill is 15.6 cm long. If 200 dollar bills were laid end to end, how many meters long would the line be?
24. The ceiling in Jan's living room is 2.5 m high. She has a hanging lamp that hangs down 41 cm. Her husband is exactly 2 m tall. Will he hit his head on the hanging lamp? Why or why not?