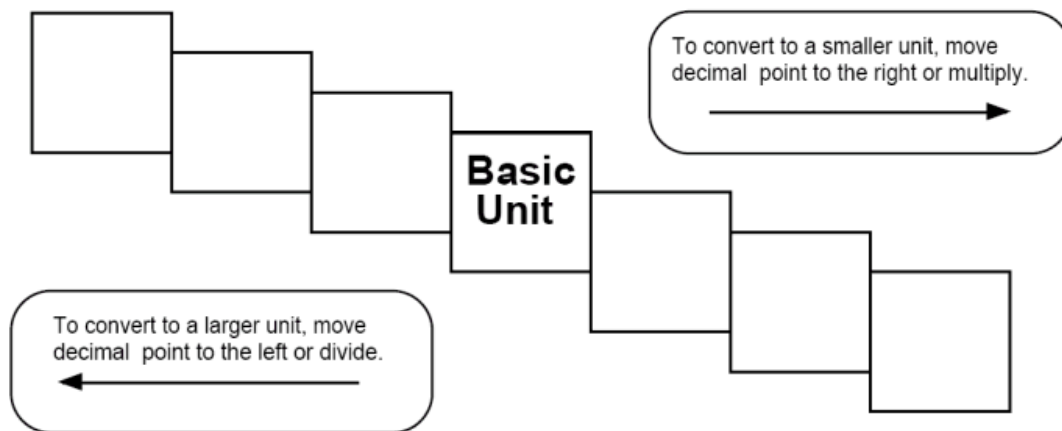


Name: _____ Date: _____

Metric Conversions

Metric Conversion: Stair-Step MethodThe **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.

2. $5 \text{ dm} = \underline{\hspace{2cm}} \text{ m}$

3. $2 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$

4. $38.2 \text{ dkg} = \underline{\hspace{2cm}} \text{ cg}$

5. $.03 \text{ km} = \underline{\hspace{2cm}} \text{ cm}$

6. $6035 \text{ mg} = \underline{\hspace{2cm}} \text{ hg}$

7. $75 \text{ mL} = \underline{\hspace{2cm}} \text{ kL}$

8. $6.5 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

9. $2007 \text{ mg} = \underline{\hspace{2cm}} \text{ g}$

10. $480 \text{ cm} = \underline{\hspace{2cm}} \text{ dkm}$

11. $2500 \text{ dL} = \underline{\hspace{2cm}} \text{ kL}$

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

12.

13.63 cm _____ 6 m

17.1500 mL _____ 1.5 L

14.43 mg _____ 5 g

18. 7 g _____ 698 mg

15.5 g _____ 508 mg

19. 536 cm _____ 53.6 dm

16.3.6 m _____ 36 cm

20.1.1 hL _____ 110 dL

Answer the following questions using metric conversions.

21. 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.

22. Wanda needs to move 110 kg of rocks. She can carry 10 kg each trip. How many trips must she make?

23. 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?

24. Will a tablecloth that is 155 cm long cover a table that is 1.6 m long? Explain.

25. 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?

26. 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?