

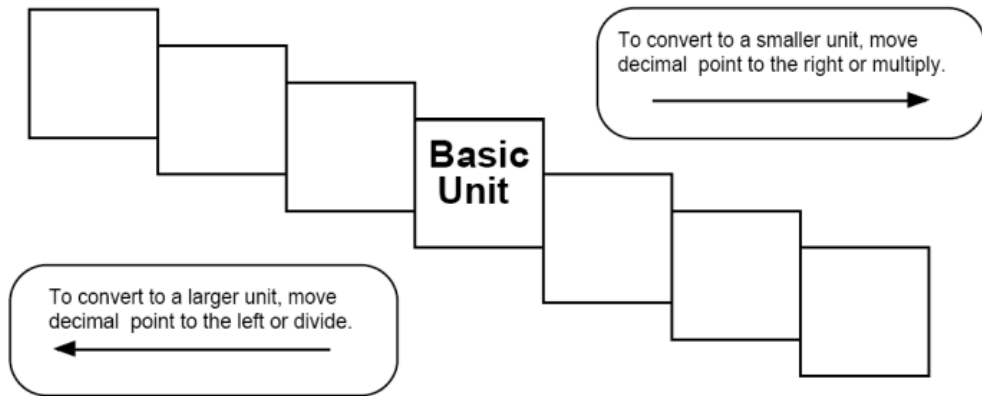
Name: _____ Date: _____

Metric Conversions

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. 75 mL = _____ kL

6. 6.5 m = _____ cm

7. 2007 mg = _____ g

8. 480 cm = _____ dkm

Comparing Quantities

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

9. 63 cm _____ 6 m

10. 43 mg _____ 5 g

11. 5 g _____ 508 mg

12. 3.6 m _____ 36 cm

13. 1500 mL _____ 1.5 L

14. 7 g _____ 698 mg

15. 536 cm _____ 53.6 dm

16. 1.1 hL _____ 110 dKL

Answer the following questions using metric conversions.

17. Wanda needs to move 110 kg of rocks. How many hectograms is that?

18. Dr. O is working on her garden. She needs 1 kg of potting soil for her plants. She has 750 g. Does she have enough soil? Justify your answer.

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

21. Alex rode 2 kilometers on his bike. His sister rode 3000 meters on her bike. Who rode the farthest and how much farther did they ride? (Answer in meters)

22. A rectangle has a length of 20 cm and a width of 1 meter. What is the perimeter of the rectangle? (Hint: Perimeter means you add up all the sides. Draw a picture if needed)

A. 42 cm

B. 120 cm

C. 140 cm

D. 240 cm

23. Of the following, which of the following is the largest quantity?

A. 1.5 km

B. 150 cm

C. 15000 mm

D. 150 hm

24. Of the following, which of the following is the smallest quantity?

A. 3 kg

B. 54 hg

C. 12 dkg

D. 178 g
