Converting Units

Name:_____

Accelerated 7th Grade Math

Customary Units	Metric Units	Customary/Metric
1 ft = 12 in 1 yd = 3 ft 1 mi = 5,280 ft	1 m = 100 cm 1 km = 1,000 m	1 in = 2.54 cm 1 mi = 1.6093 km
1 cup = 8 fl oz 1 pt = 2 cup 1 qt = 2 pt 1 gal = 4 qt	1 liter = 1,000 mL	1 gal = 3.79 liters
1 lb = 16 oz 1 ton = 2,000 lb	1 kg = 1,000 grams	1 lb = 0.45 kg

Directions: Use the information above to convert each of the following measurements.

1. 48 in = _____ ft
2. 12.3 km = _____ m
3. 30 cm = _____ in
4. 47 oz = _____ cups
5. 25 in = _____ cm
6. 5.3 mi = _____ ft
7. 5,261 mL = _____ liters
8. 7,834 ft = _____ mi
9. 10 liters = ____ gal
10. 90 lb = _____ kg
11. 46 oz = _____ lb
12. 80 km = _____ mi

Tough Conversions!

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Use the tables below to convert each of the following measurements.

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1. 7 qt =_____cups

2. 10 liters =_____qts

3. 4 days =_____seconds

4. 4 tons =_____ kg

5. 1.2 mi = _____cm

6. 17 gal =_____oz

7. 32 in=_____m

8. 420 oz=_____pts

9. 3.2 km/hr = _____cm/min

10. 10 ft/sec =_____mi/hr

11. Find your mass in grams (start with your weight in pounds).

12. How many cups of water are there in 6 gallons?

13. A typical human weighs 150 pounds and takes in 3,000 calories per day. A typical whale weighs 50 tons and needs 395,000 calories per day. A whale may spend 15 hours a day feeding during the summer season.

    a. How many pounds (lbs) does a typical whale weigh? (look at your conversions on the front)

    b. Here is a "rate" problem (from last homework):

       How many calories / hour does a typical whale take in?

    c. Use your above rate and your knowledge of conversions to determine how many calories / second a whale takes in.