

Conversions III Names: _____

Refer to the Conversion Factors given week one to solve the following problems. In some cases, you will be converting within the metric system, and in others, you will be converting between the metric and English systems. Some of the problems may require more than one conversion factor. **Show all your work** for each step with the units canceling. **Circle your final answer.**

1. A piece of notepaper is 32 cm long. Find its length in meters.
2. A middle finger is about 5.5 cm long. What is this in millimeters?
3. A newborn baby is 21 inches long. Calculate this length in mm.
4. The newborn baby above weighs 7.5 pounds. Calculate this in kilograms.
5. A bedroom is 12 feet wide. What is this in meters?
6. Directions for the preparation of a solution require 22.5 grams of salt. Calculate this in milligrams.
7. How many grams are there in 0.0500 tons?
8. Soda comes in a 2.00-liter bottle. Calculate the capacity of this bottle in pints.
9. 1.000 gallons of gas would be equal to how many milliliters?

10. How many cups are in 4.48 gallons?
11. How many pounds does a 163-kg gorilla weigh?
12. A baggy of illegal pot found by the police weighs 4.26 grams. How many pounds is this?
13. A recipe calls for 1.50 cups of milk. How many mL is this?
14. What is the length, in meters, of a 100.0-yd football field? (1 meter is NOT equal to 1 yard, close but not equal)
15. A “fifth” is a unit of volume for liquor equal to one fifth of a gallon. How many mL are in a “fifth”?
(Hint: $1/5$ can be expressed in decimal form as 0.20 gal)
16. Joanna walks 13.5 miles on the treadmill. What is this in inches?
17. A horse can run at about 16.2 meters per second. What is this in yards per second?