Factor Label Worksheet

1. The highway department wants to plant trees along the highway from Colorado Springs to Denver. They plan to plant 18 trees per mile along this 97 mile strip of highway. How many trees are needed?

2. There are .621 miles in one km. How many km is it to “Wendy’s” if the distance is 2.3 miles? Hungry yet?

3. A good milk cow can produce 19 gallons of milk per day. If a typical family consumes 0.80 gallons of milk a day, how many cows are needed to provide for 5 families?

4. How many feet are in 1742 meters? (Hint 1 inch = 2.54 cm and 1 foot = 12 inches)

5. How many kilograms of golf balls are in 4155 balls that weigh 28.4 grams each?

6. How many cm$^3$ are in 10 dm$^3$?

7. How many liters of water are needed to fill a swimming pool that is 27. dm x 200. dm x 45. dm?
8. You have just been promoted to manager of your neighborhood McDonalds, and you have 453 kg of frozen burger in stock. If one burger uses 113.5 grams of “meat” how many burgers can you make?

9. On an average day, you sell 355 burgers. How many days would it take to use up all of your stock?

10. Mr. Hatak has said that anyone over 190,000 hours old does not have to take the next test. Calculate what this age is in years and if you need to take the next test.

11. Calculate your weight in kilograms (1 pound = 454 grams)

12. It has been determined that an average high school student uses 13,000 yards of pencil lead during their time in school. What is this distance in km? (1 yard = 3 feet and 1 in = 2.54 cm)

13. How many minutes are in 3.65 days?

14. How many eight hour days will a person who works for $3.56 per hour have to work to make $21,500?
15. How many liters are in 6.30 quarts of soft drinks? (1 liter = 1.06 quarts)

16. How many meters are in 3.46 miles? (2.54 cm = 1 inch)

17. Joe wants to take a vacation to San Francisco next summer and he needs to save some money for his trip. He figures it will take 568 dollars to make the trip. If Joe earns $6.75 per hour, how many hours will he have to work to have enough to pay for the trip? If he only has ten 8-hour work days before his vacation, will he make enough to go on the trip?

18. If you have 16.0 kilograms of a shiny material that occupies 4.00 liters of space is this material gold? (Hint the density of gold is 19.3 g/ml)

19. How many kilograms of Helium are needed to fill a balloon that is 25.0 liters in volume? (Density of He is 0.166 g/ml)

20. How many kilometers will light travel in 65.84 days? (speed of light = 3.00 x 10^8 m/s)
Extra-Fun: For our esoteric group: There are 14.0 glibs in 3.0 glubs; 5.1 glibs in 6.8 grogs; and 6820 grogs in 13.0 blabs. If you were the proud owner of 1,344 glubs, how many blabs would your glubs be worth