**Chemistry Homework # .5 Conversion Problems NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Solve the following conversion problems. Show your work. You will need the following conversion rates:**

1kilometer =. 6214 miles 1 mile = 5280 feet 1 liter = 32.375 ounces 1 gallon = 4 quarts

1 quart = 2 pints 1 pint = 16 ounces 1 gallon = 3.785 liters 1 inch = 2.54 centimeters

1 ounce = 29.57 milliliters

Example 1: If you ran a 10K race in 58 minutes, what was your speed in miles per hour?

Now you try: Which is faster 60 miles per hour or 60 feet per second?

Homework: Solve the following problems. SHOW ALL YOUR WORK!

1. A 2 liter bottle of Coke costs $1.99; a gallon of milk costs $3.49; and a 12 oz can of Safeway soda costs $0.40. How much does each fluid cost per ounce?
2. Which has the greatest volume: 3 pints of blood, a 1.75 liter bottle of pop, or a half gallon of milk?
3. How many miles can a car travel on 23 liters of gas if the car gets 28 miles per gallon?
4. How many square centimeters are in a sheet of paper 8.5 by 17 inches?
5. A Canadian vacationing in the U.S. pays $5.14 for a gallon of gas. What would be the equivalent price at home (Canadian dollars per liter)? Assume 1 US dollar = 1.20 Canadian dollars.
6. If your car gets 28 miles per gallon, how many liters are necessary to travel a km?