

## Chemistry Quiz #1

Name \_\_\_\_\_

1. Lead (Pb), has a density of 11.35 g/ml. If I have 3.45 cc of lead, what is the weight in grams?
2. How many seconds are there in 7 years? (365 day per year?)
3. I take 5.0001 and divide by 24.35 and multiply by 0.00234 to get weight in pounds. I then multiply by a 2.2 pound per kilogram conversion factor. How many significant in my answer?
4. I am traveling at 100.0 mph per hour before getting pulled over. Convert this into meters per second.
5. I can eat 10.0 cans of Vienna sausages in 1 hour. Each can has 60.0 mg of sodium nitrate.  
What is my intake of sodium nitrate in grams per second?
6. 700. nanometers or  $7.00 \times 10^2$  nanometers is equal to how many meters?
7. The mass of the ocean is about  $1.8 \times 10^{24}$  g. If the ocean contains 1.076 % sodium ion,  $\text{Na}^+$ , what is the mass in kilograms of sodium in the ocean?
8. A ball of clay has a mass of 2.65 pounds and a volume of 0.5025 quarts. What is the density in grams per milliliter? (1 liter = 1.057 quarts) (1 kg = 2.205 pounds)
9. Dry ice freezes at -79.0 degrees Celsius. What is the temperature in °F?
10. A saturated salt solution (salt water) boils at 226.0 °F. What is the temperature in Kelvin?

(answers on second page)

1. 39.2 grams.
2. 220,752,000 seconds (exact)
3. 3 s.f.
4. 44.70 m/s
5.  $1.67 \times 10^{-4}$  g
6.  $7.00 \times 10^{-7}$  meters
7.  $1.9 \times 10^{19}$  kg
8. 2.53 g/mL
9.  $-110^{\circ}\text{F}$
10. 380.8 Kelvin