

Conversions

Name _____

- 1) What is your weight in kilograms?
- 2) If a canoe can hold 500 kg, how many pounds can it hold?

<u>Equalities</u>
1 kg = 2.2 lbs
1 atm = 14.69 psi
1 mol = 6.02×10^{23}
1 g = 1000 mg
1 drop of water = 0.10 ml
1 mol of H ₂ O molecules = 18.0 g

- 3) Is a tire that is marked “inflate to 35 psi” over or under inflated if the actual pressure is 0.756 atm? Show work.
- 4) How many atoms are there in 0.00045 moles of atoms?
- 5) How many grams would 3.56 moles of carbon atoms weigh?
- 6) Many cans of soda have 35 mg of sodium. How many grams of sodium is this? How many atoms of sodium is this?
- 7) (check plus if you can get this one) How many water molecules are in one drop of water? (Hint: you need the density formula in one of the several steps to solving this problem. Density of water = 1.00 g/ml)