## **Test Prep**

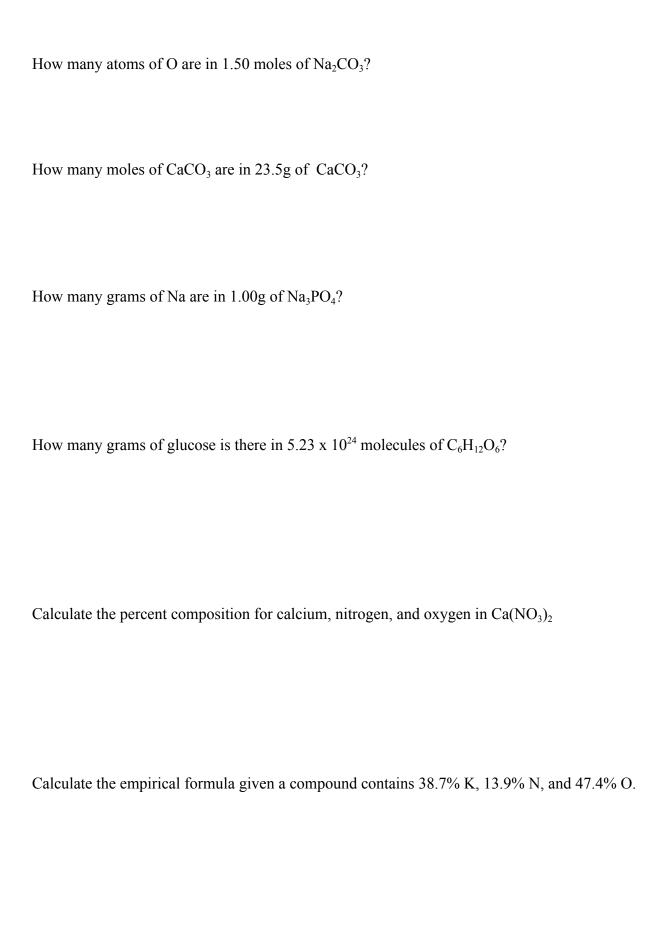
Fill in the blank:					
is the study of matter, its properties, and the changes it undergoes					
is anything that has mass and volume					
Solids	Liquids	Gasses			
shape	shape	shape			
volume	volume	volume			
attractive forces between particles	shape of container	shape and volume as container			
Particles vibrate	Particles move slowly in directions	Particles are far apart and move at speeds with little attraction to each other			

Which of the following are homogenous and heterogenous mixtures? Hot fudge sundae, baby shampoo, sugar water, peach pie

What are some examples of intensive properties?

Identify each as a physical or chemical change:					
Ice melts in the sun		Burning a candle			
Cutting a pizza		Iron rusting in an old car			
Determine the amount of significant figures:					
0.00108	5000	2.3x10 <sup>4</sup>	6.003		
2.012 + 61.09 + 3.0 =					
2.8 X 67.40 / 34.8 =					
What is the volume (mL) of a 14.7g sample of the liquid given that the density is 1.32g/mL?					
Convert:					
1053L to mL		35.3nm to m			
Who discovered electrons with the cathode ray, and what model did he use?					
Who discovered neutrons with the gold foil experiment?					

How many protons, neutrons, and ele	ectrons does <sup>197</sup> Au have	e and Ca <sup>2+</sup> ?		
How many protons, neutrons, and ele	ectrons does magnesiur	m-25 have and N <sup>3-</sup> ?		
Chlorine-35 has a mass of 34.969 amu and abundance of 75.75%, and chlorine-37 has a mass of 36.966amu and an abundance of 24.24%. What is the average atomic mass?				
Elements in the same column have chemical and physical properties.  Write the formula for the following compounds;				
Copper (II) chloride		tin (IV) oxide		
Calcium nitrate		ammonium sulfate		
Write the name for the following compounds:				
$Fe_3(PO_4)_2$	$BaCO_3$	$\mathrm{H_2O}$		
What is a mole? What is Avogadro's number?				
How many He atoms are in 3.5 mol of He?				



What is the molecular formula given the molar mass of CH<sub>3</sub>O is 62.1g/mol?

Convert 29.5 grams of Fe to grams of Fe<sub>2</sub>O<sub>3</sub>?

$$4Fe + 3O_2 \longrightarrow 2Fe_2O_3$$

Balance:

$$_{---}$$
Fe +  $_{---}$ H<sub>2</sub>SO<sub>4</sub>  $_{----}$   $_{---}$ Fe<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub> +  $_{----}$ H<sub>2</sub>

Balance:

