WORKSHEET 3
CHEMISTRY

Name _____
last first .

Set-ups must be shown where applicable. You will not receive credit for only answers shown
Problem sets are due within the first ***five*** *minutes of lecture on the due date.*
No late work will be accepted.

1. Give the correct answers for the following:
   a. Give the symbol for a metalloid in period 4 — Answer Ge or As
   b. What is the common (family) name of group IIB — Answer Transition element/metal
   c. What group number are the inert gases — Answer VIII A
   d. Give the symbol for the alkali metal in period 4 — Answer K
   e. Write the symbol for element with the atomic number of 12 — Answer Mg
   f. Give the atomic mass of sodium — Answer 23.0 or 22.99

2. a. Place a {s= solid g = gas l = liquid} next to the elements indicating its physical state at room temperature.

Plus :

b. Place a D next to the diatomic elements

Hg l	Kr g	Cl g,D
Ca s	As s	Si s
Br l,D	I s,D	Ni s

3. Put an "X" in the correct column to classify the following:

	Metal	Nonmetal	Metalloid
a. Magnesium	X		
b. Potassium	X		
c. Selenium		X	
d. Arsenic			X
e. Sulfur		X	
f. Lithium	X		
g. Manganese	X		
h. Boron			X

; B

4. Put an "X" in the correct column to classify the following:

	Element	Compound	Mixture
a. Cherry Kool-Aid			X
b. Herb Tea			X
c. Br_2	X		
d. NH_3		X	
e. Chocolate			X
f. Air			X
g. N_2	X		
h. chocolate milk			X
i. Si	X		

5. Indicate whether the following are heterogeneous or homogeneous mixtures:

a. Grape Jelly — HOMOGENEOUS
b. Chocolate chip cookies — HETEROGENEOUS
c. Red Nail Polish (Red = only color!) — HOMOGENEOUS
d. Oak lumber — HETEROGENEOUS
e. Chicken pot pie — HETEROGENEOUS
f. Paint Thinner (looks like gasoline) — HOMOGENEOUS
g. Burrito — HETEROGENEOUS

6. Indicate whether the following are potential or kinetic energy

a. A can of paint sitting on the edge of a ladder — POTENTIAL
b. A Tidal Wave — KINETIC
c. A 70 lb dog jumping on your lap — KINETIC
d. Stampeding turtles — KINETIC
e. A loaded bow and arrow — POTENTIAL

7. Classify each of the following as either a physical change or a chemical change
Rem.: Chemical changes are frequently accompanied by one or more physical changes

a. Sawing a board into two — PHYSICAL
b. A bear sitting on your lunch — PHYSICAL
c. Snowflakes form — PHYSICAL
e. A nail rusting — CHEMICAL