

# WORKSHEET 3

Chemistry 110

Name \_\_\_\_\_

(last)

(first)

Due date: \_\_\_\_\_

A. Write your answers in the blanks at the right.

1. Write the symbol for a metalloid in the same group as Gallium. 1. \_\_\_\_\_
2. What is the common name of the group to which iodine belongs? 2. \_\_\_\_\_
3. What is the group number for the noble gases? 3. \_\_\_\_\_
4. Write the element symbol for the alkaline earth metal in period 4. 4. \_\_\_\_\_
5. Write the symbol for element with atomic number 16. 5. \_\_\_\_\_
6. What is the atomic mass of potassium? 6. \_\_\_\_\_

B. Complete the following table by writing the appropriate letters.

Element	Solid (S) liquid (L) or gas (G)	Diatomic? yes (Y) or no (N)	Element	Solid (S) liquid (L) or gas (G)	Diatomic? yes (Y) or no (N)	Element	Solid (S) liquid (L) or gas (G)	Diatomic? yes (Y) or no (N)
Mg			Ne			Sb		
Ag			Cl			O		
Ba			H			Hg		

C. Write an "X" in the correct column to indicate whether the element is a metal, nonmetal or metalloid.

	ELEMENT	METAL	NONMETAL	METALLOID
1	aluminum			
2	calcium			
3	antimony			
4	cesium			
5	carbon			
6	manganese			
7	fluorine			
8	silicon			

D. Write an "X" in the correct column to classify the following as element, compound or mixture.

		ELEMENT	COMPOUND	MIXTURE
1	N <sub>2</sub>			
2	fudge			
3	diamond (made entirely of carbon atoms)			
4	gold ore			
5	P <sub>4</sub>			
6	swimming pool water			
7	marble rock			
8	SiO <sub>2</sub>			

E. Write an "X" in the correct column to classify each mixture as homogeneous or heterogeneous.

	MIXTURE	HETEROGENEOUS	HOMOGENEOUS
1	strawberry jam		
2	glass		
3	fudge with nuts		
4	brass		
5	seltzer water		
6	a candle		
7	lasagna (with lot's of cheese and sauce!)		

F. Write an "X" in the correct column to classify as kinetic or potential energy.

		KINETIC ENERGY	POTENTIAL ENERGY
1	a runaway soap box car		
2	horses at the starting gate of a race		
3	car battery		
4	dropping a can of opened car oil		
5	man with a hang glider ready to jump off a cliff		

G. Write an "X" in the correct column to classify the change as chemical or physical.

		CHEMICAL CHANGE	PHYSICAL CHANGE
1	oil burning		
2	Bugs Bunny peeling his carrots		
3	wax melting		
4	Alka-Seltzer tablet added to water		