

Name \_\_\_\_\_  
Hour \_\_\_\_\_

### Study Guide Chapter 3 Chemistry

1. Who created the first periodic table and how did he organize the table?
2. What is the difference between atomic number and mass number?
3. When I look at an element on the periodic table of elements the three things I can predict are:
4. Describe metals, nonmetals and metalloids.
5. Out of all the elements which ones do not normally form compounds?
6. What is the difference between a group and a period?

7. Describe 1 property for each of the families: alkali metals, halogens, transition metals, noble gases and alkaline earth metals.

8. Define the following words:

ductile

atomic number

isotope

chemical symbol

nucleus

9. Describe an atom in detail and make sure to mention proton, neutron and electron.

10. Explain how it is possible for an atom to have no charge even though it is made up of protons, neutrons and electrons.

11.

Particle	Location	Mass(amu)	Charge
Proton			
Electron			
Neutron			
XXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXX

12.

Element	Atomic #	Mass #	Protons	Neutrons	Electrons
Phosphorus	15	31			
Gallium		70			31
Strontium			38	50	
Niobium	41			52	
Tin		119			50
Iodine			53	74	

In the following spaces please model the following atomic structures. Make sure to include protons, electrons and neutrons.

13. Oxygen

14. Potassium

15. Iron

16. Copper