

Chemistry Unit - Study Guide

Student Name _____

1. Draw and label an atom of Aluminum. Include: protons, electrons, neutrons, nucleus, and electron cloud.	
2. Describe the electrical charge for each subatomic particle.	Proton - Neutron - Electron -
3. Locate Sodium on the periodic table. Describe how many protons, neutrons, and electrons are in 1 atom of the element.	Proton - Neutron - Electron -
4. Based on it's location in the Periodic table, describe the reactivity of Chlorine.	
5. What is a valence electron?	
6. What does a valence electron determine?	
7. What are 2 ways you can use the Periodic Table to find an atom's valence number?	
8. How do you find an atoms atomic mass?	
9. What is the difference between a compound and an element?	
10. Describe 3 ways the Periodic Table is organized.	
11. What makes the Noble gases unique?	

12. $C_6H_{12}O_6$ How many atoms of each element are in this molecule?	
13. CO_2 How many protons are in this molecule?	
14. How can you determine if a chemical equation is balanced?	
15. What are reactants and products?	Reactants- Products-
16. What evidence indicates that a chemical change has occurred?	
17. Write out in words what this chemical formula describes: $3C_6H_{12}O_6$	
18. List 3 elements in group 14. What do these elements have in common?	
19. What is the Law of Conservation of Mass?	