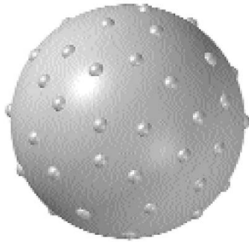
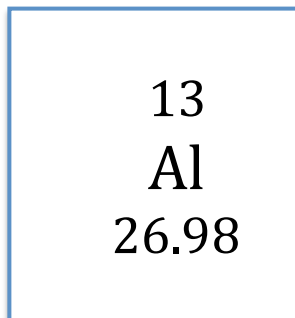


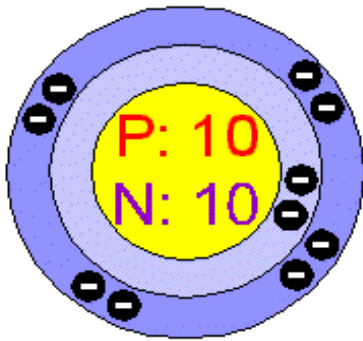
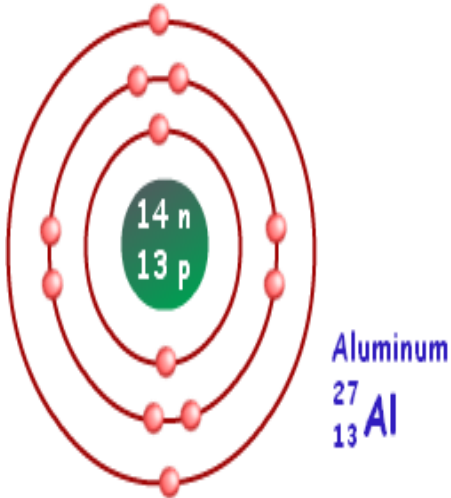
## STUDY GUIDE: Atoms and the Periodic Table

1. What is the sum of the protons and neutrons in an atom? *Atomic mass number*
2. What is the negatively charged particle? *electron*
3. Where are electrons *likely* to be found? *Electron cloud*
4. The smallest particle into which an element can be divided and still be the same substance is called a(n) \_\_\_\_\_ *atom* \_\_\_\_\_
5. Where is most of an atom's mass located? *In the nucleus*
6. What represent the number of orbitals where electrons are likely to be found on each atom; these are in rows on the periodic chart? *periods*
7. What is a particle with a negative electric charge? *electron*
8. Which part of the atom can be described as dense and positively charged? *nucleus*
9. What represents the sum of protons in the nucleus of an atom? *Mass number*
10. Which subatomic particle has a positive charge? *proton*
11. Which particle of the nucleus has no electrical charge? *neutron*
12. Explain the Raisin pudding model and why is it incorrect. *Thompson thought the electrons were randomly placed throughout the atom, no set pattern. He was wrong about the placement of electrons.*



13. Draw the Bohr model for the following elements:





Atomic number: 10  
 Mass number: 20.1  
 Number protons: 10  
 Number of electrons: 10  
 Number of neutrons: 10

14. Label the information provided by the periodic table on the arrows provided.

29	←	Atomic number
Cu	←	Element symbol
Copper	←	Element name
63.55	←	Atomic mass

15. What does the atomic number represent? *The number of protons and electrons*  
 16. What does the atomic mass number represent? *The number of protons and neutrons*