Name KEY Date _____ Homeroom _____

Atom Practice Quiz

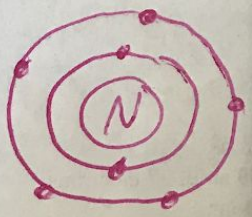
1. Complete the data table:

Name	Element Symbol	Number of Protons	Atomic Mass (Weight)	Number of Neutrons	Number of Electrons	Period	Group
Hydrogen	H	1	1	0	1	1	1
Carbon	C	6	12	6	6	2	14
Aluminum	Al	13	27	14	13	3	13

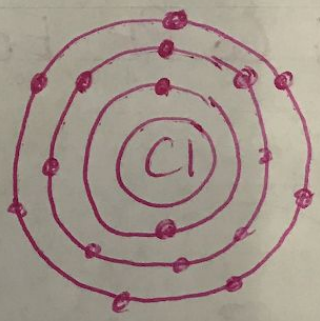
2. How many electrons fit on the first electron cloud? 2
3. The second? 8
4. The third? 8
5. The fourth? 18

6. Construct a Bohr model for each of the following elements:

a. Nitrogen



b. Chlorine



7. Calculate the mass of an atom with 19 protons, 19 electrons, and 20 neutrons. 39
8. What is the identity of the atom for question #8? Potassium

9. Element X is located in period 3 and group 2.
   a. In how many energy levels will you find electrons? 3
   b. What is the identity of this element? Mg

10. Use the periodic table to give the names of the elements that have the following characteristics?

a. Period 2; Mass = 19amu Fluorine

b. Group 9; 45 protons Rhodium

c. Period 1; Group 1 hydrogen

11. At atom of Xenon with 54 protons, 54 electrons, and 77 neutrons would have an atomic mass of

a. 54 b. 131 c. 185 d. 270

12. Which of the following has the least mass in an atom?

a. nucleus
b. proton
c. neutron
d. electron

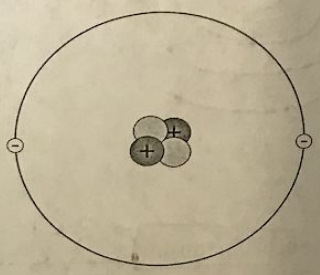
13. What is the smallest particle into which an element can be divided and still be the same substance?

a. electron
b. neutron
c. proton
d. atom

Directions: Answer each question with the atomic symbol of the correct element. For example, if the answer is 'oxygen', you would write 'O' on the line for each questions. The atomic symbols will spell out a commonly used word.

14. He (a.) Li (b.) Co (c.) Pt (d.) Er (e.)

a. Atomic model:



b. Period 2, 4 neutrons
c. atomic mass = 59 amu, 27 electrons
d. period 6, 78 protons
e. 68 electrons