**Chemistry A Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **Period\_\_\_\_\_\_**

**Atomic structure worksheet**

1. For each of the atoms below, give the symbol and list the total number of subatomic particles (protons, neutrons, and electrons) each has. Assume each to be a neutral atom and round the atomic masses to the nearest whole number.

 a. Nitrogen b. Neon c. Potassium

 d. Tin e. Uranium f. Hydrogen

 g. Silver h. Sulfur i. Copper

2. Write the name of the element that has

 a. 12 protons b. the symbol Au c. 22 protons

1. 2 electrons and an atomic mass of 4
2. 82 protons and an atomic mass of 207
3. 30 neutrons and 26 electrons

g. the symbol Na h. 86 protons i. the symbol Pb

3. In what period and group would you find

 a. Carbon b. Tungstun c. Barium

 d. Iodine e. Oxygen f. Arsenic

 g. Helium h. Argon i. Xenon

Periodic Table Questions

1. About how many known elements are in the periodic table?\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Elements in the periodic table are arranged by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Which of these things are NOT listed in the periodic table?
4. Element name or symbol
5. Atomic weight
6. Atomic orbital radius
7. Atomic number

1. Who came up with the concept of a periodic table? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. The rows of the periodic table are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Name three families in the Periodic Table
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The atomic number of an element tells you the number of \_\_\_\_\_\_\_\_\_\_ in a neutral atom.
2. The columns of the periodic table are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. You will find metals on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the periodic table.
4. Which element has an atomic number of 79?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What do you use to find the number of protons in an element?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. How do you find the number of neutrons in an element?
7. How many periods are on the periodic table?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Which element is more reactive, Potassium or Calcium?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. What is the atomic mass of the element in period 2, group 13?\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Which group contains the Noble gases?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. What side of the periodic table are the non-metals found on?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Name 2 member of the Alkali Metals Family\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Name 2 members of the Halogen Family \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. Image you discover a new element. After collecting your millions of dollars and your Nobel Prize, they ask you to decide where you would like to put it on the Periodic Table. Using your knowledge of how it is organized, describe where you would put your element and explain why. Please give your element a name and describe its characteristics to help you explain where you will put it on the table.