

## Atomic Structure

Name: \_\_\_\_\_ Period: \_\_\_\_\_

1. The 3 particles of the atom are:

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

Their respective charges are:

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

2. The number of protons in one atom of an element determines the atom's \_\_\_\_\_, and the number of electrons determines \_\_\_\_\_ of an element.

3. The atomic number tells you the number of \_\_\_\_\_ in one atom of an element. It also tells you the number of \_\_\_\_\_ in a neutral atom of that element. The atomic number gives the "identity" of an element as well as its location on the

Periodic Table. No two different elements will have the \_\_\_\_\_ atomic number.

4. The \_\_\_\_\_ of an element is the average mass of an element's naturally occurring atom, or isotopes, taking into account the \_\_\_\_\_ of each isotope.

5. The \_\_\_\_\_ of an element is the total number of protons and neutrons in the \_\_\_\_\_ of the atom.

6. The mass number is used to calculate the number of \_\_\_\_\_ in one atom of an element. In order to calculate the number of neutrons you must subtract the \_\_\_\_\_ from the \_\_\_\_\_.

7. Give the symbol and number of protons in one atom of:

Lithium \_\_\_\_\_

Bromine \_\_\_\_\_

Iron \_\_\_\_\_

Copper \_\_\_\_\_

Oxygen \_\_\_\_\_

Mercury \_\_\_\_\_

Krypton \_\_\_\_\_

Helium \_\_\_\_\_