Basic Atomic Structure Worksheet

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 the _____ of the 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 of and the number of protons in one atom of:

   Lithium _____ Bromine _____

   Iron _____ Copper _____

   Oxygen _____ Mercury _____

   Krypton _____ Helium _____
8. Give the symbol of and the number of electrons in a neutral atom of:

   Uranium _____ Iodine _____

   Boron _____ Xenon _____