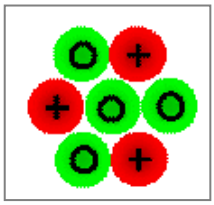
Assignment:

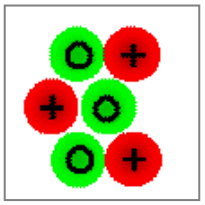
Subatomic Particles

You will need a periodic table to help you answer these questions.

1. The nuclei of two atoms are shown in diagrams A & B.



A



B

   a. What elements are they?
      A:

      B:

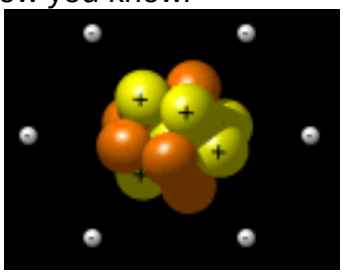
   b. What are their atomic weights?
      A:

      B:

   c. What is the word that describes what these atoms are?

2. Is the object in diagram C an atom, anion, or cation? Explain how you know.

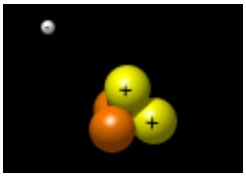
   a. What element is shown in diagram C?



C
(there are 6 protons)

3. Is the object in diagram D an atom, anion, or cation? Explain why.

   a. What element is shown in diagram D?



D

4. On the periodic table, find the element boron (B).

    a. How many protons does it have?

    b. How many electrons does it have?

    c. How many neutrons does it have?

    d. Draw a diagram of a boron atom below:

    e. Draw a diagram of a boron anion with a charge of **-5**.

5. Draw two diagrams of aluminum below, each with the atomic mass given below.

Atomic Mass = 26

Atomic Mass = 28