

NAME _____ DATE _____ PER _____

Ionic Bonds/Covalent Bonds (Use a pencil and two different colored pencils for this activity)

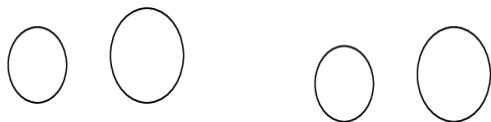
Ionic Bonds: (You will need a periodic table to determine # of valence electrons)

1. Use plastic discs labeled with the element's symbol and beads that represent valence electrons (different color for each atom).
2. On a blank paper make an **electron-dot diagram of the atoms in the ionic compound**. Check that your model is correct before drawing.
3. Draw the "before" model on this paper. Now show ionic bonding by moving the valence electron(s). Check for correctness.
4. Draw the "after" model on this paper. Use arrows to show electrons being transferred and indicate the charge of each atom.

a. NaCl (Sodium Chloride)

Before: (neutral)

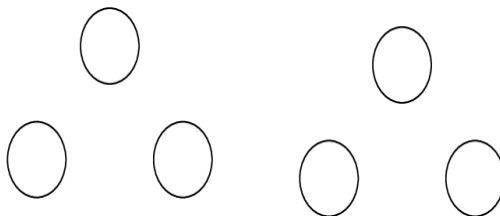
After: (ions)



d. CaCl₂ (Calcium Chloride)

Before: (neutral)

After: (ions)



b. MgO (Magnesium Oxide)

Before:

After:



e. Na₂O (Sodium Oxide)

Before:

After:

