

NAME _____

BONDING WORKSHEET

- I. Draw the Lewis symbol and show how electrons are transferred from the metal to the non-metal to make the ionic compound.

Sodium and chlorine:

Magnesium and fluorine:

Potassium and bromine:

Aluminum and bromine:

Lithium and oxygen:

II. Draw the Lewis symbol for each element and show how covalent bonds form between the following elements to make diatomic molecules. Remember the Octet Rule.

Hydrogen:



Oxygen:



Nitrogen:



Florine:



Chlorine:



Bromine:



Iodine:



Comparison between covalent and ionic compounds

(Both: Properties of compounds are completely different from the elements they are made of)

COVALENT COMPOUNDS	IONIC COMPOUNDS
<ul style="list-style-type: none">◆ Non-metal elements◆ Molecular substances◆ Smallest particle is a molecule◆ gas, liquid, or solid◆ non-polar to polar◆ low bp, mp◆ a solution with water does not conduct electricity	<ul style="list-style-type: none">◆ Metal and non-metal elements◆ Made of ions (+ & -)◆ Called “salts”◆ Solids (crystals)◆ very polar◆ high bp, mp◆ a solution with water conducts electricity