

# Ionic Bonds

- Ionic bonds form between \_\_\_\_\_ and \_\_\_\_\_.
- In naming simple ionic compounds, the \_\_\_\_\_ is always first, the \_\_\_\_\_ second (e.g., sodium chloride).
- Ionic compounds dissolve easily in \_\_\_\_\_ and other polar solvents.
- In solution, ionic compounds easily \_\_\_\_\_.
- Ionic compounds tend to form \_\_\_\_\_ with \_\_\_\_\_ melting temperatures.

## Naming Ionic Compounds

- Write the \_\_\_\_\_ first and the \_\_\_\_\_ second
- Use \_\_\_\_\_ to indicate the number of atoms of each type present in the compound
- No prefixes
- Change the \_\_\_\_\_ syllable of the \_\_\_\_\_ to say \_\_\_\_\_

Directions: Complete the chart below.

Element	Number of Valence Electrons	# of electrons gained or lost to fill outer energy level	Charge (Oxidation Number)
<b>Sodium</b>			
<b>Chlorine</b>			
<b>Beryllium</b>			
<b>Fluorine</b>			
<b>Lithium</b>			
<b>Oxygen</b>			
<b>Potassium</b>			
<b>Magnesium</b>			
<b>Phosphorous</b>			
<b>Aluminum</b>			

Directions: For each of the following elements, draw Lewis dot diagrams and arrows to show the transfer of electrons. Then, write the chemical formula and name for the compound.

### 1) Sodium + Chlorine

### 2) Potassium + Iodine

Formula: \_\_\_\_\_

Formula: \_\_\_\_\_

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

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

### 3) Magnesium + Oxygen

### 4) Calcium + Sulfur

Formula: \_\_\_\_\_

Formula: \_\_\_\_\_

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

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

### 5) Calcium + Chlorine

### 6) Magnesium + Fluorine

Formula: \_\_\_\_\_

Formula: \_\_\_\_\_

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

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

## 7) Potassium + Bromine

Formula: \_\_\_\_\_

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

## 8) Potassium + Oxygen

Formula: \_\_\_\_\_

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

## 9) Sodium + Oxygen

Formula: \_\_\_\_\_

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

## 10) Aluminum + Chlorine

Formula: \_\_\_\_\_

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

## 11) Calcium + Fluorine

Formula: \_\_\_\_\_

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

## 12) Magnesium + Iodine

Formula: \_\_\_\_\_

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