

Unit 4: Bonding

Learning Objectives

1. Predict the formula for binary (two-atom) compounds of main group elements.
 - I can use the periodic table to predict the charges of ions.
 - I can predict the formula for ionic compounds made between a metal and non-metal of main group elements (columns 1-2, 13-17)
 - I can write the names of compounds formed between a main group metal and a nonmetal.
2. Write formulas for ionic compounds containing polyatomic ions.
 - Given a Famous Ion Sheet and the name of an ionic compound, I can write the formula.
 - Given a formula, I can write the name of the compound.
3. Write formulas for ionic compounds containing transition metals.
 - I can recognize whether a metal is a transition metal.
 - I can use Roman numerals when writing the names of compounds involving transition metals.
4. Given the name of a covalent compound, write the formula.
 - I can identify whether a compound is ionic or covalent.
 - I know how the prefixes mono, di, tri, tetra, penta, hexa, hepta, and octa identify atoms involved in a covalent bond.
 - I can correctly use the term “molecule” to apply only to covalent compounds.