

CHEMICAL NOMENCLATURE

Objectives

- 1. Distinguish between monatomic & polyatomic ions.
- 2. Apply nomenclature rules to name and write formulas for monatomic ions using both new (Roman Numeral) and old (-ic and -ous) systems.
- 3. Predict ionic charges for elements using the periodic table and from chemical formulas.
- 4. Apply nomenclature rules to name and write formulas for polyatomic ions.
- 5. Distinguish the uses of -ite, -ate, and -ide suffixes and the uses of hypo- and per- prefixes.
- 6. Distinguish between ionic & molecular compounds.
- 7. Identify the representative units of elements & different types of compounds.
- 8. Identify the type of chemical bonding in a given compound.
- 9. Use prefixes representing the numbers 1 through 12 in naming binary molecular compounds.
- 10. Apply nomenclature rules for naming and writing formulas for binary molecular compounds.
- 11. Balance charges on ions to make neutral compounds.
- 12. Apply nomenclature rules for naming and writing formulas for binary ionic compounds.
- 13. Apply nomenclature rules for naming and writing formulas for ternary ionic compounds.
- 14. Identify acids from written chemical formulas.
- 15. Apply nomenclature rules for naming and writing formulas for acids.
- 16. Distinguish between these compounds: binary molecular, binary ionic, ternary ionic & acids.
- 17. Use a structured, rigorous, investigative process to collect data on specific cations, anions or compounds and use that data to predict an unknown.