Unit 06: The Mole

Content Area: **Science**
Course(s): **Chemistry Accelerated**
Time Period: **Marking Period 3**
Length: **5 weeks**
Status: **Published**

Textbook Resources

Glencoe Science Chemistry Concepts and Applications

Chapter 12: Chemical Quantities

Standards

SCI.9-12.HS-PS1-7	Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.

Goals/Objectives

- How do chemists determine the quantities needed for chemical reactions?
- How do we quantify very small things?

Content

- Empirical Formulas
- Factor Label Method (Dimensional Analysis)
- Molar Mass and Avogadro's Number
- The Mole
- Theoretical v. Actual Yield

Skills

- • Calculate percent yield
- • Mathematically determine the limiting reactant
- • Perform conversions between moles, number of particles, mass, and volume
- • Solve for empirical and molecular formulas
- • Solve stoichiometry problems