

Lesson Plan: Moles

This lesson plan includes the objectives, prerequisites, and exclusions of the lesson teaching students how to define the mole in terms of Avogadro's constant and convert the mass of a substance to an amount of moles.

■ Objectives

Students will be able to

- ▶ define what the mole is and state its relationship to Avogadro's number,
- ▶ express the relationship between molecular mass, Avogadro's number, and number of moles,
- ▶ identify the units of molecular mass, Avogadro's constant, and number of moles,
- ▶ identify that *one* mole of any substance contains the same number of entities,
- ▶ calculate the mass of a compound based on the number of moles it contains.

■ Prerequisites

Students should already be familiar with

- ▶ formula mass.

■ Exclusions

Students will not cover

- ▶ molar concentrations,
- ▶ molar gas volumes,
- ▶ percentage composition.