



# Lesson Plan: Chemical Analysis

This lesson plan includes the objectives and exclusions of the lesson teaching students how to identify and describe the different types of chemical analysis and explain their importance in scientific fields.

## ■ Objectives

Students will be able to

- ▶ describe the importance of chemical analysis in different scientific fields,
- ▶ identify the scientific fields where chemical analysis is important and explain how it is used,
- ▶ explain qualitative and quantitative analyses and the differences between them,
- ▶ describe the different tests used in qualitative and quantitative analyses,
- ▶ suggest the type of chemical analysis (or even the specific type of test) for a given experiment or scenario.

## ■ Exclusions

Students will not cover

- ▶ details of the specific tests for cations, anions, gases, or water,
- ▶ details of titration experiments or calculations,
- ▶ details of determining purity,
- ▶ details of water of crystallization or precipitation gravimetry.