

Chemistry | Science Power Standards

1. Explains and applies atomic theory to the composition of matter.
2. Explains the organization, structure, and trends of the periodic table.
3. Explains the formation of molecules and ionic compounds.
4. Applies the theories of atomic structure to nuclear reactions and decay.
5. Applies nomenclature and molar mass when balancing chemical equations.
6. Explains the nature of chemical reactions and the factors involved.
7. Explains how energy is involved in chemical reactions.
8. Explains the properties and behavior of solids, liquids, and gases.
9. Explains the properties of solutions, acids, and bases.
10. Solves problems using dimensional analysis, the metric system, significant figures, and scientific notation.
11. Applies system analysis in scientific inquiry and technological design.
12. Applies the scientific inquiry process to investigations in the natural world.
13. Explains and applies communication, collaboration, and scientific honesty to the advancement of science.
14. Explains the interdependence of science and technology, and applies these methods when solving critical issues that influence society.