

MIDDLE GRADES 6-8

The middle school science component of the SCS focuses on the Unifying Concepts of Science as identified by the National Science Education Standards. The unifying concepts and the Strands should be integrated with science content goals and objectives for middle school.

The Unifying Concepts of Science consist of:

- Systems, Order, and Organization
- Evidence, Models, and Explanation.
- Constancy, Change, and Measurement.
- Evolution and Equilibrium.
- Form and Function.

The **Strands** include the following goals:

Nature of Science

As a result of activities in grades 6-8, all students should develop an understanding of:

- Science as a human endeavor.
- Nature of scientific knowledge.
- Historical perspectives.

Science as Inquiry

As a result of activities in grades 6-8, all students should develop an understanding of:

- Ability to do scientific inquiry.
- Understanding about scientific inquiry.
- Ability to perform safe and appropriate manipulation of materials, scientific equipment, and technology.
- Mastery of integrated process skills.
 - acquiring, processing, and interpreting data
 - identifying variables and their relationships
 - designing investigations
 - experimenting
 - analyzing investigations
 - constructing hypotheses
 - formulating models

Science and Technology

As a result of activities in grades 6-8, all students should develop an understanding of:

- What technologies are.
- Ability to perform technological design.
- Understanding science and technology.

Science in Personal and Social Perspectives

As a result of activities in grades 6-8, all students should develop an understanding of:

- Personal and community health.
- Population dynamics/Environmental quality
- Natural and human-induced hazards.
- Science and technology in local, national, and global challenges.
- Careers in science and technology.