

The content standards that are addressed in the module are the following:

Montana Science Standard 1: Students, through the inquiry process, demonstrate the ability to design, conduct, evaluate, and communicate results and reasonable conclusions of scientific investigations.

Benchmark 1, grades 5-8. identify a question, determine relevant variables and a control, formulate a testable hypothesis, plan and predict the outcome of an investigation, safely conduct scientific investigation, and compare and analyze data.

Benchmark 2, grades 5-8. Select and use appropriate tools including technology to make measurements (in metric units), gather, process and analyze data from scientific investigations.

Benchmark 3, grades 5-8. Review, communicate and defend results of investigations, including considering alternative explanations.

Montana Science Standard 2. Students, through the inquiry process, demonstrate knowledge of properties, forms, changes and interactions of physical and chemical systems.

Benchmark 2, grades 5-8. Examine, describe, compare and classify objects and substances based on common physical properties and simple chemical properties.

Benchmark 7, grades 5-8. Give examples and describe how energy is transferred and conserved (e.g. electric to light and heat, chemical to mechanical).

Montana Science Standard 4: Students, through the inquiry process, demonstrate knowledge of the composition, structures, processes and interactions of Earth's systems and other objects in space.

Benchmark 4, grades 5-8. Describe the water cycle, the composition and structure of the atmosphere and the impact of oceans on large-scale weather.

Montana Science Standard 5. Students, through the inquiry process, understand how scientific knowledge and technological

developments impact communities, cultures and societies.

Benchmark 4, grades 5-8. Use scientific knowledge to investigate problems and their proposed solutions and evaluate those solutions while considering environmental impacts.

National Science Education Standards (NSES <http://www.nap.edu/html/nses>), Grades 5-8:

NSES Content Standard 1. Unifying Concepts and Processes.

- Systems, Order and Organization
- Evidence, Models and Explanation
- Change, Constancy, and Measurement

NSES Content Standard 2. Science as Inquiry.

- Abilities necessary to do scientific inquiry
- Understanding about scientific inquiry

NSES Content Standard 3. Physical Science.

- Properties and changes of properties of matter
- Transfer of energy

NSES Content Standard 5. Earth and Space Science.

- Structure of the earth system

NSES Content Standard 7. Science in personal and social perspectives.

Science and technology in society