

New Jersey State Science Standards

Process Standards Indicators | Content Standards Indicators

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The Process Standards indicate the following:

1. All students will learn to identify systems of interacting components and understand how their interactions combine to produce the overall behavior of the system.
2. All students will develop problem solving, decision making, and inquiry skills, reflected by formulating usable questions and hypotheses, planning experiments, conducting systematic observations, interpreting and analyzing data, drawing conclusions, and communicating results.
3. All students will develop an understanding of how people of various cultures have contributed to the advancement of science and technology, and how major discoveries and events have advanced science and technology.
4. All students will develop an understanding of technology as an application of scientific principals.
5. All students will integrate mathematics as a tool for problem-solving in science, and as a means of expressing and/or modeling scientific theories.

The Content Standards indicate the following:

1. All students will gain an understanding of the structure, characteristics, and basic needs of organisms.
2. All students will investigate the diversity of life.

3. All students will gain an understanding of the structure and behavior of matter.
4. All students will gain an understanding of the origin, evolution, and structure of the universe.
5. All students will develop an understanding of the environment as a system of interdependent components affected by human activity and natural phenomena.

Our efforts reflect the considerations of the NJ Core Proficiencies.

This suggests such approaches as starting with questions about phenomena rather than with answers to be learned; engaging students actively in the use of hypotheses, the collection and use of evidence, and the design of investigations and processes; and placing a premium on students' curiosity and creativity. We emphasize homework, and maintenance of a notebook.

Biology is not a subject to be learned primarily from books or computers. An understanding of biology means being personally in touch with the biosphere, observing living organisms, and discovering for oneself how they function. Therefore, the biology curriculum contains personal observation and experimentation throughout its study.