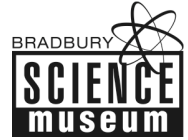




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**New Mexico Science Content Standards, Benchmarks, and Performance Standards
Strands and Benchmarks**

Kindergarten – 4th Grade

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

K-4 Benchmark I: Use scientific methods to observe, collect, record, analyze, predict, interpret, and determine reasonableness of data.

K-4 Benchmark II: Use scientific thinking and knowledge and communicate findings.

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

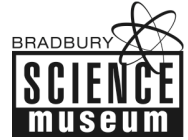
K-4 Benchmark I: Know that living things have diverse forms, structures, functions, and habitats.

Grade Performance Standards

- | | |
|----------|---|
| K | Identify major structures of common living organisms.
Observe that differences exist among individual living organisms of the same kind. |
| 1 | Know that living organisms inhabit various environments and have various external features to help them satisfy their needs.
Describe the differences and similarities among living organisms. |
| 2 | Observe that diversity exists among individuals within a population. |
| 3 | Know that an adaptation in physical structure or behavior can improve an organism's chance for survival.
Observe that plants and animals have structures that serve different functions.
Classify common animals according to their observable characteristics. |
| 4 | Explain that different living organisms have distinctive structures and body systems that serve specific functions. |



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**New Mexico Science Content Standards, Benchmarks, and Performance Standards
Strands and Benchmarks**

Kindergarten – 4th Grade

K-4 Benchmark II: Know that living things have similarities and differences and that living things change over time.

K-4 Benchmark III: Know the parts of the human body and their functions.

Grade Performance Standards

- | | |
|----------|---|
| 1 | Describe how some parts of human bodies differ from similar parts of other animals. |
| 2 | Know that various nutrients are required for specific parts and functions of the body. (ie. milk for bones and teeth)
Identify the functions of human systems. |
| 4 | Know that the human body has many parts that interact to function as systems and describe the parts and their specific functions in selected systems.
Recognize that the human body is organized from cells, to tissues, to organs, to systems, to the organism. |

**New Mexico Science Content Standards, Benchmarks, and Performance Standards
Strands and Benchmarks**

5th – 8th Grade

Strand I: Scientific Thinking and Practice

Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.

5-8 Benchmark II: Understand the processes of scientific investigation and how scientific inquiry results in scientific knowledge.

Grade Performance Standards

- 5** Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments).
Understand that scientific conclusions are subject to peer and public review.
- 6** Understand that scientific knowledge is continually reviewed, critiqued, and revised as new data become available.
Understand that scientific investigations use common processes that include the collection of relevant data and observations, accurate measurements, the identification and control of variables, and logical reasoning to formulate hypotheses and explanations.
- 7** Describe how bias can affect scientific investigation and conclusions. Critique procedures used to investigate a hypothesis. Analyze and evaluate scientific explanations.

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

5-8 Benchmark I: Explain the diverse structures and functions of living things and the complex relationships between living things and their environments.

Grade Performance Standards

- 5** Identify the components of habitats and ecosystems (producers, consumers, decomposers, predators).
Understand how food webs depict relationships between different organisms.
Know that changes in the environment can have different effects on different organisms (e.g., some organisms move, some survive, some reproduce, some die).
Describe how human activity impacts the environment.
- 6** Understand how organisms interact with their physical environments to meet their needs (i.e., food, water, air) and how the water cycle is essential to most living systems.
Describe how weather and geologic events (e.g., volcanoes, earthquakes) affect the function of living systems.
Describe how organisms have adapted to various environmental conditions.

**New Mexico Science Content Standards, Benchmarks, and Performance Standards
Strands and Benchmarks**

5th – 8th Grade

5-8 Benchmark II: Understand how traits are passed from one generation to the next and how species evolve.

Grade

Performance Standards

- 5** Know that plants and animals have life cycles that include birth, growth and development, reproduction, and death and that these cycles differ for different organisms. Identify characteristics of an organism that are inherited from its parents (e.g., eye color in humans, flower color in plants) and other characteristics that are learned or result from interactions with the environment.
Understand that heredity is the process by which traits are passed from one generation to another.
- 6** Understand that the fossil record provides data for how living organisms have evolved. Describe how species have responded to changing environmental conditions over time (e.g., extinction, adaptation).
- 7** **Biological Evolution**
Describe how typical traits may change from generation to generation due to environmental influences (e.g., color of skin, shape of eyes, camouflage, shape of beak).
Explain that diversity within a species is developed by gradual changes over many generations.
Know that organisms can acquire unique characteristics through naturally occurring genetic variations.
Identify adaptations that favor the survival of organisms in their environments (e.g., camouflage, shape of beak).

Strand II: Content of Science

Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.

5-8 Benchmark III: Understand the structure of organisms and the function of cells in living systems.

Grade

Performance Standards

- 5** Understand that all living organisms are composed of cells from one to many trillions, and that cells are usually only visible through a microscope.
Know that some organisms are made of a collection of similar cells that cooperate (e.g., algae) while other organisms are made of cells that are different in appearance and function (e.g., corn, birds).
Describe the relationships among cells, tissues, organs, organ systems, whole organisms, and ecosystems.
- 7** **Structure of Organisms**
Understand that organisms are composed of cells and identify unicellular and multicellular organisms.
Explain how organs are composed of tissues of different types of cells (e.g., skin, bone, muscle, heart, intestines).