

MINNESOTA ACADEMIC STANDARDS GRADE 3

SCIENCE

Strand: I. HISTORY AND NATURE OF SCIENCE	Sub-Strand: A. Scientific World View	Standard: The student will understand the use of science as a tool to examine the natural world.	Benchmarks: 1. The student will explore the use of science as a tool that can help investigate and answer questions about the environment.
Strand: I. HISTORY AND NATURE OF SCIENCE	Sub-Strand: B. Scientific Inquiry	Standard: The student will understand the nature of scientific investigations.	Benchmarks: 1. The student will ask questions about the natural world that can be investigated scientifically. 2. The student will participate in a scientific investigation using appropriate tools. 3. The student will know that scientists use different kinds of investigations depending on the questions they are trying to answer.
Strand: II. PHYSICAL SCIENCE	Sub-Strand: A. Structure of Matter	Standard: The student will know that heating and cooling may cause changes to the properties of a substance.	Benchmarks: 1. The student will observe that heating and cooling can cause changes in state. 2. The student will describe the changes in the properties of a substance when it is heated or cooled. 3. The student will compare and contrast the mass, shape and volume of solids, liquids and gases.
Strand: II. PHYSICAL SCIENCE	Sub-Strand: C. Energy Transformations	Standard: a. The student will understand basic electricity and its application in everyday life.	Benchmarks: 1. The student will explore simple electrical circuits using components such as wires, batteries and bulbs. 2. The student will investigate static electricity. 3. The student will identify objects and materials that conduct electricity and those that are insulators.
Strand: II. PHYSICAL SCIENCE	Sub-Strand: C. Energy Transformations	Standard: b. The student will explore the characteristics and properties of sound and light.	Benchmarks: 1. The student will investigate how sounds are made when objects vibrate. 2. The student will know that light tends to maintain its direction of motion until it is absorbed, refracted, or reflected by an object.
Strand: II. PHYSICAL SCIENCE	Sub-Strand: E. Forces of Nature	Standard: The student will understand that forces can act at a distance.	Benchmarks: 1. The student will know that magnets can be used to make some things move without direct contact. 2. The student will know that things near the Earth fall to the ground unless something holds them up.

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Strand: III. EARTH AND SPACE SCIENCE	Sub-Strand: B. The Water Cycle, Weather and Climate	Standard: The student will recognize that water on Earth cycles and exists in many forms.	Benchmarks: 1. The student will describe the water cycle involving the processes of evaporation, condensation, precipitation and collection. 2. The student will identify where water exists on Earth.
Strand: IV. LIFE SCIENCE	Sub-Strand: B. Diversity of Organisms	Standard: a. The student will recognize that plants and animals have different structures that serve various functions.	Benchmarks: 1. The student will describe the structures that serve different functions in growth, survival and reproduction for plants and animals. 2. The student will know that plants have different structures from animals that serve the same necessary functions in growth, survival and reproduction.
Strand: IV. LIFE SCIENCE	Sub-Strand: B. Diversity of Organisms	Standard: b. The student will know that living things can be sorted into groups in many ways according to their varied characteristics, structures and behaviors.	Benchmarks:
Strand: IV. LIFE SCIENCE	Sub-Strand: C. Interdependence of Life	Standard: The student will understand that an organism's patterns of behavior are related to the nature of its environment.	Benchmarks: 1. The student will know that organisms interact with one another in various ways besides providing food. 2. The student will know that changes in a habitat can be beneficial or harmful to an organism.
Strand: IV. LIFE SCIENCE	Sub-Strand: D. Heredity	Standard: The student will understand that many characteristics of an organism are inherited from its parents, but that other characteristics result from an individual's interactions with the environment.	Benchmarks: 1. The student will observe and differentiate between characteristics of organisms that are inherited and characteristics that are acquired. 2. The student will identify similarities and differences between parent and offspring.