
**Science Standards
Grades K**

Strand:

S1 Scientific Inquiry: The student develops abilities necessary to do scientific inquiry and an understanding about scientific inquiry; that is, the student:

Standards:

S1a: asks questions about objects, organisms, and events.

S1b: uses observations to make simple predictions.

S1c: conducts simple explorations and investigations.

Components:

S1c1. Records by drawing or dictating

S1c2. discusses how the class' questions might be answered.

S1c3. is exposed to a variety of teacher-selected resources.

S1c4. uses simple tools such as hand lenses and measuring devices to make observations and collect data.

S1c5. displays data in graphs.

Standards:

S1d: identifies a pattern based on observations.

S1e: compares objects based on observable and measurable characteristics (e.g., faster/slower)

S1f: analyzes and makes statements about data displayed in a graph.

S1g: communicates scientific explorations through discussions with peers and through drawings, graphs, and dictation.

S1h: identifies examples of safe practices in science.

Components:

S1h1. demonstrates safe sky viewing procedures.

S1h2. demonstrates appropriate uses of scissors, weather measuring devices, and hand lenses in science investigations.

Strand:

S2 History and Nature of Science: The student develops an awareness of science as a human endeavor; that is, the student:

Standards: S2a: realizes that people have been doing science for a long time.

S2b: expresses that science involves thinking, asking questions about the world, and trying to answer those questions.

S2c: recognizes that in science people share ideas and findings.

S2d: provides examples of how diverse people (children, fathers, mothers, teachers, weather reporters, etc.) participate in doing science.

Components:

S2d1. demonstrates knowledge of some of the things meteorologists study.

S2d2. demonstrates knowledge of some of things geologists study.

Strand:

S3 Personal & Social Perspectives: The student develops an understanding of safety and types of resources as it relates to their immediate environment; that is, the student:

Standards: S3a: describes basic resources that are found in their environments, such as soil, water, and trees, and other resources that are produced from these resources, such as building materials.

Strand:

S4 Science and Technology: The student develops an understanding about science and technology, and the nature of technological design; that is, the student:

Standards: S4a: identifies a simple problem, proposes a solution for the problem, and then evaluates the solution in terms of its ability to solve the problem.

S4b: recognizes that technological solutions are human designed.

S4c: recognizes that things found in nature are different from those that are made by humans.

Components:

S4c1. compares grow lights with the Sun's

Strand:

S5 Physical Science: The student develops an understanding of matter, motion, and energy; that is, the student:

Standards: S5a: builds awareness that objects can be described by their physical properties.

Components:

S5a1. observes and identifies properties of common objects (e.g., size, shape, color).

S5a2. observes and identifies uses of common objects based on their properties.

Standards:

S5b: recognizes that objects can move in a variety of ways.

Components:

S5b1. explores the motion of a variety of objects (e.g., balls, rolling objects pinwheels, windsocks, leaves).

S5b2. identifies the movement of objects (i.e. straight, round and round, zig-zag, back and forth, fast and slow).

S5b3. explains how the physical properties of an object may affect its motion (e.g., shape, size).

Standards:

S5c: explores sources of light and heat within the environment.

Components:

S5c1. explains that that heat has many sources (e.g., the Sun, flames, light bulbs, flashlights, heating elements).

S5c2. demonstrates that many things that produce light also produce heat.

Strand:

S6 Life Science: The student develops an understanding of the characteristics of organisms, their life cycles, and their environments; that is, the student:

Standards: S6a: identifies differences between living and nonliving things.

Components:

S6a1. identifies attributes and behaviors that help differentiate living from non-living things.

S6a2. describes examples of likenesses and differences in the appearance and behavior of some living things.

Standards:

S6b: describes ways in which animals resemble their parents.

Components:

S6b1. Provides examples of how animals (including humans) are alike and different from their biological parents.

Standards: S6c: builds an awareness of the basic needs of living things.

Components:

S6c1. Investigates and identifies resources (light, water, and air) that plants need to survive.

S6c2. Investigates and identifies resources (food, water, and air) that animals need to survive.

Strand:

S7 Earth & Space Sciences: The student develops an understanding of Earth materials, objects in the sky, and changes in Earth and sky; that is, the student:

Standards: S7a: recognizes and describes the variety of earth materials.

Components:

S7a1. Identifies rocks, sand, soil, air, and water as earth materials.

S7a2. Describes the various sizes, shapes, colors, and textures of rocks.

Standards:

S7b: investigates how weather can change from day to day.

Components:

S7b1. Identifies basic weather features (e.g., temperature, wind, rain, clouds).

S7b2. describes changes in weather, based on observations.

S7b3. demonstrates that wind is moving air that has direction and force.

Standards:

S7c: recognizes that the Sun is the major source of light and warmth on earth.

Components:

S7c1. identifies day and night as a repeating pattern.

S7c2. investigates and describes how the Sun warms the land, air, and water.

Standards:

S7d: examines the celestial objects that can be seen at various times in the daytime sky and nighttime sky.

Components:

S7d1. compares the things that can be seen in the day sky with those that that can be seen at night.