

## Science: Pre-Kindergarten

Strand:

### **S1 Scientific Inquiry**

The student begins to develop abilities necessary to do scientific inquiry and to explore through scientific inquiry; that is, the student:

Standards:

- S1a:** asks questions about objects, organisms, and events in the immediate environment.
- S1b:** accesses information by asking questions.
- S1c:** conducts simple explorations through observation and active play.
- S1d:** uses simple equipment and tools to extend the senses.
- S1e:** uses observations to answer questions.
- S1f:** communicates explorations through speaking, drawing, and writing.

Strand:

### **S2 History and Nature of Science**

The student begins to develop an awareness of science as a human endeavor; that is, the student:

Standards:

- S2a:** demonstrates curiosity during active play and explorations.
- S2b:** recognizes that in science it is possible to work alone or as a team.
- S2c:** recognizes how science and technology are used in their everyday lives.

Strand:

### **S3 Science in Personal and Social Perspectives**

The student begins to develop an awareness of safety and types of resources as it relates to the immediate environment; that is, the student:

Standards:

- S3a:** demonstrates personal and group safety during active exploration and observation.
- S3b:** identifies resources in their immediate environment.
- S3c:** practices conservation of resources.

Strand:

### **S4 Science and Technology**

The student begins to develop an understanding about science and technology; that is, the student:

Standards:

- S4a:** recognizes that tools and technology can be used to observe, measure, and make things.
- S4b:** identifies ways tools and technology are used at home and school.
- S4c:** recognizes that people are always inventing new tools and ways of doing things.

Strand:

### **S5 Physical Science**

The student begins to develop an understanding of matter, motion and energy; that is, the student:

Standards:

- S5a:** identifies observable properties of objects and materials.

Component:

- S5a.1:** Objects and materials may differ in size, shape, color, texture, weight, and temperature.

Standard:

- S5b:** explores how objects move.

Component:

- S5b.1:** Objects can move when pushed or pulled.

Standard: **S5c:** explores and identifies observable properties of light, heat, and magnets.  
Components: **S5c.1:** Light can be seen.  
**S5c.2:** Heat can be observed through touch.  
**S5c.3:** Magnets can be used to make some things move without being touched.

Strand:  
**S6 Life Science**

The student begins to develop an understanding of the characteristics of organisms, their life cycles, and their environments; that is, the student:

Standard: **S6a:** explores the differences between living and non-living things.  
Component: **S6a.1:** Living things can grow, move, and breathe. Most living things require food, water and air. Non-living things do not require food, water, and air and cannot grow, move, or breathe.  
Standard: **S6b:** observes and describes change in personal growth and change in other living organisms.  
Component: **S6b.1:** As living organisms grow, they experience many changes in appearance such as body size, body weight, and body shape.  
Standard: **S6c:** develops sensitivity to the needs of living organisms in their environment.  
Component: **S6c.1:** Care and handling of organisms requires knowledge and use of accepted procedures.

Strand:  
**S7 Earth and Space Sciences**

The student begins to develop an understanding of Earth materials, objects in the sky, and changes in Earth and sky; that is, the student:

Standard: **S7a:** explores and identifies simple properties of soil and water.  
Components: **S7a.1:** Water is a liquid and a solid (ice); soil is a solid.  
**S7a.2:** Water left in an open container disappears, but water in a closed container does not disappear.  
**S7a.3:** Soil varies in color and texture.  
Standard: **S7b:** observes changes in weather over time.  
Component: **S7b.1:** Changes may be cyclical (e.g., temperature) or less consistent (e.g., cloud cover, wind, precipitation).  
Standard: **S7c:** observes and identifies changes in the Earth and sky.  
Components: **S7c.1:** The moon looks a little different every day, but looks the same again about every four weeks.  
**S7c.2:** Stars give off light. The sun is a star and provides light to Earth and other objects in the sky.  
**S7c.3:** Additional changes on Earth include day and night, and seasons.