

Grade Pre-K

Adopted 2020

Physical Science PS1

1. Recognize there are cause-and-effect relationships related to matter and energy. PS1.PK.1

- a. Use senses to explore the properties of objects and materials (e.g., solids, liquids). PS1.PK.1.A
- b. Make simple observations, predictions, explanations, and generalizations based on real-life experiences. PS1.PK.1.B
- c. Collect, describe, predict and record information using words, drawings, maps, graphs and charts. PS1.PK.1.C
- d. Observe, describe, and discuss living things and natural processes. PS1.PK.1.D

2. Recognize there are cause-and-effect relationships related to matter and energy. PS1.PK.2

- a. Recognize and investigate cause-and-effect relationships in everyday experiences (pushing, pulling, kicking, rolling or blowing objects). PS1.PK.2.A
- b. Notice change in matter. PS1.PK.2.B
- c. Observe, describe and discuss properties of materials and transformation of substances. PS1.PK.2.C
- d. Seek answers to questions and test predictions using simple experiments. PS1.PK.2.D

Life Science LS2

1. Recognize that living things have unique characteristics and basic needs that can be observed and studied. LS2.PK.1

- a. Observe, describe and discuss living things. LS2.PK.1.A
- b. Observe similarities and differences in the needs of living things. LS2.PK.1.B
- c. Observe and describe how natural habitats provide for the basic needs of plants and animals with respect to shelter, food, water, air and light. LS2.PK.1.C
- d. Ask and pursue questions through simple investigations and observations of living things. LS2.PK.1.D
- e. Collect, describe, and record information about living things through discussion, drawings, graphs, technology and charts. LS2.PK.1.E
- f. Identify differences between living and nonliving things. LS2.PK.1.F

2. Recognize that living things develop in predictable patterns. LS2.PK.2

- a. Identify the common needs such as food, air and water of familiar living things. LS2.PK.2.A
 - b. Predict, explain and infer patterns based on observations and representations of living things, their needs and life cycles. LS2.PK.2.B
 - c. Observe and document changes in living things over time using different modalities such as drawing, dramatization, describing or using technology. LS2.PK.2.C
 - d. Recognize that plants and animals grow and change. LS2.PK.2.D
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**Earth and Space
Science** ESS3

1. The acquisition of concepts and facts related to the Earth materials and their uses. ESS3.PK.1

- a. Use senses and tools, including technology, to investigate materials, and observe processes and relationships to gather information and explore the environment. ESS3.PK.1.A
 - b. Inquire about the natural and physical environment. ESS3.PK.1.B
 - c. Observe and discuss common properties, differences and comparisons among objects. ESS3.PK.1.C
 - d. Participate in simple investigations to form hypothesis, gather observations, draw conclusions. ESS3.PK.1.D
 - e. Record observations using words, drawings, maps, graphs and charts. ESS3.PK.1.E
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2. The acquisition of concepts and facts related to the natural and physical world and the understanding of naturally occurring relationships. ESS3.PK.2

- a. Predict, explain and infer patterns based on observations and evidence. ESS3.PK.2.A
- b. Articulate findings through a variety of modalities (e.g., drawings, words, dramatizations). ESS3.PK.2.B
- c. Recognizes familiar elements of the natural world and demonstrates an understanding that these may change over time (e.g., sun and moon, weather). ESS3.PK.2.C
- d. Observe and describe patterns observed over the course of a number of days and nights (e.g., differences in the activities or appearance of plants and animals). ESS3.PK.2.D