

# Science-PreK (Early Childhood)

**GOAL 11: Demonstrate curiosity about the world and begin to use the practices of science and engineering to answer questions and solve problems.** S.EC.11

- A LEARNING STANDARD 11A: Develop beginning skills in the use of science and engineering practices, such as observing, asking questions, solving problems, and drawing conclusions.** S.EC.11A
- i Express wonder and curiosity about their world by asking questions, solving problems, and designing things. S.EC.11A-1
  - ii Develop and use models to represent their ideas, observations, and explanations through approaches such as drawing, building, or modeling with clay. S.EC.11A-2
  - iii Plan and carry out simple investigations. S.EC.11A-3
  - iv Collect, describe, compare, and record information from observations and investigations. S.EC.11A-4
  - v Use mathematical and computational thinking. S.EC.11A-5
  - vi Make meaning from experience and information by describing, talking, and thinking about what happened during an investigation. S.EC.11A-6
  - vii Generate explanations and communicate ideas and/or conclusions about their investigations. S.EC.11A-7

**GOAL 12: Explore concepts and information about the physical, earth, and life sciences.** S.EC.12

- A LEARNING STANDARD 12A: Understand that living things grow and change.** S.EC.12A
- i Observe, investigate, describe, and categorize living things. S.EC.12A-1
  - ii Show an awareness of changes that occur in oneself and the environment. S.EC.12A-2
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- B LEARNING STANDARD 12B: Understand that living things rely on the environment and/or others to live and grow.** S.EC.12B
- i Describe and compare basic needs of living things. S.EC.12B-1
  - ii Show respect for living things. S.EC.12B-2
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- C LEARNING STANDARD 12C: Explore the physical properties of objects.** S.EC.12C
- i Identify, describe, and compare the physical properties of objects. S.EC.12C-1
  - ii Experiment with changes in matter when combined with other substances. S.EC.12C-2

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**D LEARNING STANDARD 12D: Explore concepts of force and motion.** S.EC.12D

- i Describe the effects of forces in nature. S.EC.12D-1
- ii Explore the effect of force on objects in and outside the early childhood environment. S.EC.12D-2

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**E LEARNING STANDARD 12E: Explore concepts and information related to the Earth, including ways to take care of our planet.** S.EC.12E

- i Observe and describe characteristics of earth, water, and air. S.EC.12E-1
- ii Participate in discussions about simple ways to take care of the environment. S.EC.12E-2

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**F LEARNING STANDARD 12F: Explore changes related to the weather and seasons.** S.EC.12F

- i Observe and discuss changes in weather and seasons using common vocabulary. S.EC.12F-1

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**GOAL 13: Understand important connections and understandings in science and engineering.** S.EC.13

**A LEARNING STANDARD 13A: Understand rules to follow when investigating and exploring.** S.EC.13A

- i Begin to understand basic safety practices one must follow when exploring and engaging in science and engineering investigations. S.EC.13A-1

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**B LEARNING STANDARD 13B: Use tools and technology to assist with science and engineering investigations.** S.EC.13B

- i Use nonstandard and standard scientific tools for investigation. S.EC.13B-1
- ii Become familiar with technological tools that can aid in scientific inquiry. S.EC.13B-2