

# Science and Technology/Engineering

## EARTH AND SPACE SCIENCES

### 1 Earth's Place in the Universe ESS1

- 1 Demonstrate awareness that the moon can be seen in the daytime and at night, and of the different apparent shapes of the moon over a month. PREK-ESS1-1
- 2 Observe and use evidence to describe that the sun is in different places in the sky during the day. PREK-ESS1-2

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### 2 Earth's Systems ESS2

- 1 Raise questions and engage in discussions about how different types of local environments (including water) provide homes for different kinds of living things. PREK-ESS2-1
- 1 Use and share quantitative observations of local weather conditions to describe patterns over time. K-ESS2-1
- 2 Observe and classify non-living materials, natural and human made, in the local environment. PREK-ESS2-2
- 2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment. K-ESS2-2
- 3 Explore and describe different places water is found in the local environment. PREK-ESS2-3
- 4 Use simple instruments to collect and record data on elements of daily weather, including sun or clouds, wind, snow or rain, and higher or lower temperature. PREK-ESS2-4
- 5 Describe how local weather changes from day to day and over the seasons and recognize patterns in those changes. PREK-ESS2-5
- 6 Provide examples of the impact of weather on living things. PREK-ESS2-6

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### **3 Earth and Human Activity** ESS3

- 1 Engage in discussion and raise questions using examples about local resources, (including soil and water) humans use to meet their needs. PREK-ESS3-1
  - 2 Observe and discuss the impact of people’s activities on the local environment. PREK-ESS3-2
  - 2 Obtain and use information about weather forecasting to prepare for, and respond to, different types of local weather. K-ESS3-2
  - 3 Communicate solutions to reduce the amount of natural resources an individual uses. \* PREK-ESS3-3
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## **LIFE SCIENCE**

### **1 From Molecules to Organisms: Structures and Processes** LS1

- 1 Compare, using descriptions and drawings, the external body parts of animals (including humans) and plants and explain functions of some of the observable body parts. PRE-K-LS1-1
  - 1 Observe and communicate that animals (including humans) and plants need food, water, and air to survive. Animals get food from plants or other animals. Plants make their own food and need light to live and grow. K-LS1-1
  - 2 Explain that most animals have five senses they use to gather information about the world around them. PRE-K-LS1-2
  - 2 Recognize that all plants and animals grow and change over time. K-LS1-2
  - 3 Use their five senses in their exploration and play to gather information. PRE-K-LS1-3
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### **2 Ecosystems: Interactions, Energy, and Dynamics** LS2

- 1 Use evidence from animals and plants to define several characteristics of living things that distinguish them from non-living things. PK-LS2-1
  - 2 Using evidence from the local environment to explain how familiar plants and animals meet their needs where they live. PK-LS2-2
  - 3 Give examples from the local environment of how animals and plants are dependent on one another to meet their basic needs. PK-LS2-3
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### **3 Variation of Traits** LS3

- 1 Use observations to explain that young plants and animals are like but not exactly like their parents. PREK-LS3-1
  - 2 Use observations to recognize differences and similarities among themselves and their friends. PREK-LS3-2
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## PHYSICAL SCIENCE

### 1 Matter and Its Interactions PS1

- 1 Raise questions and investigate the differences between liquids and solids and develop awareness that a liquid can become a solid and vice versa. PREK-PS1-1
  - 1 Investigate and communicate the idea that different kinds of materials can be solid or liquid depending on temperature. K-PS1-1
  - 2 Investigate natural and human-made objects to describe, compare, sort and classify objects based on observable physical characteristics, uses, and whether something is manufactured or occurs in nature. PREK-PS1-2
  - 3 Differentiate between the properties of an object and those of the material of which it is made. PREK-PS1-3
  - 4 Recognize through investigation that physical objects and materials can change under different circumstances. PREK-PS1-4
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### 2 Motion and Stability: Forces and Interactions PS2

- 1 Using evidence, discuss ideas about what is making something move the way it does and how some movements can be controlled. PREK-PS2-1
  - 1 Compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-PS2-1
  - 2 Through experience, develop awareness of factors that influence whether things stand or fall. PREK-PS2-2
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### 3 Energy PS3

- 1 Make observations to determine that sunlight warms materials on Earth's surface. K-PS3-1
  - 2 Use tools and materials to design and build a prototype of a structure that will reduce the warming effect of sunlight on an area. \* K-PS3-2
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### 4 Waves and Their Applications in Technologies for Information Transfer PS4

- 1 Investigate sounds made by different objects and materials and discuss explanations about what is causing the sounds. Through play and investigations, identify ways to manipulate different objects and materials that make sound to change volume and pitch. PREK-PS4-1
- 2 Connect daily experience and investigations to demonstrate the relationships between the size and shape of shadows, the objects creating the shadow, and the light source. PREK-PS4-2