

Tarrant Texas Education
Standards:

Subject - Science: Science Grade - K: Kindergarten Section - K: Knowledge and Skills Strand - K: Scientific investigation and reasoning Knowledge & Skill Statement - K.1: The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices. The student is expected to: Student Expectation K.1A: Identify, discuss, and demonstrate safe and healthy practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately. **K.1B:** Demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reusing or recycling paper, plastic, and metal.

Subject - Science: Science Grade - K: Kindergarten Section - K: Knowledge and Skills Strand - K: Earth and space Knowledge & Skill Statement - K.7: The student knows that the natural world includes earth materials. The student is expected to: Student Expectation K.7A: Observe, describe, and sort rocks by size, shape, color, and texture. **K.7B:** Observe and describe physical properties of natural sources of water, including color and clarity. **K.7C:** Give examples of ways rocks, soil, and water are useful.

Subject - Science: Science Grade - K: Kindergarten Section - K: Knowledge and Skills Strand - K: Organisms and environments Knowledge & Skill Statement - K.9: The student knows that plants and animals have basic needs and depend on the living and nonliving things around them for survival. The student is expected to: Student Expectation K.9A: Differentiate between living and nonliving things based upon whether they have basic needs and produce offspring. **K.9B:** Examine evidence that living organisms have basic needs such as food, water, and shelter for animals and air, water, nutrients, sunlight, and space for plants.

Subject - Science: Science Grade - 1: Grade 1 Section - 1: Knowledge and Skills Strand - 1: Scientific investigation and reasoning Knowledge & Skill Statement - 1.1: The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices. The student is expected to: Student Expectation 1.1A: Identify, discuss, and demonstrate safe and healthy practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately. **1.1B:** Identify and learn how to use natural resources and materials, including conservation and reuse or recycling of paper, plastic, and metals.

Subject - Science: Science Grade - 1: Grade 1 Section - 1: Knowledge and Skills Strand - 1: Earth and space Knowledge & Skill Statement - 1.7: The student knows that the natural world includes rocks, soil, and water that can be observed in cycles, patterns, and systems. The student is expected to: Student Expectation 1.7A: Observe, compare, describe, and sort components of soil by size, texture, and color. **1.7B:** Identify and describe a variety of natural sources of water, including streams, lakes, and oceans. **1.7C:** Identify how rocks, soil, and water are used to make products.

Subject - Science: Science Grade - 2: Grade 2 Section - 2: Knowledge and Skills Strand - 2: Scientific investigation and reasoning Knowledge & Skill Statement - 2.1: The student conducts classroom and outdoor investigations following home and school safety procedures. The student is expected to: Student Expectation 2.1A: Identify, describe, and demonstrate safe practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately. **2.1B:** Identify and demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reuse or recycling of paper, plastic, and metal.

Subject - Science: Science Grade - 2: Grade 2 Section - 2: Knowledge and Skills Strand - 2: Earth and space Knowledge & Skill Statement - 2.7: The student knows that the natural world includes earth materials. The student is expected to: Student Expectation 2.7A: Observe, describe, and compare rocks by size, texture, and color. **2.7B:** Identify and compare the properties of natural sources of freshwater and saltwater. **2.7C:** Distinguish between natural and manmade resources.

**Subject - Science:
Science Grade - 3:
Grade 3**

Section - 3: Knowledge and Skills Strand - 3: Scientific investigation and reasoning Knowledge & Skill Statement - 3.1: The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate practices. The student is expected to: Student Expectation 3.1A: Demonstrate safe practices as described in Texas Education Agency-approved safety standards during classroom and outdoor investigations using safety equipment as appropriate, including safety goggles or chemical splash goggles, as appropriate, and gloves. **3.1B:** Make informed choices in the use and conservation of natural resources by recycling or reusing materials such as paper, aluminum cans, and plastics.

Subject - Science: Science Grade - 3: Grade 3 Section - 3: Knowledge and Skills Strand - 3: Organisms and environments Knowledge & Skill Statement - 3.9: The student knows and can describe patterns, cycles, systems, and relationships within the environments. The student is expected to: Student Expectation 3.9A: Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem. **3.9B:** Identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the ecosystem such as removal of frogs from a pond or bees from a field. **3.9C:** Describe environmental changes such as floods and droughts where some organisms thrive and others perish or move to new locations.

Subject - Science: Science Grade - 4: Grade 4 Section - 4: Knowledge and Skills Strand - 4: Scientific investigation and reasoning Knowledge & Skill Statement - 4.1: The student conducts classroom and outdoor investigations, following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to: Student Expectation 4.1A: Demonstrate safe practices and the use of safety equipment as described in Texas Education Agency-approved safety standards during classroom and outdoor

investigations using safety equipment, including safety goggles or chemical splash goggles, as appropriate, and gloves, as appropriate. **4.1B:** Make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic.

Subject - Science: Science Grade - 4: Grade 4 Section - 4: Knowledge and Skills Strand - 4: Earth and space Knowledge & Skill Statement - 4.7: The students know that Earth consists of useful resources and its surface is constantly changing. The student is expected to: Student Expectation 4.7A: Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants. **4.7B:** Observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice. **4.7C:** Identify and classify Earth's renewable resources, including air, plants, water, and animals, and nonrenewable resources, including coal, oil, and natural gas, and the importance of conservation.

Subject - Science: Science Grade - 4: Grade 4 Section - 4: Knowledge and Skills Strand - 4: Organisms and environments Knowledge & Skill Statement - 4.9: The student knows and understands that living organisms within an ecosystem interact with one another and with their environment. The student is expected to: Student Expectation 4.9A: Investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food. **4.9B:** Describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web.

Subject - Science: Science Grade - 5: Grade 5 Section - 5: Knowledge and Skills Strand - 5: Scientific investigation and reasoning Knowledge & Skill Statement - 5.1: The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to: Student Expectation 5.1A: Demonstrate safe practices and the use of safety equipment as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations using safety equipment, including safety goggles or chemical splash goggles, as appropriate, and gloves, as appropriate. **5.1B:** Make informed choices in the conservation, disposal, and recycling of materials.

Subject - Science: Science Grade - 5: Grade 5 Section - 5: Knowledge and Skills Strand - 5: Earth and space Knowledge & Skill Statement - 5.8: The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to: Student Expectation 5.8A: Differentiate between weather and climate. **5.8B:** Explain how the Sun and the ocean interact in the water cycle. **5.8C:** Demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky. **5.8D:** Identify and compare the physical characteristics of the Sun, Earth, and Moon.