



Science Vertical Alignment, *Prekindergarten – Grade 2*

	Prekindergarten-PK4**	Kindergarten	Grade 1	Grade 2
Standards	Texas Prekindergarten Guidelines	Texas Essential Knowledge and Skills (TEKS)*	Texas Essential Knowledge and Skills (TEKS)*	Texas Essential Knowledge and Skills (TEKS)*
Domain / Content Area	VI. Science Domain *V. Mathematics Domain	Science	Science	Science
Sub-Domains / Strands	A. Physical Science B. Life Science C. Earth and Space Science *E. Classifications and Patterns	1. Scientific and Engineering Practices 2. Recurring Themes and Concepts 3. Matter and Its Properties 4. Force, Motion, and Energy 5. Earth and Space 6. Organisms and Environments	1. Scientific and Engineering Practices 2. Recurring Themes and Concepts 3. Matter and Its Properties 4. Force, Motion, and Energy 5. Earth and Space 6. Organisms and Environments	1. Scientific and Engineering Practices 2. Recurring Themes and Concepts 3. Matter and Its Properties 4. Force, Motion, and Energy 5. Earth and Space 6. Organisms and Environments

*Refers to the Science TEKS adopted in 2021

** There are no PK3 outcomes for this domain of learning.

SCIENTIFIC AND ENGINEERING PRACTICES

<p>Prekindergarten-PK4 A. Physical Science B.</p> <p>*V. Mathematics Domain PK3/PK4 E. Classification & Patterns</p>	<p>Kindergarten K(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>	<p>Grade 1 1(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>	<p>Grade 2 2(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>
<p>VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects.</p>	<p>K(1)(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations.</p>	<p>1(1)(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations.</p>	<p>2(1)(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations.</p>
<p>No standard present in the vertical progression</p>	<p>K(1)(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems.</p>	<p>1(1)(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems.</p>	<p>2(1)(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems.</p>
<p>No standard present in the vertical progression</p>	<p>K(1)(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards.</p>	<p>1(1)(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards.</p>	<p>2(1)(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards.</p>

<p>Prekindergarten-PK4 A. Physical Science B.</p> <p>*V. Mathematics Domain PK3/PK4 E. Classification & Patterns</p>	<p>Kindergarten K(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>	<p>Grade 1 1(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>	<p>Grade 2 2(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>
<p>VI.A.3 Child uses simple scientific tools to learn about objects.</p>	<p>K(1)(D) use tools, including hand lenses, goggles, trays, cups, bowls, sieves or sifters, notebooks, terrariums, aquariums, samples (rocks, sand, soil, loam, gravel, clay, seeds, and plants), windsock, demonstration thermometer, rain gauge, straws, ribbons, non-standard measuring items, blocks or cubes, tuning fork, various flashlights, small paper cups, items that roll, noise makers, hot plate, opaque objects, transparent objects, foil pie pans, foil muffin cups, wax paper, Sun-Moon-Earth model, and plant life cycle model to observe, measure, test, and compare.</p>	<p>1(1)(D) use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, sieves/sifters, tweezers, primary balance, notebooks, terrariums, aquariums, stream tables, soil samples (loam, sand, gravel, rocks, and clay), seeds, plants, windsock, pinwheel, student thermometer, demonstration thermometer, rain gauge straws, ribbons, non-standard measuring items, flashlights, sandpaper, wax paper, items that are magnetic, non-magnetic items, a variety of magnets, hot plate, aluminum foil, Sun, Moon-Earth model, and plant and animal life cycle models to observe, measure, test, and compare.</p>	<p>2(1)(D) use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, notebooks, stream tables, soil, sand, gravel, flowering plants, student thermometer, demonstration thermometer, rain gauge, flashlights, ramps, balls, spinning tops, drums, tuning forks, sandpaper, wax paper, items that are flexible, non-flexible items, magnets, hot plate, aluminum foil, Sun Moon-Earth model, and frog and butterfly life cycle models to observe, measure, test, and compare.</p>
<p>VI.A.3 Child uses simple scientific tools to learn about objects.</p>	<p>K(1)(E) collect observations and measurements as evidence.</p>	<p>1(1)(E) collect observations and measurements as evidence.</p>	<p>2(1)(E) collect observations and measurements as evidence.</p>

<p>Prekindergarten-PK4 A. Physical Science B.</p> <p>*V. Mathematics Domain PK3/PK4 E. Classification & Patterns</p>	<p>Kindergarten K(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>	<p>Grade 1 1(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>	<p>Grade 2 2(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:</p>
<p>PK3.V.E.2 Child participates in group activities of collecting data and organizing it into graphic representations.</p> <p>PK4.V.E.2 Child collects data and organizes it in a graphic representation.</p>	<p>K(1)(F) record and organize data using pictures, numbers, words, symbols, and simple graphs.</p>	<p>1(1)(F) record and organize data using pictures, numbers, words, symbols, and simple graphs.</p>	<p>2(1)(F) record and organize data using pictures, numbers, words, symbols, and simple graphs.</p>
<p>No standard present in the vertical progression</p>	<p>K(1)(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.</p>	<p>1(1)(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.</p>	<p>2(1)(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.</p>

SCIENTIFIC AND ENGINEERING PRACTICES

<p>Prekindergarten-PK4 A. Physical Science</p> <p>*V. Mathematics Domain- PK3/PK4</p> <p>E. Classification & Patterns</p>	<p>Kindergarten</p> <p>K(2) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:</p>	<p>Grade 1</p> <p>1(2) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:</p>	<p>Grade 2</p> <p>2(2) The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to:</p>
<p>VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects.</p>	<p>K(2)(A) identify basic advantages and limitations of models such as their size, properties, and materials.</p>	<p>1(2)(A) identify basic advantages and limitations of models such as their size, properties, and materials.</p>	<p>2(2)(A) identify basic advantages and limitations of models such as their size, properties, and materials.</p>
<p>PK3.V.E.2 Child participates in group activities of collecting data and organizing it into graphic representations.</p> <p>PK4.V.E.2 Child collects data and organizes it in a graphic representation.</p> <p>PK3.V.E.3 Child recognizes and duplicates patterns.</p> <p>PK4.V.E.3 Child recognizes, duplicates, extends, and creates patterns.</p>	<p>K(2)(B) analyze data by identifying any significant features and patterns.</p>	<p>1(2)(B) analyze data by identifying any significant features and patterns.</p>	<p>2(2)(B) analyze data by identifying any significant features and patterns.</p>
<p>V.E.1 Child sorts objects that are the same and different into groups and uses language to describe how the groups are similar and different.</p>	<p>K(2)(C) use mathematical concepts to compare two objects with common attributes.</p>	<p>1(2)(C) use mathematical concepts to compare two objects with common attributes.</p>	<p>2(2)(C) use mathematical concepts to compare two objects with common attributes.</p>
<p>No standard present in the vertical progression</p>	<p>K(2)(D) evaluate a design or object using criteria to determine if it works as intended.</p>	<p>1(2)(D) evaluate a design or object using criteria to determine if it works as intended.</p>	<p>2(2)(D) evaluate a design or object using criteria to determine if it works as intended.</p>

SCIENTIFIC AND ENGINEERING PRACTICES

Prekindergarten-PK4 N/A	Kindergarten K(3) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:	Grade 1 1(3) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:	Grade 2 2(3) The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:
No standard present in the vertical progression	K(3)(A) develop explanations and propose solutions supported by data and models.	1(3)(A) develop explanations and propose solutions supported by data and models.	2(3)(A) develop explanations and propose solutions supported by data and models.
No standard present in the vertical progression	K(3)(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats.	1(3)(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats.	2(3)(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats.
No standard present in the vertical progression	K(3)(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.	1(3)(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.	2(3)(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.

SCIENTIFIC AND ENGINEERING PRACTICES

Prekindergarten-PK4 N/A	Kindergarten K(4) The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:	Grade 1 1(4) The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:	Grade 2 2(4) The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:
No standard present in the vertical progression	K(4)(A) explain how science, or an innovation can help others.	1(4)(A) explain how science, or an innovation can help others.	2(4)(A) explain how science, or an innovation can help others.
VII.B.3 Child discusses the roles and responsibilities of family, school, and community helpers.	K(4)(B) identify scientists and engineers such as Isaac Newton, Mae Jemison, and Ynes Mexia and explore what different scientists and engineers do.	1(4)(B) identify scientists and engineers such as Isaac Newton, Mae Jemison, and Ynes Mexia and explore what different scientists and engineers do.	2(4)(B) identify scientists and engineers such as Isaac Newton, Mae Jemison, and Ynes Mexia and explore what different scientists and engineers do.

RECURRING THEMES AND CONCEPTS

Prekindergarten-PK4 A. Physical Science B. Life Science C. Earth and Space Science	Kindergarten K(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:	Grade 1 1(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:	Grade 2 2(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:
No standard present in the vertical progression	K(5)(A) identify and use patterns to describe phenomena or design solutions.	1(5)(A) identify and use patterns to describe phenomena or design solutions.	2(5)(A) identify and use patterns to describe phenomena or design solutions.
No standard present in the vertical progression	K(5)(B) investigate and predict cause-and-effect relationships in science.	1(5)(B) investigate and predict cause-and-effect relationships in science.	2(5)(B) investigate and predict cause-and-effect relationships in science.
VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects.	K(5)(C) describe the properties of objects in terms of relative size (scale) and relative quantity.	1(5)(C) describe the properties of objects in terms of relative size (scale) and relative quantity.	2(5)(C) measure and describe the properties of objects in terms of size (scale) and quantity.

Prekindergarten-PK4 A. Physical Science B. Life Science C. Earth and Space Science	Kindergarten K(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:	Grade 1 1(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:	Grade 2 2(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:
No standard present in the vertical progression	K(5)(D) examine the parts of a whole to define or model a system.	1(5)(D) examine the parts of a whole to define or model a system.	2(5)(D) examine the parts of a whole to define or model a system.
VI.A.4 Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity.	K(5)(E) identify forms of energy and properties of matter.	1(5)(E) identify forms of energy and properties of matter.	2(5)(E) identify forms of energy and properties of matter.
VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects. VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms. VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments.	K(5)(F) describe the relationship between the structure and function of objects, organisms, and systems.	1(5)(F) describe the relationship between the structure and function of objects, organisms, and systems.	2(5)(F) describe the relationship between the structure and function of objects, organisms, and systems.

Prekindergarten-PK4 A. Physical Science B. Life Science C. Earth and Space Science	Kindergarten K(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:	Grade 1 1(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:	Grade 2 2(5) The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:
<p>VI.A.2 Child observes, investigates, describes, and discusses position and motion of objects.</p> <p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments.</p> <p>VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>K(5)(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.</p>	<p>1(5)(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.</p>	<p>2(5)(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.</p>

MATTER AND ITS PROPERTIES

Prekindergarten-PK4 A. Physical Science	Kindergarten K(6) The student knows that objects have physical properties that determine how they are described and classified. The student is expected to:	Grade 1 1(6) The student knows that objects have physical properties that determine how they are described and classified. The student is expected to:	Grade 2 2(6) The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:
<p>VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects.</p>	<p>K(6)(A) identify and record observable physical properties of objects, including shape, color, texture, and material, and generate ways to classify objects.</p>	<p>1(6)(A) classify objects by observable physical properties, including, shape, color, and texture, and attributes such as larger and smaller and heavier and lighter.</p>	<p>2(6)(A) classify matter by observable physical properties, including texture, flexibility, and relative temperature, and identify whether a material is a solid or liquid.</p>

VI.A.4 Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	No standard present in the vertical progression	1(6)(B) explain and predict changes in materials caused by heating and cooling.	2(6)(B) conduct a descriptive investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing.
No standard present in the vertical progression	No standard present in the vertical progression	1(6)(C) demonstrate and explain that a whole object is a system made of organized parts such as a toy that can be taken apart and put back together.	2(6)(C) demonstrate that small units such as building blocks can be combined or reassembled to form new objects for different purposes and explain the materials chosen based on their physical properties.

FORCE, MOTION AND ENERGY

Prekindergarten-PK4 A. Physical Science	Kindergarten K(7) The student knows that forces cause changes in motion and position in everyday life. The student is expected to:	Grade 1 1(7) The student knows that forces cause changes in motion and position in everyday life. The student is expected to:	Grade 2 2(7) The student knows that forces cause changes in motion and position in everyday life. The student is expected to:
<p>VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects.</p> <p>VI.A.2 Child observes, investigates, describes, and discusses position and motion of objects.</p> <p>VI.A.3 Child uses simple scientific tools to learn about objects.</p>	K(7)(A) describe and predict how a magnet interacts with various materials and how magnets can be used to push or pull.	No standard present in the vertical progression	No standard present in the vertical progression
VI.A.2 Child observes, investigates, describes, and discusses position and motion of objects.	No standard present in the vertical progression	No standard present in the vertical progression	2(7)(A) explain how objects push on each other and may change shape when they touch or collide.

<p>VI.A.2 Child observes, investigates, describes, and discusses position and motion of objects.</p>	<p>No standard present in the vertical progression</p>	<p>1(7)(A) explain how pushes and pulls can start, stop, or change the speed or direction of an object’s motion.</p> <p>1(7)(B) plan and conduct a descriptive investigation that predicts how pushes and pulls can start, stop, or change the speed or direction of an object's motion.</p>	<p>2(7)(B) plan and conduct a descriptive investigation to demonstrate how the strength of a push and pull changes an object's motion.</p>
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FORCE, MOTION AND ENERGY

<p>Prekindergarten-PK4 A. Physical Science C. Earth and Space Science</p>	<p>Kindergarten K(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:</p>	<p>Grade 1 1(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:</p>	<p>Grade 2 2(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to: AND 2(6) The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:</p>
<p>VI.A.4 Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity.</p> <p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky.</p> <p>VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>K(8)(A) communicate the idea that objects can only be seen when a light source is present and compare the effects of different amounts of light on the appearance of objects.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>

<p>Prekindergarten-PK4 A. Physical Science C. Earth and Space Science</p>	<p>Kindergarten K(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:</p>	<p>Grade 1 1(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:</p>	<p>Grade 2 2(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to: AND 2(6) The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:</p>
<p>VI.A.4 Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity.</p> <p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky.</p> <p>VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>K(8)(B) demonstrate and explain that light travels through some objects and is blocked by other objects, creating shadows.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>
<p>VI.A.4 Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity.</p>	<p>No standard present in the vertical progression</p>	<p>1(8)(A) investigate and describe applications of heat in everyday life such as cooking food or using a clothes dryer.</p> <p>1(8)(B) describe how some changes caused by heat may be reversed such as melting butter and other changes cannot be reversed such as cooking an egg or baking a cake.</p>	<p>2(6)(B) conduct a descriptive investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing.</p>
<p>VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>	<p>2(8)(A) demonstrate and explain that sound is made by vibrating matter and that vibrations can be caused by a variety of means, including sound.</p>

Prekindergarten-PK4 A. Physical Science C. Earth and Space Science	Kindergarten K(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:	Grade 1 1(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:	Grade 2 2(8) The student knows that energy is everywhere and can be observed in everyday life. The student is expected to: AND 2(6) The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:
VI.A.1 Child observes, investigates, describes, and discusses characteristics of common objects.	No standard present in the vertical progression	No standard present in the vertical progression	2(8)(B) Explain how different levels of sound are used in everyday life such as a whisper in a classroom or a fire alarm.
No standard present in the vertical progression	No standard present in the vertical progression	No standard present in the vertical progression	2(8)(C) design and build a device using tools and materials that uses sound to solve the problem of communicating over a distance.

EARTH AND SPACE

<p>Prekindergarten-PK4 C. Earth and Space Science</p>	<p>Kindergarten K(9) The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to: AND K(10) The student knows that the natural world includes earth materials and systems that can be observed. The student is expected to:</p>	<p>Grade 1 1(9) The student knows that the natural world has recognizable patterns. The student is expected to: AND 1(10) The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:</p>	<p>Grade 2 2(9) The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to: AND 2(10) The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:</p>
<p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky.</p>	<p>K(9)(A) identify, describe, and predict the patterns of day and night and their observable characteristics.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>
<p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>	<p>2(9)(A) describe the Sun as a star that provides light and heat and explain that the Moon reflects the Sun's light.</p>
<p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky.</p>	<p>K(9)(B) observe, describe, and illustrate the Sun, Moon, stars, and objects in the sky such as clouds.</p>	<p>No standard present in the vertical progression</p>	<p>2(9)(B) observe objects in the sky using tools such as a telescope and compare how objects in the sky are more visible and can appear different with a tool than with an unaided eye.</p>
<p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p>	<p>K(10)(A) describe and classify rocks by the observable properties of size, shape, color, and texture.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>
<p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p>	<p>No standard present in the vertical progression</p>	<p>1(10)(A) investigate and document the properties of particle size, shape, texture, and color and the components of different types of soils such as topsoil, clay, and sand.</p>	<p>No standard present in the vertical progression</p>

<p>Prekindergarten-PK4 C. Earth and Space Science</p>	<p>Kindergarten K(9) The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to: AND K(10) The student knows that the natural world includes earth materials and systems that can be observed. The student is expected to:</p>	<p>Grade 1 1(9) The student knows that the natural world has recognizable patterns. The student is expected to: AND 1(10) The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:</p>	<p>Grade 2 2(9) The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to: AND 2(10) The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:</p>
<p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p>	<p>No standard present in the vertical progression</p>	<p>1(10)(B) investigate and describe how water can move rock and soil particles from one place to another.</p>	<p>2(10)(A) investigate and describe how wind and water move soil and rock particles across the Earth's surface such as wind blowing sand into dunes on a beach or a river carrying rocks as it flows.</p>
<p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky. VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>K(10)(B) observe and describe weather changes from day to day and over seasons.</p>	<p>1(9)(A) describe and predict the patterns of seasons of the year such as order of occurrence and changes in nature.</p>	<p>No standard present in the vertical progression</p>
<p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky. VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>K(10)(C) identify evidence that supports the idea that air is all around us and demonstrate that wind is moving air using items such as a windsock, pinwheel, or ribbon.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>

<p>Prekindergarten-PK4 C. Earth and Space Science</p>	<p>Kindergarten K(9) The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to: AND K(10) The student knows that the natural world includes earth materials and systems that can be observed. The student is expected to:</p>	<p>Grade 1 1(9) The student knows that the natural world has recognizable patterns. The student is expected to: AND 1(10) The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:</p>	<p>Grade 2 2(9) The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to: AND 2(10) The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:</p>
<p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p>	<p>No standard present in the vertical progression</p>	<p>1(10)(C) compare the properties of puddles, ponds, streams, rivers, lakes, and oceans, including color, clarity, size, shape, and whether it is freshwater or saltwater.</p>	<p>No standard present in the vertical progression</p>
<p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky. VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>No standard present in the vertical progression</p>	<p>1(10)(D) describe and record observable characteristics of weather, including hot or cold, clear or cloudy, calm or windy, and rainy or icy, and explain the impact of weather on daily choices.</p>	<p>2(10)(B) measure, record, and graph weather information, including temperature and precipitation.</p>
<p>VI.C.2 Child identifies, observes, describes, and discusses objects in the sky. VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>	<p>2(10)(C) investigate different types of severe weather events such as a hurricane, tornado, or flood and explain that some events are more likely than others in a given region.</p>

EARTH AND SPACE

<p>Prekindergarten-PK4 C. Earth and Space</p>	<p>Kindergarten K(11) The student knows that earth materials are important to everyday life. The student is expected to:</p>	<p>Grade 1 1(11) The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:</p>	<p>Grade 2 2(11) The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:</p>
<p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p> <p>VI.C.4 Child demonstrates an understanding of the importance of caring for our environment and our planet.</p>	<p>K(11)(A) observe and generate examples of practical uses for rocks, soil, and water.</p>	<p>1(11)(A) identify and describe how plants, animals, and humans use rocks, soil, and water.</p>	<p>2(11)(A) distinguish between natural and manmade resources.</p>
<p>VI.C.4 Child demonstrates an understanding of the importance of caring for our environment and our planet.</p>	<p>No standard present in the vertical progression</p>	<p>1(11)(B) explain why water conservation is important.</p>	<p>2(11)(B) describe how human impact can be limited by making choices to conserve and properly dispose of materials such as reducing use of, reusing, or recycling paper, plastic, and metal.</p>
<p>VI.C.4 Child demonstrates an understanding of the importance of caring for our environment and our planet.</p>	<p>No standard present in the vertical progression</p>	<p>1(11)(C) describe ways to conserve water such as turning off the faucet when brushing teeth and protect natural sources of water such as keeping trash out of bodies of water.</p>	<p>No standard present in the vertical progression</p>

ORGANISMS AND ENVIRONMENTS

<p>Prekindergarten-PK4 B. Life Science C. Earth and Space Science</p>	<p>Kindergarten K(12) The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to: AND K(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 1 1(12) The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to: AND 1(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 2 2(12) The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to: AND 2(13) The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>
<p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p> <p>VI.C.3 Child observes and describes what happens during changes in the earth and sky.</p>	<p>K(12)(A) observe and identify the dependence of plants on air, sunlight, water, nutrients in the soil, and space to grow.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>
<p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p>	<p>K(12)(B) observe and identify the dependence of animals on air, water, food, space, and shelter.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>

<p>Prekindergarten-PK4 B. Life Science C. Earth and Space Science</p>	<p>Kindergarten K(12) The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to: AND K(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 1 1(12) The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to: AND 1(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 2 2(12) The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to: AND 2(13) The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>
<p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p>	<p>No standard present in the vertical progression</p>	<p>1(12)(A) classify living and nonliving things based upon whether they have basic needs and produce young.</p> <p>1(12)(B) describe and record examples of interactions and dependence between living and nonliving components in terrariums or aquariums.</p>	<p>2(12)(A) describe how the physical characteristics of environments, including the amount of rainfall, support plants and animals within an ecosystem.</p>
<p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments</p>	<p>No standard present in the vertical progression</p>	<p>1(12)(C) identify and illustrate how living organisms depend on each other through food chains.</p>	<p>2(12)(B) create and describe food chains identifying producers and consumers to demonstrate how animals depend on other living things.</p>

<p>Prekindergarten-PK4 B. Life Science C. Earth and Space Science</p>	<p>Kindergarten K(12) The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to: AND K(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 1 1(12) The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to: AND 1(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 2 2(12) The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to: AND 2(13) The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>
<p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.B.2 Child observes, describes, and discusses the life cycles of organisms.</p> <p>VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments</p>	<p>K(13)(A) identify the structures of plants, including roots, stems, leaves, flowers, and fruits.</p>	<p>No standard present in the vertical progression</p>	<p>2(13)(A) identify the roots, stems, leaves, flowers, fruits, and seeds of plants and compare how those structures help different plants meet their basic needs for survival.</p>
<p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.B.2 Child observes, describes, and discusses the life cycles of organisms.</p> <p>VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments.</p>	<p>K(13)(B) identify the different structures that animals have that allow them to interact with their environment such as seeing, hearing, moving, and grasping objects.</p>	<p>1(13)(A) identify the external structures of different animals and compare how those structures help different animals live, move, and meet basic needs for survival.</p>	<p>2(13)(B) record and compare how the structures and behaviors of animals help them find and take in food, water, and air.</p>

<p>Prekindergarten-PK4 B. Life Science C. Earth and Space Science</p>	<p>Kindergarten K(12) The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to: AND K(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 1 1(12) The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to: AND 1(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 2 2(12) The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to: AND 2(13) The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>
<p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.B.2 Child observes, describes, and discusses the life cycles of organisms.</p> <p>VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments.</p>	<p>No standard present in the vertical progression</p>	<p>No standard present in the vertical progression</p>	<p>2(13)(C) record and compare how being part of a group helps animals obtain food, defend themselves, and cope with changes.</p>

<p>Prekindergarten-PK4 B. Life Science C. Earth and Space Science</p>	<p>Kindergarten K(12) The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to: AND K(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 1 1(12) The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to: AND 1(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 2 2(12) The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to: AND 2(13) The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>
<p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.B.2 Child observes, describes, and discusses the life cycles of organisms.</p> <p>VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments.</p> <p>VI.C.1 Child observes, investigates, describes, and discusses earth materials, and their properties and uses.</p>	<p>K(13)(C) identify and record the changes from seed, seedling, plant, flower, and fruit in a simple plant life cycle.</p>	<p>1(13)(B) record observations of and describe basic life cycles of animals, including a bird, a mammal, and a fish.</p>	<p>2(12)(C) explain and demonstrate how some plants depend on other living things, wind, or water for pollination and to move their seeds around.</p> <p>2(13)(D) investigate Life Cycles and describe some of the unique life cycles of animals where young animals do not resemble their parents, including butterflies and frogs.</p>

<p>Prekindergarten-PK4 B. Life Science C. Earth and Space Science</p>	<p>Kindergarten K(12) The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to: AND K(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 1 1(12) The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to: AND 1(13) The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>	<p>Grade 2 2(12) The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to: AND 2(13) The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>
<p>VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.</p> <p>VI.B.2 Child observes, describes, and discusses the life cycles of organisms.</p> <p>VI.B.3 Child observes, investigates, describes, and discusses the relationship of organisms in their environments.</p>	<p>K(13)(D) identify ways that young plants resemble the parent plant.</p>	<p>1(13)(C) compare ways that young animals resemble their parents.</p>	<p>No standard present in the vertical progression</p>