Course Description Grades K-2 Science Streamlined TEKS 2021-22

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Kindergarten Course Description

Unit: Describing Objects – TEKS K.5 A, B

Science Concepts TEKS	**K.5 A, B**
Teacher Resources	Describing Objects
Instruction Module	In this Instructional Module, students learn that objects can be described and compared with each other based on their size, shape, and color. They learn to describe objects as heavy, light, big, and small. The students also learn that objects can change properties by heating and cooling. They can freeze, melt, and evaporate. They can be solid, liquid, or gas.
Interactivity (Embedded in IM)	In the Interactivity, students follow instructions and learn how to compare different objects based on their size. The students compare two objects at a time and tell if the objects are bigger or smaller, and heavier or lighter.
Quiz	The questions in the assessment section test students' ability to identify and compare the physical properties of objects including color, texture, and state. They also test their ability to recognize changes caused by heating or cooling.
Glossary	Describing Objects
Readers	**Changing Shapes:** An explanation about changing shapes of some materials such as clay and paper that does not change the material itself. **Science TEKS**: K.5(A) **ELA TEKS:** K.8(D) i, ii, **Reading Levels:** 3 **The Puzzle Piece:** An introduction to some of the physical properties of matter such as color, size, shape, texture, hardness, weight, and hot or cold, and the senses used to observe them. **Science TEKS**: K.5(A), K.4(B), **ELA TEKS:** K.5(C), K.6(C), K.8(D) i, ii, **Reading Levels:** 3 **Telescopes:** An introduction to stars and planets and the use of telescopes to learn more about them. **Science TEKS**: K.5(A), K.8(C), K.3(C), **ELA TEKS**: K.8(D) i, K.9(A,B), **Reading Levels:** 3

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Unit: See, Feel, and Hear – TEKS K.6 A	
Science Concepts TEKS	**K.6 A**
Teacher Resources	See, Feel, and Hear
Instruction Module	In this Instruction Module, students are introduced to light energy, thermal energy, and sound energy. They are made to recognize some common sources of these three types of energy, and to understand how energy is observed through the senses of sight, touch, and hearing. They are familiarized with the concept that light, thermal, and sound energy can be sensed using different sense organs—eyes, skin, and ears respectively.
Interactivity (Embedded in IM)	A simple interactive section, in which students predict which senses are used to observe certain forms of energy, is integrated within the main section of the Instruction Module.
Quiz	The questions in the assessment section test the students' understanding of the sources and the senses associated with light energy, thermal energy, and sound energy.
Glossary	See, Feel, and Hear
Readers	**How Do I Make Sound:** An introduction to sound, how sound is produced, and the different kinds of sound. **Science TEKS**: K.6(A); K.4(B), **ELA TEKS**: K.5(H); K.8(D)ii, **Reading Levels:** 3

Unit: Attractions – TEKS K.6 B	
Science Concepts TEKS	**K.6 B**
Teacher Resources	Attractions
Instruction Module	In this Instruction Module, students are introduced to magnets. They recognize that magnets attract some objects such as refrigerator doors and paper clips that contain iron. They learn that magnets are of different shapes and sizes and have two ends which are usually colored differently; different colored ends (unlike poles) attract each other and similar colored ends (like poles) repel each other.

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Interactivity (Embedded in IM)	A simple interactive section, in which students predict which objects are attracted to magnets, is integrated within the main section of the Instruction Module.
Quiz	The questions in the assessment section test student' understanding of the following concepts: objects that are attracted to magnets, and attraction and repulsion between two magnets.
Glossary	Attractions

Unit: Place and Location – TEKS K.6 C	
Science Concepts TEKS	**K.6 C**
Teacher Resources	Place and Location
Instruction Module	In this Instruction Module, students learn that every object has a location. They are introduced to the concept of location and that an object's location can be described in relation to another object. Students learn to identify locations such as above, below, behind, beside, and in front of, in relation to other objects.
Interactivity (Embedded in IM)	In the Interactivity, students identify the locations of various objects in a playground in relation to a slide.
Quiz	The questions in the assessment section test students' understanding of the following concept: locations of objects in relation to other objects.
Glossary	Place and Location
Readers	**I Wonder Why Things Fall:** An introduction to gravity as the force that pulls things to the ground. **Science TEKS**: K.6(C), K.6(D), **ELA TEKS**: K.6(F), K.8(D)i, ii, K.9(D), **Reading Levels:** 3

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Unit: Moving Objects – TEKS K.6 D	
Science Concepts TEKS	**K.6 D**
Teacher Resources	Moving Objects
Instruction Module	In this Instruction Module, students are introduced to the movement of objects. They recognize and learn about different types of movement. They observe objects that move straight, round and round, up and down, and in a zigzag manner. They are also introduced to the fast and slow movement.
Interactivity (Embedded in IM)	In this interactive section, students are shown zigzag, straight, and round paths that lead to different destinations. They observe the shape of the paths and decide the kind of motion required to reach the destination.
Quiz	The questions in the assessment section test student' understanding of the following concepts: fast and slow moving objects and different kinds of motion.
Glossary	Moving Objects
Readers	**How Things Move:** An introduction to things that move fast and things that move slowly. **Science TEKS** K.6(D), K.4(B), **ELA TEKS**: K.8(D)i, ii, iii, K.9(A), **Reading Levels:** 3 **Why Do I Look Like I Do?:** A comparison of the bodies of humans and animals explaining the influence of environments on shape. **Science TEKS**: 2.10(A), **ELA TEKS:** 2.14(D), 2.10(B) (2019) **Reading levels:** 3

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Unit: Describing Rocks – TEKS K.7 A, C	
Science Concepts TEKS	**K.7 A, C**
Teacher Resources	Describing Rocks
Instruction Module	In this Instructional Module, students observe that rocks come in different shapes, sizes, colors, and textures. They learn to sort the rocks based on their physical properties. Students also understand the different uses of rocks and soils by learning about the numerous ways in which rocks help us in our daily lives.
Interactivity (Embedded in IM)	In this interactivity, students understand the different characteristics of rocks by identifying and sorting rocks on the basis of their properties. Students demonstrate an understanding of properties by selecting a specific rock based on its properties.
Quiz	The questions in the assessment section test students' understanding of the following concepts: characteristics of rocks, objects made form rocks, sorting rocks by their properties.
Glossary	Describing Rocks
Readers	**What's on Earth's Surface:** A look at some important living and nonliving things, such as water, rock, and plants, found on Earth's surface. **Science TEKS** K.7(A), (C), K.9(B), **ELA TEKS**: K.10(A), K.5 (F) (2019), **Reading Levels:** 2

Unit: Describing Water – TEKS K.7 B, C	
Science Concepts TEKS	**K.7 B, C**
Teacher Resource	Describing Water
Instruction Module	In **this** Instruction Module, students observe and describe physical properties of water including color and clarity. They learn that water is found in different forms such as clouds, rain, snow and ice. They also identify natural sources of water such as lakes, rivers and oceans and classify them as freshwater and salt water. Students recognize that water is very useful and is used for a variety of purposes such as drinking, washing, cooking, cleaning and farming.

Interactivity (Embedded in IM)	In the Interactivity, students describe the different physical properties of water.
Quiz	The questions in the assessment section test students' understanding of the following concepts: Uses of water, forms of water, physical properties of water, and sources of natural water.
Glossary	Describing Water

Unit: Daily Changes and Repeating Patterns – TEKS K.8 A, B, C	
Science Concepts TEKS	**K.8 A, B, C**
Teacher Resources	Daily Changes and Repeating Patterns
Instruction Module	In this Instruction Module, students identify events that have repeating patterns such as changing seasons of the year, changes of objects in the sky such as the Sun and Moon that cause day and night, and changes in the shape of the moon that repeats every month.
Interactivity (Embedded in IM)	Students know that the Sun, Moon, and seasons form a repeating pattern in the natural world. In this Interactivity, students identify and arrange some of the activities that they do throughout the day to form a repeating pattern.
Quiz	The questions in the assessment section test students' understanding of the following concepts: Identifying and describing daily patterns such as day and night and repeating patterns such as seasons and the changes in the shape of the moon.
Expository Text Passage	Exploring What Scientists Do – Meteorologists: Scientists Who Study Weather Science TEKS: K.1A, B; K.2A, B, C, D; K.3B, C; K.4A(demonstration thermometer, wind socks), B; K.8A, C
Glossary	Daily Changes and Repeating Patterns
Readers	**Day and Night:** The text describes the apparent journey of the Sun across the sky in a day, its effect on shadows, and how we plan our activities based on the position of the Sun. Science TEKS K.8(B); K.1(B),ELA TEKS: K.5(B), K.8(D), Reading Levels: 2 **The Moon:** The text compares the Sun and the Moon, and describes their patterns. Science TEKS K.8(B); K.8(C); K.3(B), ELA TEKS: K.5(B); K.8(D)i; K.9(A) Reading Levels: 2

	Sky Patterns: A description of how the Sun, the Moon, and the stars move across the sky from east to west forming a pattern. **Science TEKS:** K.8(B); K.3(B), **ELA TEKS:** K.8(D)I; K.9(A,C). Reading Levels: 3 **Types of Weather:** Brief descriptions of the weather of the seasons, primarily summer and winter. **Science TEKS:** K.8(B), **ELA TEKS:** K.10(A), K.5(F) (2019) Reading Levels: 3

Unit: Needs of Plants and Animals – TEKS K.9 A, B	
Science Concepts TEKS	**K.9 A, B**
Teacher Resource	Needs of Plants and Animals
Instruction Module	In this Instruction Module, students recognize the difference between living things and nonliving things based on their basic needs or lack of needs. The student learns that humans, animals, and plants are living things. They learn more about each of the needs of living things. Students are introduced to the concept of an offspring.
Interactivity (Embedded in IM)	In the Interactivity, students identify and categorize things on a farm into living things and nonliving things based on concepts covered in the lesson.
Quiz	The questions in the assessment section test the students' understanding of the following concepts: differences between living and nonliving things, the basic needs of living things, identifying the basic need and identifying the offspring.
Expository Text Passage	Exploring What Scientists Do – Entomologists: Scientists Who Study Insects TEKS: K.1A, B; K.2B, C, D, E; K.3B, C; K.4A, B; K.9B
Glossary	Needs of Plants and Animals
Readers	**Observing Living and Nonliving Things:** What makes something living, such as animals and plants, and how they are different from nonliving things. Science TEKS K. 9(A), ELA TEKS: 1.6(A), 1.7(F), 1.9(D) 1.10(D) Reading Levels: 3 **Making a Home:** The importance of shelter, the different kinds of shelters humans construct, and how the beaver in particular creates its home. **Science TEKS:** K. 9(B), ELA TEKS: K.10(A), K.5(F) (2019) Reading Levels: 3

	What's on Earth's Surface: A look at some important living and nonliving things, such as water, rock, and plants, found on Earth's surface. **Science TEKS** K.7(A), (C), K.9(B), **ELA TEKS**: K.10(A), K.5 (F) (2019), **Reading Levels:** 2

Unit: Plants and Animals – TEKS K.10 A, B	
Science Concepts TEKS	**K.10 A, B**
Teacher Resource	Plants and Animals
Instruction Module	In this Instruction Module, students learn that plants and animals have physical characteristics that help them survive in their environment. They learn to identify different parts of a plant such as the roots, stem and leaves and learn about their functions. They learn that physical features of plants such as leaf shape can be used to sort plants into different groups. They also learn that physical characteristics of animals such as body coverings can be used to sort animals into different groups.
Interactivity (Embedded in IM)	In the interactive section of this Instruction Module, students apply their understanding of plant and animal body parts by matching different plants and animals with their missing body parts. They also identify plants and animals based on where they live and their physical characteristics.
Quiz	The questions in the assessment section test the students' understanding of the following concepts: parts of a plant and their functions, physical characteristics of animals, and sorting of plants and animals based on their characteristics.
Glossary	Plants and Animals
Readers	**My Five Senses:** An explanation about how we use our sense organs to observe and learn about the world around us by seeing, touching, smelling, hearing, and tasting. **Science TEKS**: K.10(B), K.4(B)**, ELA TEKS:** K.6(A, B), K.8(D)i, ii **Reading Levels: 3**

Unit: Fruit from a Seed – TEKS K.10 C, D	
Science Concepts TEKS	**K.10 C, D**
Teacher Resource	Fruit from a Seed
Instruction Module	In this Instruction Module, students understand the changes that a plant undergoes in its life cycle. They learn to identify a seed, a seedling, a flower, the fruit, the leaf, the stem, and the root of a plant. Students also understand that a plant needs sunlight, food, soil, and air to survive and grow. By comparing the adult plant with the young plant, students learn to identify the similarities and differences between the two.
Interactivity (Embedded in IM)	In the Interactivity, students learn to identify the order and names of the different stages in the growth of a plant. They do this by putting the pictures of the stages in the life cycle of a pumpkin plant, in order, from seed to fruit.
Quiz	The questions in the assessment section test students' understanding of the following concepts: stages in the life cycle of a plant, identifying a plant part, needs of a plant.
Expository Text Passage	Patterns and Properties – The Life Cycle of a Bean Plant TEKS: K.1A, B; K.2A, C, D; K.3B, C; K.4A; K.8; K.9B; K.10B,D
Glossary	Fruit from a Seed

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Grade 1 Course Description

Unit: Sorting and Changing Matter – TEKS 1.5 A, B, C

Science Concepts TEKS	**1.5 A, B, C**
Teacher Resource	Sorting and Changing Matter
Instruction Module	In this Instruction Module, students learn to classify matter by recognizing properties such as size, mass, color, and texture. Students also observe the changes that occur in matter when heated or cooled.
Interactivity	**Sort Them**!: In this Interactivity, students classify objects based on their physical properties of mass, size, shape, and color.
Quiz	The questions in the assessment section test student' understanding of the following concepts: basis on which matter is sorted, properties of matter such as color and changes that occur in matter.
Glossary	Sorting and Changing Matter
Readers	**What on Earth:** An introduction to nonliving things such as rock, soil, and water, and living things such as animals and plants found on Earth. **Science TEKS**: 1.5(A), 1.7(A), 1.7(B), 1.9(A)**, ELA TEKS:** 1.6(H), 1.7(D), 1.9(D)i, ii, iii, 1.10(B). **Reading Levels: 3**
	Observable Properties: The text explains how scientists use their senses to observe properties of matter such as size, shape, color, temperature, weight, and texture, and use tools to measure them. **Science TEKS**: 1.5(A), 1.3(C)**, ELA TEKS:** 1.6(I), 1.7(E), 1.9(D)i, ii, 1.10(C). **Reading Levels: 3**
	Natures Many Sizes and Shapes: An introduction to the concept of size and basic geometric shape using objects found in nature. **Science TEKS**: 1.5(A) **ELA TEKS:** 1.6(D), 1.7(D), 1.10(C, D) **Reading Levels: 3**

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Unit: Energy and Its Uses – TEKS 1.6 A	
Science Concepts TEKS	**1.6 A**
Teacher Resource	Energy and Its Uses
Instruction Module	In this Instruction Module, students learn the concept of energy and its importance in everyday life. They are also introduced to three forms of energy, namely light energy, thermal energy, and sound energy, and the uses of each of the three forms. They understand that while the different forms of energy cannot be touched, they can be experienced in many ways; light energy can be seen, thermal energy can be felt, and sound energy can be heard.
Interactivity	**Energize!:** In the Interactivity, students are required to "energize" various objects in a toy house by identifying the type(s) of energy each of them uses or gives out.
Quiz	The questions in the assessment section test students' understanding of the following concepts: the form(s) of energy objects use or give out, and which sense helps us experience one of the forms of energy.
Glossary	Energy and Its Uses
Readers	**Our Sun:** An introduction to the helpful and harmful effects of the Sun and its importance to life on Earth including the use of sunlight by plants for making food. **Science TEKS**: 1.6(A), 1.1(A) **ELA TEKS:** 11.6(A), 1.9(D)i, ii, iii, 1.10(A). **Reading Levels: 3**

Unit: Magnets – Push or Pull? – TEKS 1.6 B	
Science Concepts TEKS	**1.6 B**
Teacher Resource	Magnets – Push or Pull?
Instruction Module	In this Instruction Module, students recognize that force and motion are part of everyday life and magnets can exert force. They recognize that magnets have two poles and that opposite poles attract each other while similar poles repel each other. They learn that magnets can be used to push or pull objects.

Interactivity	**Magnets – Push or Pull?:** In the Interactivity, students identify objects that are attracted to magnets. They "use" a magnet to pick up the magnetic objects. Then, they use a magnet to attract and repel other magnets in order to "collect" them.
Quiz	The questions in the assessment section test students' understanding of the following concepts: force, magnets, and magnetic attraction and repulsion.
Glossary	Magnets – Push or Pull?

Unit: How Do They Move? – TEKS 1.6 C	
Science Concepts TEKS	**1.6 C**
Teacher Resource	How Do They Move?
Instruction Module	In this Instruction Module, students observe various moving objects in a fair including a Ferris wheel, a pendulum boat, pigs in a race, and a cable car, and identify how they are moving. They recognize the different ways in which objects can move such as, in a straight line, up and down, back and forth, round and round, and fast and slow.
Interactivity	**Moving Animals:** In the Interactivity, students observe animals moving in different ways and identify the words that describe the movement of each animal.
Quiz	The questions in the assessment section test students' understanding of the following concepts: words used to describe the movement of objects, patterns or traces made by moving objects, and objects that move in different ways.
Glossary	How Do They Move?
Readers	**How Do Things Move?:** An introduction to the different kinds of movements such as in a straight line, back and forth, zig-zag, and fast and slow. **Science TEKS**: 1.6 (C), **ELA TEKS:** 1.6 (C); 1.9(D)i, ii, 1.10(B) **Reading Levels: 3**

Unit: Using Rocks, Soil, and Water – TEKS 1.7 A, B, C	
Science Concepts TEKS	**1.7 A, B, C**
Teacher Resource	Using Rocks, Soil, and Water
Instruction Module	In this Instruction Module, students will learn to identify and compare the color, composition, and the different layers of soil, and sort components of soil such as sand, silt, and clay based on size and texture. They also learn to identify different sources of water such as lakes, streams, rivers, and oceans, and identify useful products formed from rocks, soil, and water.
Interactivity	**Using Rocks, Soil, and Water:** In the Interactivity, students Identify and group objects as water product, soil product, and rock product.
Quiz	The questions in the assessment section test students' understanding of the following concepts: Describing texture of soils, Identifying components of soil based on size, Identifying and describing rocks, soil and water.
Expository Text Passage	The Three R's of Conservation: Reduce, Reuse, Recycle TEKS: 1.1A, C; 1.4A; 1.7C
Glossary	Using Rocks, Soil, and Water
Readers	**Soils:** What makes up soil, how it helps plants, and its importance to farmers. **Science TEKS**: 1.5(A), 1.7(A), 1.7(B), 1.9(A), **ELA TEKS:** 1.6(H), 1.7(D), 1.9(D)i, ii, iii, 1.10(B). Reading Levels: 3 **What on Earth:** An introduction to nonliving things such as rock, soil, and water, and living things such as animals and plants found on Earth. **Science TEKS**: 1.5(A), 1.7(A), 1.7(B), 1.9(A)**, ELA TEKS:** 1.6(H), 1.7(D), 1.9(D)i, ii, iii, 1.10(B). **Reading Levels: 3**

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Unit: Weather Information – TEKS 1.8 A, D	
Science Concepts TEKS	**1.8 A, D**
Teacher Resource	Weather Information
Instruction Module	In this Instruction Module students describe weather and understand that weather information can be recorded by observing, measuring, and describing weather conditions such as hot or cold, clear or cloudy, calm or windy, and rainy or icy. They learn and demonstrate that air is all around us and wind is moving air which can be observed by the motion of objects.
Interactivity	**What to Wear?:** In the Interactivity, students will demonstrate an understanding of how weather affects their daily lives by selecting appropriate clothing based on different weather conditions.
Quiz	The questions in the assessment section test students' understanding of the following concepts: Observing wind as moving air, appropriate clothing based on weather conditions, recording weather conditions, measuring relative temperature using thermometers.
Expository Text Passage	Exploring What Scientists Do – Meteorologists: Scientists Who Study Weather TEKS: 1.1A, B; 1.2A, B, C, D; 1.3B, C; 1.4A, B; 1.8A, C
Glossary	Weather Information
Reader	**The Wind:** What wind actually is, its effects, and how it can be useful to us. **Science TEKS:** 1.8 (B), **ELA TEKS:** 1.6(F), 1.7(B), 1.9(D), 1.10(A) Reading Levels: 3 **Our Changing Weather:** A discussion of what defines weather, and some differences between hot, cold, and windy weather. **Science TEKS:** 1.8(C), 1.8(D) ı **ELA TEKS:** 1.14(B), 2019 ELA TEKS: 1.9(D) i Reading Levels: 1

Unit: Day and Night, and Seasons – TEKS 1.8 B, C	
Science Concepts TEKS	**1.8 B, C**
Teacher Resource	Day and Night, and Seasons
Instruction Module	In this Instruction Module, students learn that there are different objects visible in the sky during the day and different objects visible at night. They observe the changes in the shape of objects in the sky during the day and during the night. They learn to differentiate seasons of the year based of activities, surroundings, and temperature.
Interactivity	**What's the Season?**: n the Interactivity, students identify the activities performed during the course of the day and the greetings that are associated with different times of the day. They identify and differentiate the activities associated with the different seasons.
Quiz	The questions in the assessment section test the students' understanding of the following concepts: appearance and shape of objects in the sky and the time of day, seasons of the year and distinct features associated with each season.
Expository Text Passage	Observing Objects in the Sky – Exploring the Moon TEKS: 1.1A; 1.2A, B, C, D, E; 1.3B, C; 1.4A(clocks, notebooks); 1.6D; 1.8B
Glossary	Day and Night, and Seasons
Readers	**Patterns in the Sky:** The patterns of the Sun, Moon, and stars seen during day and night. **Science TEKS:** 1.8 (B), **ELA TEKS:** 1.6(F), 1.7(B), 1.9(D), 1.10(A) Reading Levels: 3 **Stars in the Sky:** A short reading of stars and the Sun in particular. **Science TEKS:** 1.6(A), 1.8(B),**ELA TEKS:** 1.14(B), 1.9.(D) (2019) Reading Levels: 1 **Our Changing Weather:** A discussion of what defines weather, and some differences between hot, cold, and windy weather. **Science TEKS:** 1.8(C), 1.8(D) I ELA TEKS: 1.14(B), 2019 ELA TEKS: 1.9(D) i **Reading Levels: 1**

Unit: Basic Needs of Living Things – TEKS 1.9 A	
Science Concepts TEKS	**1.9 A**
Teacher Resource	Basic Needs of Living Things
Instruction Module	In this Instruction Module students learn the differences between living and nonliving things. They are made aware of the factors that make a thing living or nonliving. They learn that living things have basic needs and produce offspring.
Interactivity	**Match'em:** In this Interactivity students match an organism with its food needs and shelter.
Quiz	The questions in the assessment section test student' understanding of the following concepts: needs of plants, shelters of animals, differences between living and nonliving things.
Glossary	Basic Needs of Living Things
Readers	**What on Earth:** An introduction to nonliving things such as rock, soil, and water, and living things such as animals and plants found on Earth. **Science TEKS**: 1.5(A), 1.7(A), 1.7(B), 1.9(A)**, ELA TEKS:** 1.6(H), 1.7(D), 1.9(D)i, ii, iii, 1.10(B). **Reading Levels: 3**

Unit: Depending on Each Other – TEKS 1.9 B, C	
Science Concepts TEKS	**1.9 B, C**
Teacher Resource	Depending on Each Other
Instruction Module	In this Instruction Module, students learn about how living things in an environment depend on each other to meet their basic needs. They learn that animals depend on plants for food, air and shelter and plants depend on animals for spreading their seeds and sometimes for water and nutrients (as in the case of indoor plants). They also learn that animals sometimes depend on each other to meet their basic needs. They understand that plants convert energy from sunlight to a form that can be used by them and animals and that such an interdependence for energy can be depicted using diagrams called food chains.

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Interactivity	**Snap It Up**! : In this Interactivity, students observe and record different examples of interdependence among plants and animals in a park, forest, and pond environment.
Quiz	The questions in the assessment section test student understanding of the following concepts: basic needs of plants and animals, food chains, interdependence among plants and animals to meet their basic needs.
Expository Text Passage	Organisms and Environments – Animals Need Homes TEKS: 1.1A, B; 1.2A; 1.3A; 1.4A; 1.9B, C
Glossary	Depending on Each Other

Unit: Animals and their Environments – TEKS 1.10 A

Science Concepts TEKS	**1.10 A**
Teacher Resource	Animals and their Environments
Instruction Module	In this Instruction Module, students learn that animals have unique external features which help them survive in a particular environment. They learn to identify the external features that help each animal survive in its environment. Students also learn that different parts of the world have different environments and the animal's features are suited to that specific environment.
Interactivity	**What Helps Me Survive?:** In the Interactivity, students identify the correct external feature that will help an animal survive in its environment. They also learn to use the correct name of the feature for each animal.
Quiz	The questions in the assessment section tests students' understanding of the following concepts: unique external features of an animal, how the feature helps the animal survive, and the correct name of the feature.
Expository Text Passage	Exploring What Scientists Do – Entomologists: Scientists Who Study Insects TEKS: 1.1A, B; 1.2A, B, C, D, E; 1.3A, B, C; 1.4A, B; 1.10A
Glossary	Animals and their Environments
Readers	**Where Animals Live:** How the parts of some animals help them live in their environment. **Science TEKS:** 1.10 (A), 3. 10 (A)**ELA TEKS:** 1.6(E), 1.9(D)I Reading levels: 3

	My Features Help Me: The text explains about the traits, or features of animals and plants that help them survive in their environment. **Science TEKS:** 1.10(A), **ELA TEKS:** 1.6(I), 1.7(F) Reading levels: 3

Unit: Parts of a Plant – TEKS 1.10 B	
Science Concepts TEKS	**1.10 B**
Teacher Resource	Parts of a Plant
Instruction Module	In this Instruction Module, the students learn to identify the various parts of a plant. They do this by comparing the various parts of a plant, including the root, stem, leaf, flower, fruit, and seed. Students also learn how each plant part helps the plant by performing individual functions.
Interactivity	**Backyard Bugs:** In this interactivity, students learn the positions of the various plant parts by placing backyard bugs on the different parts of plants. Students also learn how each plant part helps the bugs in different ways, be it providing them with shelter or food.
Quiz	The questions in the assessment section test students' understanding of the following concepts: needs of a plant, the uses of plant parts, functions of plant parts, identifying the parts of a plant.
Expository Text Passage	Structure and Function – The Parts of a Plant TEKS: 1.1A, B, C; 1.2A, C, D; 1.3 C; 1.4A (hand lenses, paperclips, notebooks), B; 1.10B
Glossary	Parts of a Plant
Readers	**Plant Parts:** An introduction to the parts of the plant including stem, leaves, roots, flowers, fruits, and seeds, and their functions. **Science TEKS:** 1.6(A), 1.10(B), **ELA TEKS:** 1.6(E), 1.7(A), 1.9(D)i, ii, iii, 1.10(A), Reading levels: 3

Unit: Life Cycle of Animals – TEKS 1.10 C, D	
Science Concepts TEKS	**1.10 C, D**
Teacher Resource	Life Cycle of Animals
Instruction Module	In this Instruction Module, students learn that a cycle is a repeating pattern of events and that a life cycle of an animal consists of different stages in its life such as birth, growth and reproduction. They learn to identify and describe the stages in the life cycle of different animals such as a chicken and a frog. They learn that some animals such as frogs and butterflies produce young that look very different from their parents while other animals such as birds and mammals produce young that closely resemble their parents. They also learn to compare the young of different animals with their parents.
Interactivity	**One...Two...Three...Grow! :** In this Interactivity students apply their understanding of life cycles to match different young ones with their parents. They compare the physical features of the young with different sets of parents in order to make correct matches.
Quiz	The questions in the assessment section test student understanding of the following concepts: animal life cycles, stages in the life cycle of a frog and a butterfly.
Glossary	Life Cycle of Animals
Readers	**Life Cycles of Plants and Animals:** An introduction to the life cycles of some animals and plants where the young ones look like the adults but are smaller in size, and that there can be variations. **Science TEKS:** 1.10(C), 1.10(D), **ELA TEKS:** 1.3(A), 1.6(C), 1.9(D)i, ii, Reading levels: 3

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Grade 2 Course Description

Unit: Physical Properties of Matter – TEKS 2.5 A

Science Concepts TEKS	2.5 A
Teacher Resource	Physical Properties of Matter
Instruction Module	**Solid, Liquid, and Gas:** In this Instruction Module, students learn to classify matter as solid, liquids, or gases based on its physical state.
Instruction Module	**Classifying Matter: 1:** In this Instruction Module, students learn to classify matter by size, shape, color, and flexibility.
Instruction Module	**Classification of Matter: 2:** In this Instruction Module, students learn to classify matter by temperature, mass, and texture.
Interactivity	**Physical Properties of Matter:** The Interactivity is a virtual experiment in which students "use" a double pan balance to compare masses and classify them as "heavier" or "lighter" than a given object. Then, they compare their temperatures and classify them as "warm", "cold", or "normal". Finally, they "use" a magnet to classify the objects as magnetic or nonmagnetic object.
Quiz	The questions in the assessment section test students' understanding of the following concepts: physical properties of matter including shape, relative temperature, texture, and states of matter.
Glossary	Physical Properties of Matter
Readers	**Properties of Matter:** An explanation of how scientist use their senses to observe the physical properties of matter and use tools to measure them. **Science TEKS:** 2.5(A), 2.3(C), **ELA TEKS:** 2.6(C), 2.9(D)i, ii, iii, 2.10(B). Reading levels: 3
	Matters Many Shapes: Comparing solids, liquids, and gases based on the physical property of shape. **Science TEKS:** 2.5(A), 2.3(C), **ELA TEKS:** 2.6(E), 2.9(D)i, 2.10(A).

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	Reading levels: 3

Unit: Changes in Matter – TEKS 2.5 B, C	
Science Concepts TEKS	**2.5 B, C**
Teacher Resource	Changes in Matter
Instruction Module	**Cutting, Folding, and Sanding Matter:** In this Instruction Module, students observe examples and understand that cutting, folding, and sanding changes the physical properties of an object but does not change the matter that makes up the object.
Instruction Module	**Heating and Cooling Matter:** In this Instruction Module, students observe and compare changes caused by heating and cooling. They learn that freezing, or melting changes the physical properties of objects but does not change the matter that makes up the object. They also learn that heating can sometimes change the matter that the object is made of.
Interactivity	**Changes in Matter:** The Interactivity is a virtual experiment in which students predict the changes that may be caused by heating and cooling different materials. Then, they place the materials in the oven and the freezer and observe the changes caused by heating and cooling.
Quiz	The questions in the assessment section test students understanding of the following concepts: changes caused by folding, heating and cooling (evaporation, melting, freezing, and changes in temperature).
Glossary	Changes in Matter
Readers	**Changes:** Everyday examples of reversible and irreversible changes. **Science TEKS:** 2.5 (C), **ELA TEKS:** 2.14(A), 2.9(D)i (2019) Reading levels: 1

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Unit: Introduction to Mixtures – TEKS 2.5 D	
Science Concepts TEKS	**2.5 D**
Teacher Resource	Introduction to Mixtures
Instruction Module	**Mixing Materials:** In this Instruction Module, students learn that materials with different physical properties physically combine to form a mixture. They also observe how different materials when put together, may have functions that the parts could not do by themselves.
Instruction Module	**Selecting the Right Materials:** In this Instruction Module, students learn how to select the right materials based on their physical properties and create a combination that serves a particular function.
Interactivity	**Introduction To Mixtures:** The Interactivity is an experiment wherein the students use various materials with different physical properties to create a combination that serves a particular function. They test the properties of the various materials provided to select the right material.
Quiz	The questions in the assessment section test students understanding of the following concepts: physical properties of objects, functions of different materials, identifying mixtures.
Glossary	Introduction to Mixtures

Unit: Effect of Energy on Matter – TEKS 2.6 A	
Science Concepts TEKS	**2.6 A**
Teacher Resource	Effect of Energy on Matter
Instruction Module	**Increasing and Decreasing Light Energy:** In this Instruction Module, students observe how increasing or decreasing the amount of light energy affects the color of an object.
Instruction Module	**Increasing and Decreasing Sound Energy:** In this Instruction Module, students observe how increasing or decreasing the amount of sound energy affects the loudness of the sound.
Instruction Module	**Increasing and Decreasing Heat Energy:** In this Instruction Module, students observe how increasing or decreasing the amount of heat energy affects various objects. They learn how the amount of heat energy can make some things melt

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	or freeze.
Interactivity	**Increasing Heat energy**: The Interactivity is an experiment wherein students investigate how increasing or decreasing heat energy can affect objects. They identify the change in energy needed to cause a particular change in an object, observing the time taken to melt different materials.
Quiz	The questions in the assessment section test students understanding of the following concepts: changes caused by heating and cooling, effect and use of light energy, effect of sound energy on loudness and softness.
Glossary	Effect of Energy on Matter

Unit: Using Magnets – TEKS 2.6 B	
Science Concepts TEKS	**2.6 B**
Teacher Resource	Using Magnets
Instruction Module	**Uses of Magnets:** In this Instruction Module, students observe and learn how magnets are used in everyday life.
Interactivity	**Magnetizing a Needle:** In the Interactivity, students learn how to make a magnet and identify the two poles through careful observation. Safety measures while doing an experiment is emphasized.
Quiz	The questions in the assessment section test the students' understanding of the following concepts: identifying objects that are attracted to a magnet and objects that use magnets, and using scientific vocabulary.
Glossary	Using Magnets

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Unit: On the Move – TEKS 2.6 C	
Science Concepts TEKS	**2.6 C**
Instruction Module	**Patterns of Movement:** In this Instruction Module, students observe and compare patterns of movement of objects such as sliding, rolling, and spinning.
Interactivity	**On the Move:** The interactivity is designed as an experiment that allows a student to observe and record the movement of different objects by tracing their motion on a white sheet of paper. This is done by allowing the student to "dip" an object in paint and then letting it slide down a ramp to trace a path on a white sheet of paper.
Quiz	The questions in the assessment section test student' understanding of the following concepts: types of motion, instruments used to measure distance.
Glossary	On the Move
Teacher Resources	On the Move

Unit: Natural Resources – TEKS 2.7 A, B, C	
Science Concepts TEKS	**2.7 A, B, C**
Teacher Resource	Natural Resources
Instruction Module	**Describing Rocks:** In this Instruction Module, students observe, describe and compare rocks by size, texture, and color.
Instruction Module	**Water from Different Sources:** In this Instruction Module, students identify and compare the properties of natural sources of freshwater and saltwater.
Instruction Module	**Natural and Man-made Resources:** In this Instruction Module, students differentiate between natural and man-made resources.
Interactivity	**Get Resourceful! :** In the Interactivity, students identify and classify resources as natural and man-made resources.

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Quiz	The questions in the assessment section test students' understanding of the following concepts: Identify between natural and man-made resources, describing rocks based on physical properties, identifying natural sources of freshwater and saltwater.
Expository Text Passage	The Three R's of Conservation: Reduce, Reuse, Recycle TEKS: 2.1A, B; 2.2D, E; 2.4A; 2.7C
Glossary	Natural Resources
Readers	**Rocks:** What defines rocks, their types, and how they are formed? **Science TEKS:** 2.7(A), **ELA TEKS:** 2.6(D, H) Reading levels: 3

Unit: Weather and the Water Cycle – TEKS 2.8 A, B	
Science Concepts TEKS	**2.8 A, B**
Teacher Resource	Weather and the Water Cycle
Instruction Module	**Weather and Seasonal Change:** In this Instruction Module, students learn how the weather and seasons affect our choices in clothing and activities.
Instruction Module	**Rain, Wind, and Temperature:** In this Instruction Module, students learn how rain, wind, and temperature are measured. They also learn to use weather information graphs to identify patterns in data.
Instruction Module	**Water Cycle and the Weather:** In this Instruction Module, students are introduced to the processes in the water cycle, including evaporation, condensation, and precipitation.
Interactivity	**The Indoor Water Cycle:** In this Interactivity, students first match clothing and activities with the correct seasons and then label the seasons. They also solve a jigsaw puzzle to complete pictures of seasonal cycle, water cycle, and the day and night cycle and label them.
Quiz	The questions in the assessment section test students understanding of the following concepts: processes in the water cycle, reading patterns in data provided, effect of seasons on clothing.

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Expository Text Passage	Exploring What Scientists Do – Meteorologists: Scientists Who Study Weather TEKS: 2.1A, B; 2.2A, B, C, D; 2.3B, C; 2.4A, B; 2.8A
Glossary	Weather and the Water Cycle
Readers	**Severe Weather:** Things to do and not do during storms. **Science TEKS:** 2.8 (B), **ELA TEKS:** 2.14(A), 2.6(F) (2019) **Reading levels:** 2

Unit: Sky World – TEKS 2.8 C	
Science Concepts TEKS	**2.8 C**
Teacher Resource	Sky World
Instruction Module	**The Sun and the Clouds:** In this Instruction Module, students learn to describe the changes that occur in the sky through the day including the apparent movement of the Sun across the sky and the appearance of clouds.
Instruction Module	**The Night Sky:** In this Instruction Module, students learn to describe the patterns and appearance of the Moon. They also learn about stars.
Interactivity	**Model-making:** The Interactivity is a virtual experiment that traces the apparent movement of the Sun during a single day. It allows a student to mark the position of the Sun through the day, with respect to a fixed point. Students can drag and drop stickers onto a dome—which represents the sky—to mark the Sun's position at a particular time.
Quiz	The questions in the assessment section test students understanding of the following concepts: objects in the sky, patterns of objects in the sky, and the effect of clouds on weather.
Expository Text Passage	Observing Objects in the Sky – Exploring the Moon TEKS: 2.1A; 2.2A, B, C, D, E; 2.3B, C; 2.4A; 2.8C
Glossary	Sky World

Unit: Living Things and Their Environment – TEKS 2.9 A, B, C	
Science Concepts TEKS	**2.9 A, B, C**
Teacher Resource	Living Things and Their Environment
Instruction Module	**Needs of Animals and Plants:** In this Instruction Module, students learn about the basic needs of plants and animals.
Instruction Module	**How Environments Affect Organisms:** In this Instruction Module, students learn how factors in the environment affect the growth and behavior of living things. They learn about migration, hibernation, and dormancy.
Instruction Module	**What Living Things Depend On:** In this Instruction Module, students learn about the different ways in which organisms depend on the environment and on each other. They learn to use food chains to represent how nutrients and energy are passed from one organism to another.
Interactivity	**Build the Energy Bar:** This is a simple interactivity that teaches a student the dependence of organisms on each other. This is done by asking the student to arrange organisms in the correct order in a given food chain.
Quiz	The questions in the assessment section test students understanding of the following concepts: needs of organisms, behavior with relation to the changes in environment, and dependence demonstrated through food chains.
Expository Text Passage	Mammals: Large and Small TEKS: 2.1A, C; 2.2A, C, D, E, F; 2.3B, C; 2.4A (hand lens, notebooks, computers, safety goggles), B; 2.9A; 2.10A
Glossary	Living Things and Their Environment
Readers	**Trip to the Midwest:** A road trip through corn fields and pines to introduce the needs of plants and to explain that plants make their own food using carbon dioxide, water, and sunlight. **Science TEKS:** 2.9(A), 2.10(B), **ELA TEKS:** 2.9(D)i, 2.10(A) **Reading levels:** 3 **Life on the Farm:** A morning at the farm to introduce the needs of animals including food, water, air, and space. **Science TEKS**: 2.9(A), **ELA TEKS:** 2.6(B), 2.9(D)i, 2.10(A) **Reading levels:** 3

	The World's Tiniest Frog: An explanation of the basic needs of survival using the tiniest frog as an example. **Science TEKS**: 2.9(A), **ELA TEKS:** 2.6(I), 2.9(D)(i), 2.10(A) **Reading levels:** 3 **Living on Earth:** An introduction to the basic needs that we need to live on Earth. **Science TEKS:** 2.9(A), **ELA TEKS:** 2.14(B), 2.7(C) (2019) **Reading levels: 2** **Coping with Seasonal Changes:** A look at how some animals like squirrels and whales survive the changes in seasons. **Science TEKS:** 2.9(B), **ELA TEKS:** 2.14(A), 2.9(D)(i) (2019) **Reading levels: 2**

Unit: Animal and Plant Adaptations – TEKS 2.10 A, B	
Science Concepts TEKS	**2.10 A, B**
Teacher Resource	Animal and Plant Adaptations
Instruction Module	**Physical Adaptations of Animals:** In this Instruction Module, students learn that physical adaptations are structures that animals have developed over time that help them survive in their environments.
Instruction Module	**Behavioral Adaptations of Animals:** In this Instruction Module, students learn that behavioral adaptations are actions or behaviors that help animals survive in their environments.
Instruction Module	**Adaptations of Plants:** In this Instruction Module, students learn that plants living in different environments have different physical and behavioral adaptations that help them meet their basic needs.
Interactivity	**Animal and Plant Adaptations**: In this Interactivity, students apply their understanding of animal and plant adaptations to identify the adaptations in different animals and plants. They also sort the different animal and plant adaptations into physical and behavioral adaptations.
Quiz	The questions in the assessment section test student understanding of the following concepts: physical and behavioral adaptations in animals, physical and behavioral adaptations in plants.

Expository Text Passage	**Organisms and Environments – The Venus Fly Trap** TEKS: 2.1A, B; 2.2A, B, C, D, E, F; 2.4A (hand lens, notebooks, terrariums, nonstandard measurement tools); 2.9A, C; 2.10B **Mammals: Large and Small** TEKS: 2.1A, C; 2.2A, C, D, E, F; 2.4A (hand lens, notebooks, computers, safety goggles); 2.9A; 2.10A **Structure and Function – The Parts of a Plant** TEKS: 2.1A, B, C; 2.2A, B, C; 2.3 C; 2.4A, B; 2.10B
Glossary	Animal and Plant Adaptations
Readers	**Animal Characteristics:** How animals' parts and actions help them to survive in their environment. **Science TEKS:** 2.10(A), 2.1(A), **ELA TEKS:** 2.6(F), 2.7(C), 2.9(D) **Reading levels: 3** **My Body Parts are Similar to a Car's Parts:** An analogy of a car and its parts used to describe the functions of the different organs in a human body. **Science TEKS:** 2.10(A), **ELA TEKS:** 2.6(A, G), 2.10(A) **Reading levels:** 3 **Do Animals Have Pockets:** An introduction to marsupials with examples. **Science TEKS:** 2.10(A), **ELA TEKS:** 2.6(B, F), 2.9(D)i **Reading levels:** 3 **Why Do I Look Like I Do?:** A comparison of the bodies of humans and animals explaining the influence of environments on shape. **Science TEKS**: 2.10(A), **ELA TEKS:** 2.14(D), 2.10(B) (2019) **Reading levels:** 3 **Trip to the Midwest:** A road trip through corn fields and pines to introduce the needs of plants and to explain that plants make their own food using carbon dioxide, water, and sunlight. **Science TEKS:** 2.9(A), 2.10(B), **ELA TEKS:** 2.9(D)i, 2.10(A) **Reading levels:** 3

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Unit: Life Cycles of Insects – TEKS 2.10 C	
Science Concepts TEKS	**2.10 C**
Teacher Resource	Life Cycle of Insects
Instruction Module	**Life Cycle of Insects:** In this Instruction Module, students observe and compare some of the unique stages that insects such as butterflies and grasshoppers undergo during their life cycle.
Interactivity	**Costume Mayhem!:** In this Interactivity, students apply their knowledge and understanding of a butterfly life cycle. They observe the physical features of each stage in order to correctly identify it. Once all the stages are identified, students arrange the different stages in the correct order of occurrence.
Quiz	The questions in the assessment section test student understanding of the following concepts: different stages in a butterfly life cycle, metamorphosis, life cycle of a cockroach.
Expository Text Passage	Exploring What Scientists Do – Entomologists: Scientists Who Study Insects TEKS: 2.1A, B; 2.2A, B, C, D, E, F; 2.3 C; 2.4A, B; 2.10C
Glossary	Life Cycle of Insects
Readers	**Life Cycles of Butterflies:** This reader explains the different stages in the life cycle of a butterfly. **Science TEKS**: 2.10(C), **ELA TEKS:** 2.6(C, G); 2.9(D)ii,iiii **Reading levels:** 3

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