



Course Description
3-5 Science
NGSS



Table of Contents

GRADE 3 COURSE DESCRIPTION	5
3-PS2 MOTION AND STABILITY: FORCES AND INTERACTIONS	5
Topic 1: Forces on an Object	5
Topic 2: Different Kinds of Forces	6
3-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES	7
Topic 1: Life Cycles of Animals	7
Topic 2: Life Cycles of Plants	8
3-LS2 ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS	9
Topic 1: Food Chains	9
3-LS3 HEREDITY: INHERITANCE AND VARIATION OF TRAITS	10
Topic 1: Inheritance and Traits	10
3-LS4 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY	11
Topic 1: Fossils and Organisms	11
Topic 2: Habitats and Organisms	12
Topic 3: Environmental Changes	13
3-ESS2 EARTH'S SYSTEMS	14
Topic 1: Weather Conditions and Climate	14
GRADE 4 COURSE DESCRIPTION	15
4-PS3 ENERGY	15
Topic 1: Energy and its Forms	15
Topic 2: Electricity	17
4-PS4 WAVES AND THEIR APPLICATIONS IN TECHNOLOGIES FOR INFORMATION TRANSFER	18
Topic 1: Sound Waves and Light	18



4-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES 19
 Topic 1: Adaptations: Structures and Behaviors 19

4-ESS1 EARTH’S PLACE IN THE UNIVERSE 20
 Topic 1: Fossils - Evidence of Changes on Earth 20

4-ESS2 EARTH’S SYSTEMS 21
 Topic 1: Earth's Ever Changing Surface 21

4-ESS3 EARTH AND HUMAN ACTIVITY 22
 Topic 1: Energy Resources and Effects on Environment 22

GRADE 5 COURSE DESCRIPTION 24

5-PS1 MATTER AND ITS INTERACTIONS 24
 Topic 1: Particles of Matter 24
 Topic 2: Conservation of Mass 25
 Topic 3: Properties of Matter 26
 Topic 4: Mixing Substances 27

5-PS2 MOTION AND STABILITY: FORCES AND INTERACTIONS 28
 Topic 1: Comparing Magnetic and Gravitational Force 28

5-PS3 ENERGY 29
 Topic 1: Energy Flow through Food Webs 29

5-LS1 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES 30
 Topic 1: Photosynthesis 30

5-LS2 ECOSYSTEMS: INTERACTIONS, ENERGY, AND DYNAMICS 30
 Topic 1: Energy and Matter in an Ecosystem 30

5-ESS1 EARTH’S PLACE IN THE UNIVERSE 32
 Topic 1: The Sun 32
 Topic 2: Patterns of Daily Changes and Seasonal Cycles 32

5-ESS2 EARTH’S SYSTEMS 33



Topic 1: Weather and Climate..... 33

5-ESS3 EARTH AND HUMAN ACTIVITY..... 35

Topic 1: Protecting Earth's Resources and Environment 35



Grade 3 Course Description

3-PS2 Motion and Stability: Forces and Interactions

Topic 1: Forces on an Object

Description: [3-PS2-1] In this topic students will learn to recognize and describe the effects of balanced and unbalanced forces on the motion of an object.

Instruction Module **What Can Force Do?:** In this Instruction Module, students are introduced to force and its effects on objects. Students learn that pushes and pull are called forces. They recognize the forces can move an object, stop a moving object, and change the direction and speed of a moving object. They learn that forces are represented by arrows.

Instruction Module **Balanced and Unbalanced Forces:** In this Instruction Module, students learn that forces have a magnitude and direction. They observe examples of balanced and unbalanced forces and infer about their effects on an object. They learn that an object at rest will move only when the forces acting on it are not balanced.

Instruction Module **Force and Mass:** In this Instruction Module, students observe an experiment with a toy and learn that an object of greater mass requires a greater force to move it from rest.

Instruction Module **What is Work?:** In this Instruction Module, students are introduced to the concept of work and machines. Students learn that in science, work is done when a force moves an object. They also learn that simple machines like pulleys help to make work easier.

Glossary **Forces on an Object**
The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.

Interactivity **The Mass-matcher!:** In this Interactivity, students observe the effects of a pair of forces on an object and decide if the forces are balanced or unbalanced.

Simulation **Force and Distance:** In this Simulation, students conduct an experiment to investigate the motion and position of four carts filled with different loads and then infer which cart has the greatest mass.

Activities
Force
Force - Push or Pull

Quiz Forces on an Object



Topic 2: Different Kinds of Forces

Description: [3-PS2-3; 3-PS2-4.] In this topic students will learn about different kinds of forces including forces between two object not in contact with each other such as gravity, magnetic force, and electrical force.

Instruction Module

Friction: In this Instruction Module, students learn that friction is a force that opposes motion. They observe an experiment and recognize friction is greater when the surfaces in contact are rough than when the surfaces are smooth.

Instruction Module

Gravity and Magnetic Force: In this Instruction Module, student learn that both gravity and magnetic forces are similar because they are invisible forces that can pull objects. They also learn the differences between the two forces. They understand that while gravity pulls all objects, magnetic forces pull magnetic materials, and that magnets can also push other magnets depending on the direction in which they point.

Instruction Module

A Magnet's Force: In this Instruction Module, students observe examples and understand that magnets exert a force of attraction on certain materials such as iron. They also learn that like of poles of two magnets repel each other while unlike poles attract each other.

Instruction Module

Mass, Weight, and Gravity: In this Instruction Module, students learn the difference between mass and weight, and the units used to measure them. They learn that the weight of an object is a measure of gravitational force experienced by the object and can be measured with a spring scale. They understand that the mass of an object remains the same wherever it is measured, but the weight of an object depends on the gravitational force experienced by it.

Instruction Module

Electricity: In this Instruction Module, students are introduced to static electricity. Students learn that charges are of two type - positive and negative; like charges repel each other while unlike charges attract each other. They also learn that almost all electrical appliances use current electricity, which is charges in motion.

Glossary

Different Kinds of Forces

The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.

Interactivity

Types of Forces: In this interactivity students observe the movement of an object and identify the force that causes the changes in motion.

Journals

Forces
Forces on an Object



3-LS1 From Molecules to Organisms: Structures and Processes

Topic 1: Life Cycles of Animals

Description: [3-LS1-1.] In this topic students will learn that the life cycles of all organisms include the stages of birth, growth, reproduction, and death, and describe the life cycles of some organisms.

Instruction Module

Simple Life Cycles: In this Instruction Module, students learn how the life cycle of an organism includes its birth, growth, and reproduction. They understand what is meant by a simple life cycle, and gives examples of organisms that have a simple life cycle.

Instruction Module

Life Cycles of Animals: In this Instruction Module, student observe examples of organisms that have simple life cycles and complex life cycles. They learn which types of organisms have simple life cycles and which ones have complex life cycles.

Instruction Module

Life Cycle of a Frog: In this Instruction Module, students learn that metamorphosis is a complete change in form that some animals such as frogs undergo during their lives. They learn to describe the different stages in the life cycle of a frog and identify the important changes that take place as a tadpole metamorphoses into an adult frog. They also learn to identify structural differences between a tadpole and an adult frog.

Instruction Module

Metamorphosis: In this Instruction Module, students observe and learn about the different stages in the life cycle of a ladybug, an insect that undergoes metamorphosis. They also learn about the different stages in the life cycle of a frog. They recognize the important structural differences between the juvenile and adult stages.

Instruction Module

Life Cycle of a Butterfly: In this Instruction Module, students observe and understand that a butterfly undergoes a complete change in form or complete metamorphosis during its life. Students will be able to identify and describe the main features of the four stages in a butterfly life cycle.

Glossaries

Life Cycles of Animals

The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.



Interactivities

Try Cycles!: In this interactivity students apply their understanding of plant and animal life cycles to identify the types of life cycles that different organisms undergo.

Life Cycle: In this Interactivity, students apply their understanding of frog metamorphosis to correctly order the different stages in a frog's life cycle.

The Circle of Life!: In this Interactivity, students apply their understanding of complex life cycles to arrange the different stages in the life cycles of a butterfly, a beetle, and a radish plant, in the correct order.

Journals	Comparing Life Cycles Life Cycles Growth and Change
Activities	Expository - Lifecycles: Fireflies
Quiz	Life Cycles of Animals

Topic 2: Life Cycles of Plants

Description: [3-LS1-1.] In this topic students will learn to describe the life cycle of some plants.

Instruction Module

Plant Growth Cycles: In this Instruction Module, students learn that different plants take different amounts of time to complete their growth and life cycle. They learn that plants can be classified as annuals, biennials, or perennials depending on whether they complete their life cycle in one, two, or many growing seasons respectively.

Instruction Module

Plant Life Cycles: In this Instruction Module students observe example of plant life cycles and recognize that plants have a complex life cycle. They learn about the different stages in the life cycle of a bean plant and an oak tree.

Instruction Module

Life Cycle of a Bean Plant: In this Instruction Module, students learn to identify and describe the different stages of plant growth, using the example of a bean plant.

Instruction Module

Life Cycle of an Apple Tree: In this Instruction Module, students learn to identify and describe the different stages in the life cycle of an apple tree, and identify the correct sequence in which these events occur.



Glossaries	Life Cycles of Plants The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Simulation	Comparing Life Cycles of Plants: In this simulation students will compare the length of time it takes for different plants to complete one life cycle.
Activities	Activity - Life Cycle of a Dandelion
Quiz	Life Cycles of Plants

3-LS2 Ecosystems: Interactions, Energy, and Dynamics

Topic 1: Food Chains

Description: [3-LS2-1.] In this subtopic students will learn how organisms depend on each other and on their environment for food, and learn that the flow of energy in an ecosystem can be represented by food chains and food webs.

Instruction Module	Food Chains and Food Webs: In this Instruction Module students learn that that plants convert sunlight into chemical energy and are called producers. They also learn that animals are consumers because they cannot make their own food. They understand that the flow of energy in an ecosystem can be represented schematically using food chains and food webs.
Instruction Module	Types of Consumers: In this Instruction Module students understand that consumers are organisms that cannot make their own food and depend on other organisms for their energy. They understand that consumers can be classified based on what they eat and how they obtain their food. They learn to describe and give examples of different types of consumers such as herbivores, carnivores, omnivores, scavengers and decomposers.
Glossaries	Food Chains The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Interactivity	Build a Food Chain: In this interactivity students apply their understanding of food chains. They arrange organisms in the correct order of who eats what and also identify which organisms are producers, herbivores, carnivores, omnivores and decomposers.



Journal Food Chains

Quiz Food Chains

3-LS3 Heredity: Inheritance and Variation of Traits

Topic 1: Inheritance and Traits

Description: [3-LS3-1; 3-LS3-2] In this topic students will learn to identify and describe some inherited traits of animals and plants, and recognize how the inherited traits of some organisms help them adapt to their environment.

Instruction Module

Inherited Traits of Animals and Plants: In this Instruction Module, students learn that offspring resemble their parents because of inherited traits that are passed on from parents to their offspring. They observe and recognize examples of inherited traits in animals, plants, and humans.

Instruction Module

Inherited Traits and Survival: In this Instruction Module, students learn that inherited traits are characteristics that are passed on from parents to offspring and recognize different examples of inherited traits. They also understand how the inherited traits of some organisms help them adapt to their environment.

Instruction Module

What is an Adaptation?: In this Instruction Module, students observe a variety of examples of adaptations. They identify the adaptations and differentiate between structural and behavioral adaptations.

Glossaries

Inheritance and Traits

The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.

Interactivity

Test Your Pair-enting Skills: In this interactivity, students apply their knowledge of inherited traits of animals and plants to correctly identify the parent of given offspring based on inherited traits.

Sort the Pictures: In this Interactivity, students learn to distinguish between inherited traits and learned characteristics by identifying whether different pictures show inherited traits or learned characteristics of organisms.

Sonoran Desert Organisms: In the interactive section of this module, students select organisms that belong in the desert environment from a group of organisms, by studying their adaptations.



Journal	Inherited Traits Traits and Characteristics Adaptations
Activity	Expository - Insect Adaptations
Quiz	Inheritance and Traits

3-LS4 Biological Evolution: Unity and Diversity

Topic 1: Fossils and Organisms

Description: [3-LS4-1] In this topic students will learn how fossils are formed and recognize the significance of using sedimentary rock sequences and fossils as evidence of past environments and living organisms.

Instruction Module	Rock Layers and Fossils: In this Instruction Module, students learn that the lowest layer in sedimentary rock is usually the oldest and that scientists study these layers to understand events that occurred in the past. They also learn that fossils found in rock layers provide evidence of organisms that lived in the past and their environments.
Instruction Module	How are Fossils Formed?: In this Instruction Module, students learn that sedimentary rocks are formed over millions of years and plant and animal remains are buried in these rocks as fossils.
Instruction Module	Clues About Past Environments: In this Instruction Modules, students observe examples of trace fossils and make inferences about environmental conditions that existed in the past. They learn how such fossils provide important clues about environmental conditions in the past.
Instruction Module	Evidence of Pangaea: In this Instruction Module, students are introduced to various evidence that suggest that in the past, all present-day continents were joined to form one giant landmass called Pangaea. Students learn to evaluate the evidence.
Glossaries	Fossils and Organisms The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Interactivity	Observing Change: In the interactive section of the module, students observe fossils in layers of rock and order them from the oldest to the most recent, and use them as clues to infer about the environment of the region in the past.



Journal Journal 1 - Learning from the Past
Journal 2 - Learning from the Past
Journal 3 - Learning from the Past

Activities Fossils as Evidence of the Past

Quiz Fossils and Organisms

Topic 2: Habitats and Organisms

Description: [3-LS4-3] In this topic students will learn to describe the components of an ecosystem, and explain how the basic needs of organisms are best met in their natural habitat.

Instruction Module **Components of an Ecosystem** In this Instruction Module students learn what an ecosystem is and recognize that it is made up of living and nonliving components. They observe examples of ecosystems and identify the living and nonliving components of an ecosystem.

Instruction Module **Population and Habitat** : In this Instruction Module students examine a pond environment to understand what a population, community, and habitat are.

Instruction Module **Basic Needs of Organisms:** In this Instruction Module students learn that all organisms have some basic needs without which they cannot survive and that all their basic needs are best met in their natural habitat. They learn to identify the basic needs of plants and animals. They also understand why the natural habitat for one organism may be unsuitable for another organism, belonging to a different habitat.

Instruction Module **Competing for Habitat Resources:** In this Instruction Module students study a pond habitat to understand that organisms in a habitat must compete with each other to fulfill their basic needs. They also evaluate the impacts of over population of some organisms in the pond habitat, on resources and populations of other organisms in the pond.

Glossaries **Habitats and Organisms**
The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.

Interactivity **Pond Dwellers:** In the interactive section of this module, students apply their understanding of the type of organisms that make up a pond community to identify which organisms belong to a pond ecosystem and which ones do not.

Journal Journal - Habitats and Organisms



Activities	Habitats and Organisms Observing Organisms in a Water Sample Using a Microscope Organisms and their Environments Expository - Animals Homes
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Quiz Habitats and Organisms

Topic 3: Environmental Changes

Description: [3-LS4-4] In this topic students will learn to describe how environmental changes can affect the organisms that live there.

Instruction Module **Organisms Changing their Environment:** In this Instruction Module, students observe and understand how organisms like beavers change their environment, and how these changes affects other organisms living in the same environment.

Instruction Module **Factors Affecting an Environment:** In this Instruction Module, students examine how natural hazards such as forest fires, affect food webs in an ecosystem. They observe examples and evaluate how a change in prey population affects the corresponding predator population.

Instruction Module **Factors Affecting Populations:** In this Instruction Module, students learn to describe the effects of a forest fire on the different populations of organisms living in it. They also learn to explain how a change in the number of producers or consumers can affect the entire food web.

Instruction Module **How Organisms Change Their Ecosystems:** In this Instruction Module, students learn how an organism can make important changes to its ecosystem using the example of the prairie dog in the Blackland Prairie Ecosystem. They also understand how these changes benefit other organisms in the same ecosystem.

Instruction Module **Human Impacts on Ecosystems:** In this Instruction Module, students understand how humans have drastically altered ecosystems by activities such as hunting, agriculture, and the construction of roadways, using the example of a Blackland Prairie ecosystem. They also learn about the different steps that humans can take to minimize damage to an ecosystem and to restore an ecosystem.

Glossaries **Environmental Changes**
The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.

Interactivity **Ecosystem Harmony:** In the interactive section of the module, students apply their understanding of factors affecting ecosystem stability to predict the impacts of different changes on an estuary



ecosystem.

Journal	Journal - Environmental Changes Journal 1 - Changes in Ecosystems Journal 2 - Changes in Ecosystems Journal 3 - Changes in Ecosystems
Activities	Predicting Effects of Changes to an Ant Farm Ecosystem Expository - The Brown Tree Snake
Quiz	Environmental Changes

3-ESS2 Earth's Systems

Topic 1: Weather Conditions and Climate

Description: [3-ESS2-1; 3-ESS2-2] In this topic students learn how to measure, record, and compare day-to-day weather changes that include air temperature, wind direction, and precipitation, and recognize patterns in these changes.

Instruction Module

What is Weather?: In this Instruction Module, students are introduced to the concept of weather. Students learn that the Sun warms the surface of Earth and the air above it, causing the weather changes on Earth. They recognize how weather affects our daily activities.

Instruction Module

Air Temperature: In this Instruction Module, students are introduced to air temperature. Students learn how a thermometer is used to measure air temperature. They recognize that the Sun does not heat Earth's surface evenly, resulting in variations in temperatures across Earth.

Instruction Module

Wind: In this Instruction Module, students are introduced to the direction and speeds of winds. They learn how a wind sock is used to find out the direction in which the wind blows. They understand how wind speeds can be described a calm, light, moderate, or strong.

Instruction Module

Precipitation: In this Instruction Module, students learn about the different forms of precipitation such as rain, sleet, and snow. They learn that tools such as the rain gauge and the snow gauge help to measure the amount of precipitation in an area. They recognize the effects of an excess or of a shortage of precipitation.

Instruction Module

Patterns in Weather: In this Instruction Module, students learn that meteorologists use information from satellite maps to study weather patterns and predict weather conditions. They also learn how data collected and represented in charts and tables help to identify



	weather patterns.
Instruction Module	Seasonal Patterns, Weather, and Climate: In this Instruction Module, students observe and recognize seasonal patterns. They recognize that seasons are accompanied by changes in weather, and that a pattern of weather of a place over several years is the climate of the place.
Instruction Module	Weather Maps: In this Instruction Module, students learn about the symbols on a weather map that represent high and low pressures, and cold, warm, and stationary fronts. They also learn how each of these conditions affects the weather of a place.
Glossaries	Weather Conditions and Climate The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Interactivities	Watch Out for the Weather!!: In the interactive section of this module, students observe and record weather conditions such as temperature, precipitation, and wind speeds for three different cities.
Journals	Energy from the Sun and Weather
Activities	Measuring the Weather Expository - Weather
Quiz	Weather Conditions and Climate

Grade 4 Course Description

4-PS3 Energy

Topic 1: Energy and its Forms

Description: [4-PS3-1; 4-PS3-2] In this topic students will learn to identify the different forms of energy and recognize that energy can be transformed and transferred by sound, light, heat, and electric currents.

Instruction Module **What is Energy?:** In this Instruction Module, students observe examples of situations where energy is used and understand the meaning of energy. They learn that energy exists in different forms.



Instruction Module	Energy Forms – Light and Heat: In this Instruction Module, students are introduced to heat and light as forms of energy. They learn that light energy helps us to see and plants use light energy during photosynthesis. They understand that light bends as it passes through transparent objects and is blocked by opaque objects. They also learn that heat or thermal energy is the energy of the moving particles of matter.
Instruction Module	Sound Energy: In this Instruction Module, students observe and infer that sound is produced by mechanical vibrations and travels as sound waves. They learn that sound needs matter to travel through and travels fastest through solids. They also learn that echoes are a result of the bouncing of sound waves.
Instruction Module	Thermal Energy: In this Instruction Module, students learn that the energy of the moving particles of matter is called thermal energy, and that temperature is a measure of how fast the particles of matter are moving. They learn about the process of heat transfer including conduction, convection, and radiation. They also learn that heat conductors are materials that allow heat to pass through them while heat insulators are materials that do not allow heat to pass through them easily.
Instruction Module	Energy of Moving Objects: In this Instruction Module, students are introduced to examples of mechanical energy. Students observe various examples and infer that moving objects have mechanical energy. They also recognize that objects can have stored mechanical energy because of their position.
Instruction Module	What is Electricity?: In this Instruction Module, students learn that electrical devices work on electric current, which is a flow of electric charges. They understand that the flow of electric current requires a source of energy and a closed continuous path called an electric circuit. They recognize instances where electrical energy is converted to other useful forms of energy such as light, heat, and sound.
Instruction Module	Energy Transformations: In this Instruction Module, students observe various examples of energy transformations and learn that energy is neither created nor destroyed but can change from one form to another.
Glossaries	Energy and its Forms The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Interactivities	Interactivity - Jamie In The Maze: In this Interactivity, students identify the correct form of energy that they need to use to perform a task, as they move through a maze. Energy to Unpack: In this Interactivity students are presented with various situations and are required to identify the different forms of energy.



Journals	Journal - Energy Journal 2 - Forms of Energy Journal 1 - Electricity Journal 2 – Energy Conversions.
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Activities	Converting Energy Conductors and Insulators Using an Electrical Circuit to Pop a Balloon
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Quiz	Energy and its Forms
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Topic 2: Electricity

Description: [4-PS3-2; 4-PS3-4] In this topic students will learn that the flow of electricity requires a closed circuit and identify materials the conduct electricity and those that do not. They are introduced to magnetic fields, electrical fields, and electromagnetic fields.

Instruction Module	Electricity: In this Instruction Module, students are introduced to static electricity. Students learn that charges are of two type - positive and negative; like charges repel each other while unlike charges attract each other. They also learn that almost all electrical appliances use current electricity, which is charges in motion.
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Instruction Module	Electrical Circuits: In this Instruction Module, students are introduced to electrical circuits. Students learn that the flow of electricity requires a closed path and a source of energy such as a battery. They understand how a switch helps to make or break a circuit and learn the difference between conductors and insulators of electricity.
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Instruction Module	Electricity and Magnetism: In this Instruction Module, students are introduced to magnetic fields, electrical fields, and electromagnetic fields. Students learn how to create an electromagnet and understand how electromagnets differ from permanent magnets. Students also learn how magnets are used to produce electricity.
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Glossaries	Electricity The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
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Simulation	Conductor or Insulator?: In this simulation students will test different materials to find out whether they are electrical conductors or insulators. Electromagnets - An Investigation: In this simulation students will explore an electromagnetic field by setting up an experiment to investigate how the number of turns of wire in the coil wrapped around a nail affects the strength of an electromagnet.
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Journals

Electrical Circuits

Activities

Electrical Circuits – Electromagnets
Design a Switch for an Electric Circuit

Quiz

Electricity

4-PS4 Waves and their Applications in Technologies for Information Transfer

Topic 1: Sound Waves and Light

Description: [4-PS4-1; 4-PS4-2; 4-PS4-3] In this topic students will learn how sound energy travels as waves, and describe how light is transmitted through or reflected from objects.

Instruction Module

What is Sound?: In this Instruction Module, students learn how sound is produced, how it travels, and how our ear helps us to hear sound. They also learn that sound waves can travel through solids, liquids, and gases but cannot travel in space.

Instruction Module

Light and Matter: In this Instruction Module students learn about light as a form of energy, its sources, and how it travels. They observe various examples and identify transparent, translucent, and opaque materials.

Instruction Module

Reflection and Refraction of Light: In this Instruction Module, students learn that light rays reflect off surfaces. They learn the difference between regular reflection and diffuse reflection. They also understand that light rays refract when they travel from one medium into another, and recognize instances of refraction.

Instruction Module

Lenses and Their Uses: In this Instruction Modules, students learn how light rays refract when they travel through concave and convex lenses. They understand how a telescopes make distant objects appear closer by using a combination of lenses to magnify the image. They also understand the role of the lens in the human eye and a camera.

Glossary

Sound Waves and Light

Interactivities

Create a Circuit!: In the interactive section of the module, students use components such as wires and batteries to “build” electrical circuits that light up a bulb and make an electromagnet.

Journals

Journal - Energy
Journal 1 – Light
Journal 2 - Light



Activities	Energy: Observing Sound Sound Energy: Make a Speaker The Properties of Light Light Reflection and Different Surfaces Why Rainbows Form Exploring the Properties of Light
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Quiz	Sound Waves and Light
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4-LS1 From Molecules to Organisms: Structures and Processes

Topic 1: Adaptations: Structures and Behaviors

Description: [4-LS1-1] In this topic students will learn to identify and describe the internal and external structures and behaviors of organisms that function to support survival.

Instruction Module	<p>Types of Adaptations: In this Instruction Module, students learn to define and explain what is meant by an adaptation. They learn that adaptations can be either structural or behavioral and recognize examples of each kind.</p>
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Instruction Module	<p>Structural Adaptations: In this Instruction Module, students learn to identify and describe structural adaptations and recognize how mimicry and camouflage support survival.</p>
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Instruction Module	<p>Comparing Adaptations of Similar Organisms: In this Instruction Module, students observe and compare the structural adaptations of similar organisms that inhabit different environments. They learn how adaptations help an organism survive in its natural environment.</p>
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Instruction Module	<p>Behavioral Adaptations: In this Instruction Module, students observe and identify examples of instinctive and learned behavioral adaptations. They learn how behavioral adaptations help organisms survive in their environment.</p>
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Instruction Module	<p>Inherited Traits and Survival: In this Instruction Module, students learn that inherited traits are characteristics that are passed on from parents to offspring and recognize different examples of inherited traits. They also understand how the inherited traits of some organisms help them adapt to their environment.</p>
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Instruction Module	<p>What is Learned Behavior?: In this Instruction Module, students will understand what learned behavior is and explain how learned behavior is different from inherited traits. They will also understand how some types of learned behavior helps some organisms survive in their environment.</p>
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Glossaries	Adaptations: Structures and Behaviors The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Interactivities	Structural and Behavioral Adaptation: In this interactivity students use their understanding to identify whether an organism’s adaptation is structural or behavioral. Sort the Pictures: In this Interactivity, students learn to distinguish between inherited traits and learned characteristics by identifying whether different pictures show inherited traits or learned characteristics of organisms.
Journals	Environments and Adaptations Traits and Characteristics
Activities	Adaptations Expository - Insect Adaptations
Quiz	Adaptations: Structures and Behaviors

4-ESS1 Earth’s Place in the Universe

Topic 1: Fossils - Evidence of Changes on Earth

Description: [4-ESS1-1] In this topic students will learn how fossils in rock layers provide evidence to support explanations for changes on Earth's surface and the environment over time.

Instruction Module	Rock Layers and Fossils: In this Instruction Module, students learn that the lowest layer in sedimentary rock is usually the oldest and that scientists study these layers to understand events that occurred in the past. They also learn that fossils found in rock layers provide evidence of organisms that lived in the past and their environments.
Instruction Module	How are Fossils Formed?: In this Instruction Module, students learn that sedimentary rocks are formed over millions of years and plant and animal remains are buried in these rocks as fossils.
Instruction Module	Clues About Past Environments: In this Instruction Modules, students observe examples of trace fossils and make inferences about environmental conditions that existed in the past. They learn how such fossils provide important clues about environmental conditions in the past.



Glossaries	Fossils - Evidence of Changes on Earth The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Interactivities	Observing Change: In this interactivity students observe fossils in layers of rock and order them from the oldest to the most recent, and use them as clues to infer about the environment of the region in the past.
Journal	Journal 1 - Learning from the Past
Activities	Fossils as Evidence of the Past
Quiz	Evidence of Changes on Earth

4-ESS2 Earth's Systems

Topic 1: Earth's Ever Changing Surface

Description: [4-ESS2-1; 4-ESS2-2] In this topic students will learn about the processes of weathering, erosion, and deposition that constantly change Earth's surface, and analyze evidence provided from the shape of continents to interpret that all present-day continents were once joined to form one giant landmass.

Instruction Module	Changes on the Earth's Surface: In this Instruction Module, students learn that Earth's surface is constantly being changed by temperature changes and natural forces such as wind, water, and glaciers. They understand how these forces cause weathering, erosion, deposition, and dissolving which change landforms and create new landforms.
Instruction Module	Erosion by Water: In this Instruction Module, students will learn about water erosion and the landforms created by such erosion. They will also understand how erosion by water can be measured quantitatively in the laboratory.
Instruction Module	Water as a Force: In this Instruction Module, students learn how water can change Earth's surface. They learn that water is a destructive force when it causes weathering and erosion and that it is a constructive force when it causes deposition.



Instruction Module	Glaciers – A Natural Force: In this Instruction Module, students learn what a glacier is and recognize the effects of glacial erosion on Earth’s surface.
Instruction Module	Evidence of Pangaea: In this Instruction Module, students are introduced to various evidence that suggest that in the past, all present-day continents were joined to form one giant landmass called Pangaea. Students learn to evaluate the evidence.
Glossaries	Earths Ever Changing Surface The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.
Journals	Journal - Observing Change Journal 2 -Changes on the Earth’s Surface Journal - Earths Ever-Changing Surface Journal 2 - Learning from the Past Journal 3 - Learning from the Past
Activities	Changes on the Earth’s Surface A Changing Earth Observing Erosion and Deposition
Quiz	Earths Ever Changing Surface

4-ESS3 Earth and Human Activity

Topic 1: Energy Resources and Effects on Environment

Description: [4-ESS3-1] In this topic students will learn about renewable and nonrenewable energy resources and will be able to describe how their use affects the environment.

Instruction Module **Energy Resources:** In this Instruction Module, students learn to distinguish between renewable and nonrenewable energy resources. They also learn to identify examples of renewable and non-renewable energy resources.

Instruction Module **Fossil Fuels:** In this Instruction Module, students understand that coal, oil and natural gas are fossils used and that they can be used to produce electricity. They also understand the advantages and disadvantages of using fossil fuels.

Instruction Module **Nuclear Energy:** In this Instruction Module, students understand how nuclear energy can be utilized to generate electricity. They also understand the advantages and disadvantages of using nuclear energy.



Instruction Module	<p>Hydroelectricity: In this Instruction Module, students understand how hydropower, the energy stored in moving water, can be utilized to generate electricity. They also understand the advantages and disadvantages of using hydropower.</p>
Instruction Module	<p>Geothermal Energy: In this Instruction Module, students understand how geothermal energy or the energy stored in hot springs and geysers, can be utilized to generate electricity. They also understand the advantages and disadvantages of using geothermal energy.</p>
Instruction Module	<p>Biomass: In this Instruction Module, students understand how biomass can be utilized to generate electricity. They also understand the advantages and disadvantages of using biomass.</p>
Instruction Module	<p>Solar Energy: In this Instruction Module, students understand how solar energy can be utilized to generate electricity. They also understand the advantages and disadvantages of using solar energy.</p>
Instruction Module	<p>Wind Energy : In this Instruction Module, students understand how wind energy can be utilized to generate electricity. They also understand the advantages and disadvantages of using wind energy.</p>
Glossaries	<p>Energy Resources and Effects on Environment The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities.</p>
Interactivities	<p>Energize the Gadgets: In this Interactivity, students identify an energy resource based on the clues provided and then identify whether the energy resource is renewable or nonrenewable.</p>
Activities	<p>Energy Matters Comparing Solar Ovens The Effect of Color on Heat Absorption in a Solar Collector</p>
Quiz	<p>Energy Resources and Effects on Environment</p>



Grade 5 Course Description

5-PS1 Matter and Its Interactions

Topic 1: Particles of Matter

Description: [5-PS1-1] In this topic students will learn that matter is made of particles too small to be seen and can exist as solids, liquids, and/or gases, and can be changed from one state to another by heating or cooling.

Instruction Module **Solids, Liquids, and Gases:** In this Instruction Module, students are presented with examples of solids, liquids, and gases. Students observe and compare their physical properties including shape and volume, and arrive at a generalization of their physical properties. They also learn that the differences in state are a result of the differences in the arrangement of particles of matter in them.

Instruction Module **Changing States of Water:** In this Instruction Module, students observe the changes in states of water when heat is added to it or removed from it. They learn how adding or removing heat affects the particles of matter in water, and results in change of state.

Instruction Module **Particles of Matter in Solids:** In this Instruction Module, students are introduced to the arrangement of particles of matter in solids and the forces of attraction between them. Students understand the process of change of state from solid to liquid by heating (melting) and from liquid to solid (freezing) at the molecular level.

Instruction Module **Particles of Matter in Liquids:** In this Instruction Module, students are introduced to the arrangement of, and force of attraction between, the particles of matter in liquids. Students learn how this affects the volume and shape of liquids. They understand the processes of boiling (change of state to gas on heating a liquid) and condensation (the change to liquid on cooling a gas).

Instruction Module **Gases: Shape and Volume:** In this Instruction Module, students are introduced to the strength of the forces between particles of matter in gases. Students understand why gases have neither a fixed shape nor a fixed volume.

Instruction Module **Nature and States of Water:** In this Instruction Module, students are introduced to the three states of water. Students learn that water naturally exist in all three states. They observe and recognize how water changes states as it moves from land to air and back to land during the process of the water cycle.



Glossary	Particles of Matter The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities
Interactivities	Changing States of Matter: In this interactivity students identify the energy change (adding heat or removing heat) required to bring about specific changes in the states of matter.
Journal	States of Matter Changing States of Matter
Activities	States of Matter Chart and Venn Diagram
Quiz	Particles of Matter

Topic 2: Conservation of Mass

Description: [5-PS1-2] In this topic students will observe and learn that the mass of an object is the same as the sum of the masses of its parts.

Instruction Module	Measuring Mass: In this Instruction Module, students learn that mass refers to the amount of matter in an object and can be measured with a triple beam balance.
Instruction Module	Mass: In this Instruction Module, students learn that the mass of an object is the amount of matter in it and can be measured with a triple beam balance. They observe and measure the mass of substances before and after a physical change and recognize that mass is conserved.
Glossary	Conservation of Mass The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities
Journal	Journal 1 - Physical Properties of Matter
Quiz	Conservation of Mass



Topic 3: Properties of Matter

Description: [5-PS1-3] In this topic students will learn that matter has properties based on which matter can be identified and classified.

Instruction Module **Hardness of Matter:** In this Instruction Module, students are introduced to the term “hardness”. Students learn how to use the scratch test to test and compare hardness of objects made of different kinds of matter.

Instruction Module **Magnetic Properties:** In this Instruction Module, students are introduced to the magnetic properties of matter. They learn that magnets attract objects made of certain metals like iron. They observe and understand that like poles of magnets repel while unlike poles attract each other.

Instruction Module **Volume:** In this Instruction Module, students learn that the volume of an object is the amount of space occupied by it. They observe and infer that two objects cannot occupy the same space at the same time and learn how this property is used to measure the volume of irregular solids using a graduated cylinder. They also learn to use formulas to find the volume of a rectangular prism.

Instruction Module **Heat Conductors and Insulators:** In this Instruction Module, students learn about conductors and insulators of heat. They observe various examples of conductors and insulators of heat, and recognize their uses.

Instruction Module **Conductors and Insulators of Electricity:** In this Instruction Module, students learn that conductors of electricity allow electricity to flow through them while insulators do not allow electricity to flow through them. They observe examples of conductors and insulators and identify their uses.

Instruction Module **Density:** In this Instruction Module, students observe and understand the meaning of density. They learn that density is a measure of the mass of an object compared to its volume. They also learn that an object sinks or floats in water depending on whether its density is greater than or less than the density of water.

Glossary **Properties of Matter**
The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities

Interactivities **Float or Sink:** In this Interactivity students “drop” various objects in water and observe them as they float or sink. Based on their observations, they decide whether or not the object is denser than water.



Simulation **Conductor or Insulator?:** In this simulation students will test different materials to find out whether they are electrical conductors or insulators.
Thermal Energy - Conductor Or Insulator?: In this simulation students will classify materials as thermal insulators or thermal conductors by conducting a simple investigation.

Journal Journal - Measuring Physical Properties

Activities Using Physical Properties to Classify Matter
 Classifying Matter
 Conductors and Insulators

Quiz Properties of Matter

Topic 4: Mixing Substances

Description: [5-PS1-4] In this topic students will learn to differentiate between mixtures and pure substances, and to explain how mixtures can be separated based on the physical properties of the components.

Instruction Module **The Mixed and the Pure:** In this Instruction Module, students observe various examples of mixtures and identify the substances that make up each mixture. They understand the difference between mixtures and pure substances. They recognize that mixture can be physical combinations of solids, liquids, and gases.

Instruction Module **Heterogeneous and Homogeneous Mixtures:** In this Instruction Module, students observe examples of heterogeneous and homogeneous mixtures and understand the difference. They learn that solutions are homogeneous mixtures.

Instruction Module **Solutions:** In this Instruction Module, students learn that solutions are homogeneous mixtures. They observe examples of solutions and understand that the size of the ingredients, a physical property, changes. They learn that alloys are solutions of two or more metals.

Instruction Module **Using Properties to Separate Mixtures:** In this Instruction Module, students observe examples of mixtures and understand that the components retain most of their physical properties. They learn that mixtures can be separated using tools based on the physical properties of the components.

Glossary **Mixing Substances**
 The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities



Interactivities	Mix Your Cake and Eat It Too!: In this interactivity students observe how different ingredients are mixed together to make the batter for a cake, and identify whether the mixture is heterogeneous or homogeneous at each stage during the process.
Simulation	Properties Of Mixtures: In this simulation students will investigate to find out whether particles of different materials maintain their size, which is a physical property, or dissolve when mixed with water.
Journal	Journal 1 - Mixtures and Solutions Journal 2 - Mixtures and Solutions
Activities	Comparing Mixtures and Solutions Identifying Mixtures and Solutions The Ingredients of Solutions
Quiz	Mixing Substances

5-PS2 Motion and Stability: Forces and Interactions

Topic 1: Comparing Magnetic and Gravitational Force

Description: [5-PS2-1] In this topic students will learn that the gravitational force exerted by Earth on objects is directed toward Earth's center, identify the similarities and differences between magnetic force and gravitational force, and learn that the weight of an object depends on the gravitational force experience by it.

Instruction Module

What is Gravity and Magnetic Force: In this Instruction Module, student learn that both gravity and magnetic forces are similar because they are invisible forces that can pull objects. They also learn the differences between the two forces. They understand that while gravity pulls all objects, magnetic forces pull magnetic materials, and that magnets can also push other magnets depending on the direction in which they point.

Instruction Module

Gravity and Weight: In this Instruction Module, students learn that the gravitational force between two objects depends on the mass of the objects. They compare the weights of an object on Earth, on the Moon, and on Jupiter, and infer that weight depends on the gravitational force experienced by it.

Glossary

Comparing Magnetic and Gravitational Force

The interactive multimedia glossary provides both linguistic and non-linguistic representations of key terms related to science concepts presented in the Instruction Modules and Interactivities



Journals	Journal - Force Journal 1 - Effects of Force
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Quiz Comparing Magnetic and Gravitational Force

5-PS3 Energy

Topic 1: Energy Flow through Food Webs

Description: [5-PS3-1] In this topic, students learn how food chains and food webs can be used to trace the flow of energy from the Sun through producers and consumers.

Instruction Module **Energy from the Sun:** In this Instruction Module, students learn that energy from the Sun powers the water cycle. They also understand that plants convert sunlight to chemical energy during photosynthesis and animals depend on plants directly or indirectly for this chemical energy.

Instruction Module **Energy Flow in an Ecosystem:** In this Instruction Module, students learn that the flow of energy from one organism to another in an ecosystem can be represented diagrammatically using a food chain. They understand that food chains in an ecosystem interlink to form food webs. They also learn that more energy is available to the producers than to the consumers and that this decrease in energy can be represented using an energy pyramid.

Glossary **Energy Flow through Food Webs**
This Glossary is a list of the scientific terms used in the Instruction Module, along with their definitions. The combined use of text, audio, and visual descriptions help students understand and retain the words and their meanings.

Interactivity **Food Web Flow!:** In this Interactivity students arrange organisms of different food chains in the correct order of energy flow and form food webs by identifying the correct links between food chains.

Journals Journal 1 - Energy Flow through Food Webs
Journal 2 - Energy Flow through Food Webs

Activity Energy Flow through Food Webs
A Meadow Food Web

Quiz Energy Flow through Food Webs



5-LS1 From Molecules to Organisms: Structures and Processes

Topic 1: Photosynthesis

Description: [5-LS1-1] In this topic students will learn to describe photosynthesis as the process by which plants produce food in the presence of sunlight, using carbon dioxide and water.

Instruction Module	Photosynthesis: In this Instruction Module, students learn that plants use carbon dioxide and water along with energy from sunlight to make their own food. They also understand that oxygen is released as a by-product of photosynthesis. They evaluate the significance of photosynthesis in sustaining life on Earth.
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Glossary	Photosynthesis This Glossary is a list of the scientific terms used in the Instruction Module, along with their definitions. The combined use of text, audio, and visual descriptions help students understand and retain the words and their meanings.
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Quiz	Photosynthesis
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5-LS2 Ecosystems: Interactions, Energy, and Dynamics

Topic 1: Energy and Matter in an Ecosystem

Description: [5-LS2-1] In this topic students will learn to describe the flow of energy and the movement of matter in an ecosystem.

Instruction Module	Ecosystems: In this Instruction Module, students learn to describe ecosystems and explain why they are important. They also use examples to identify suitable ecosystems for different animals.
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Instruction Module	Role of Producers: In this Instruction Module, students understand that plants are called producers because they can directly convert sunlight to chemical energy through photosynthesis. They also learn how plants make the Sun's energy available to all other organisms in an ecosystem.
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Instruction Module	Consumers: In this Instruction Module, students will learn that all animals are consumers because they depend on other organisms for their energy. They learn to identify, describe, and give examples of the different types of consumers such as herbivores,
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	carnivore, omnivores, predators, prey, and scavengers.
Instruction Module	Decomposers: In this Instruction Module, students learn to explain the role of decomposers in an ecosystem and give examples of some common decomposers. They also learn to evaluate the significance of decomposers in the recycling of nutrients in an ecosystem.
Instruction Module	Food Chains: In this Instruction Module, students understand how energy from the Sun is converted to chemical energy by the producers. They learn how this chemical energy is passed on from the producers to the consumers, and understand that this flow of energy can be represented using a food chain.
Instruction Module	Food Webs: In this Instruction Module, students understand how food chains can be interconnected to form food webs. They learn how to use a food web to recognize the relationship between different organisms in an ecosystem.
Instruction Module	Respiration: In this Instruction Module, students learn that oxygen is essential for organisms to survive. They understand how organisms such as human, breathe in oxygen and explain how this oxygen eventually reaches the cells to break down food and release chemical energy.
Instruction Module	Decomposition: In this Instruction Module , students understand the process of decomposition as the breakdown of dead organic matter by organisms called decomposers. They recognize the importance of decomposition in recycling nutrients within an environment and in the carbon dioxide - oxygen cycle.
Glossary	Energy and Matter in an Ecosystem This Glossary is a list of the scientific terms used in the Instruction Module, along with their definitions. The combined use of text, audio, and visual descriptions help students understand and retain the words and their meanings.
Interactivities	Got the Munchies!: In this Interactivity, students apply their understanding of consumers, and decomposers and sort organisms as herbivores, carnivores, omnivores, or decomposers, based on their food preferences. Go with the Energy Flow: In this interactivity, students apply their understanding of food chains to identify the roles of organisms in a food chain and the correct order of energy flow.
Journal	Producers and Consumers Food Webs
Activities	Expository - Food Webs
Quiz	Energy and Matter in an Ecosystem



5-ESS1 Earth’s Place in the Universe

Topic 1: The Sun

Description: [5-ESS1-1] In this topic students will learn about the characteristics of the Sun, and relate its apparent brightness and size to its relative distance from Earth.

Instruction Module **The Sun—Our Star:** In this Instruction Module, students are introduced to the Sun as the largest object in our solar system. Students learn that the Sun is a star and is made of up mostly of hydrogen and helium. They compare the relative sizes of the Sun, Earth, and the Moon and understand that the Sun appears to be the same size as the Moon because it is much farther away from Earth than the Moon.

Instruction Module **Characteristics of the Sun:** In this Instruction Module, students are introduced to the characteristics of the Sun such as its temperature and composition. Students observe and compare the Sun's mass and size with that of Earth. They learn about sunspots, solar winds, and solar flares.

Glossary **The Sun**
This Glossary is a list of the scientific terms used in the Instruction Module, along with their definitions. The combined use of text, audio, and visual descriptions help students understand and retain the words and their meanings.

Quiz The Sun

Topic 2: Patterns of Daily Changes and Seasonal Cycles

Description: [5-ESS1-2] In this topic students will identify and describe patterns of daily changes and seasonal cycles caused by Earth's rotation and revolution.

Instruction Module **Orbits and Rotation:** In this Instruction Module students learn to construct models to demonstrate that Earth rotates on its axis, causing the day and night cycle, and revolves around the Sun in an oval-shaped orbit.

Instruction Module **Patterns of the Sun:** In this Instruction Module students learn about the daily patterns of Sun including sunrise and sunset, and its apparent movement across the sky during a day that causes patterns in shadows. They also understand that the position of the Sun in the sky changes through different seasons and affects the duration of the day and night.

Instruction Module **The Day and Night Cycle:** In this Instruction Module, students



learn that changes that repeat and form a pattern are called cycles. They understand that the day-and-night cycle is caused by the rotation of Earth on its axis.

Instruction Module **Cycle of the Seasons:** In this Instruction Module, students learn that the cycle of seasons is a result of Earth revolving around the Sun on its tilted axis. They observe and understand that when the Northern hemisphere is tilted toward the Sun, it experiences summer and when it is tilted away from the Sun, it experiences winter.

Glossary **Patterns of Daily Changes and Seasonal Cycles**
This Glossary is a list of the scientific terms used in the Instruction Module, along with their definitions. The combined use of text, audio, and visual descriptions help students understand and retain the words and their meanings.

Interactivities **Orbiting Spheres:** In this interactivity, students “place” the Sun, the Moon, and Earth in their correct orbital positions in the solar system. Then, they identify the correct object based on the characteristics of the Sun, the Moon, and Earth.

Simulation **Shadows And Seasons:** In this simulation students will investigate and recognize that the length of a shadow follows a pattern throughout the year.

Journal Journal 1 - Earth Cycles

Activities The Sun, Earth, and Moon As a System
Day and Night and the Movement of the Sun across the Sky

Quiz Patterns of Daily Changes and Seasonal Cycles

5-ESS2 Earth’s Systems

Topic 1: Weather and Climate

Description: [5-ESS2-1] In this topic students will learn how air temperature, humidity, and air pressure determine the weather and climate of a place, and describe the water cycle.

Instruction Module **The Sun and Weather:** In this Instruction Module, students learn how uneven heating of the Earth’s surface results in variation of temperatures in the different parts of Earth. They learn that the Earth's tilted axis is the cause of the uneven heating.



Instruction Module	Humidity: In this Instruction Module, students are introduced to humidity. They learn that humidity refers to the amount of water vapor in the air. They understand that humidity depends on the climate of a place and on temperature.
Instruction Module	Air Pressure and Weather: In this Instruction Module, students are introduced to air pressure. Students learn about the effects of temperature on air pressure and learn to identify regions of high and low pressures on a weather map. They understand that air moves from a region of high pressure to a region of low pressure and recognize the effects of air pressure on weather.
Instruction Module	Climate: In this Instruction Module, student learn the difference between climate and weather. They learn how meteorologists collect weather data over several years to determine the climate of a place. They also learn about global warming and some of the possible consequences.
Instruction Module	Water Cycle: In this Instruction Module, students are introduced to the water cycle. Students learn to identify and describe the different processes that are part of the water cycle such as evaporation, condensation, precipitation, infiltration, and transpiration.
Glossary	Weather and Climate This Glossary is a list of the scientific terms used in the Instruction Module, along with their definitions. The combined use of text, audio, and visual descriptions help students understand and retain the words and their meanings.
Interactivity	Weather vs Climate: In this interactivity, students observe pictures and classify them as ‘weather’ or ‘climate’ based on whether it is a short term or a long term condition.
Journal	Journal 1 - Weather or Climate? Journal 2 - Weather or Climate? Journal 1 - The Water Cycle Journal 2 - The Water Cycle
Activities	Determining Wind Direction Weather or Climate? Benjamin Franklin: Meteorologist The Water Cycle - Descriptive Investigation Expository - The Water Cycle
Quiz	Weather and Climate



5-ESS3 Earth and Human Activity

Topic 1: Protecting Earth's Resources and Environment

Description: [[5-ESS3-1] In this topic students will learn how natural calamities and human activities affect ecosystems, and recognize the importance of protecting Earth's resources and environment.

Instruction Module

Conservation of Natural Resources: In this Instruction Module, students learn about the consequences of depletion of natural resources and recognize the importance of conservation of resources. They also learn about different ways to conserve these resources.

Instruction Module

Factors Affecting an Environment: In this Instruction Module, students examine how natural hazards and human activities alter environments and affect food webs in an ecosystem. They observe examples and evaluate how a change in prey population affects the corresponding predator population.

Instruction Module

Factors Affecting Populations: In this Instruction Module, students learn to describe the effects of a forest fire on the different populations of organisms living in it. They also learn to explain how the introduction of a new species in an ecosystem can affect the entire food web.

Instruction Module

Human Impacts on Ecosystems: In this Instruction Module, students understand how humans have drastically altered ecosystems by activities such as hunting, agriculture, and the construction of roadways, using the example of a Blackland Prairie ecosystem. They also learn about the different steps that humans can take to minimize damage to an ecosystem and to restore an ecosystem.

Glossary

Protecting Earths Resources and Environment

This Glossary is a list of the scientific terms used in the Instruction Module, along with their definitions. The combined use of text, audio, and visual descriptions help students understand and retain the words and their meanings.

Interactivity

Pick the Change: In this interactivity students study visuals representing different environmental changes and identify the factors responsible for causing those changes.

Journal

- Journal - Conserving Resources
- Journal 2 - Energy Resources
- Journal - Environmental Changes
- Journal 1 - Changes in Ecosystems
- Journal 2 - Changes in Ecosystems
- Journal 3 - Changes in Ecosystems



Activities

Alternative Energy Sources at Home

Quiz

Protecting Earths Resources and Environment