Summit K12 Pacing Materials

Fifth Grade Science

SUMMIT K12

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Introduction

The Summit K12 pacing materials are intended to assist educators in planning and organizing science curriculum according to the Texas Essential Knowledge and Skills for 5th grade. This guide provides a comprehensive timeline and framework based on state standards and serves as an optional resource that teachers and administrators may use in addition to or in support of any district-provided pacing guidelines.

All pacing materials are based on 60-minute class sessions. Please note that actual times will vary depending on scheduling considerations, the number of students, the amount of setup done ahead of time, the depth of class discussions, and your own needs and preferences.

Year at a Glance

Reporting Category	# of TEKS	Estimated Time Allotment
Matter and Energy	4	30 days
Force, Motion, and Energy	5	40 days
Earth and Space	5	40 days
Organisms and Environments	5	40 days
		150 days*

**Only 150 days have been planned out of the 180 school days, though this course includes more than enough material to cover the full 180 days of instruction. This was intended to account for beginning of year logistics, STAAR review, district and state testing, field trips, or any other interruptions to the daily cycle of instruction. Pacing should be adjusted according to student assessment data and district instructional priorities.*

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Scope and Sequence

Summit K12 has developed an optional year-long scope and sequence for schools and districts who wish to follow a set lesson progression that ensures all TEKS are covered within one school year. Within this framework, all grade-level TEKS have been organized into units of study with suggested time allotments for each TEKS. Each lesson guide includes key concepts, investigations, and activities to facilitate quality instruction for all learners.

Scientific and Engineering Practices and Recurring Themes and Concepts standards are integrated into lessons throughout the course and should be taught within the context of science content standards.

Teachers and administrators should adjust the instructional timeline according to student data and classroom needs. This scope and sequence was designed to be flexible, with extra time built in for concept and spiral review, in-depth discussions and investigations, and extension activities to support learners of all abilities.

Optional Science STAAR Review

For 5th grade, a STAAR review unit is included in the scope and sequence for teachers and administrators who determine students would benefit from this instruction. Summit K12 includes a Science STAAR Review component for teachers and students to use during the Spring semester. This Science STAAR Review includes a full-length STAAR Practice Test, along with new assessment questions, study guides, and teacher lesson guides for each TEKS.

Teachers may assign students to complete the Personalized Learning Plan (PLP) that is automatically generated from each student's STAAR Practice Test data, or target necessary TEKS during a whole-class review using STAAR Review Lesson Guides, Study Guides, TEKS videos, and assessments.

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5th Grade Science Units

Unit 1:

- 5.6A: Compare and Contrast Physical Properties
- 5.6B: Mixtures Maintain Physical Properties
- 5.6C: Solutions
- 5.6D: Particles Make Matter

Unit 2:

- 5.7A: Nature of Forces
- 5.7B: Effects of Forces

Unit 3:

- 5.8A: Transformation of Energy
- 5.8B: Electric Circuits
- 5.8C: Light

Unit 4:

- 5.9A: Sun, Earth, Moon System

Unit 5:

- 5.10A: Water Cycle and Weather
- 5.10B: Sedimentary Rocks and Fossil Fuels
- 5.10C: Formation of Landforms

Unit 6:

- 5.11A: Natural Resources

Unit 7:

- 5.12A: Organism Survival
- 5.12B: Changes in Ecosystems
- 5.12C: Ecosystems and Human Activity

Unit 8:

- 5.13A: Structure and Function of Organisms
- 5.13B: Instinctual and Learned Behavioral Traits

Unit 9: STAAR Review

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Scope and Sequence

RC	Unit	TEKS	Suggested Instructional Time	Unit Total
RC1: Matter and Energy	1	**5.6A:** Compare and Contrast Physical Properties of Matter	8 days	30 days
		5.6B: Mixtures Maintain Physical Properties	8 days	
		5.6C: Solutions	8 days	
		5.6D: Particles Make Matter	6 days	
RC2: Force, Motion, and Energy	2	**5.7A:** Nature of Forces	8 days	16 days
		5.7B: Effects of Forces	8 days	
	3	**5.8A:** Transformation of Energy	8 days	24 days
		5.8B: Electric Circuits	8 days	
		5.8C: Light	8 days	
RC3: Earth and Space	4	**5.9A:** Sun, Earth, Moon System	8 days	8 days
	5	**5.10A:** Water Cycle and Weather	8 days	24 days
		5.10B: Sedimentary Rock and Fossil Fuels	8 days	
		5.10C: Formation of Landforms	8 days	
	6	**5.11A:** Natural Resources	8 days	8 days
RC4: Organisms and Environments	7	**5.12A:** Organism Survival	8 days	24 days
		5.12B: Changes in Ecosystems	8 days	
		5.12C: Ecosystems and Human Activity	8 days	
	8	**5.13A:** Structure and Function of Organisms	8 days	16 days
		5.13B: Instinctual and Learned Behavioral Traits	8 days	

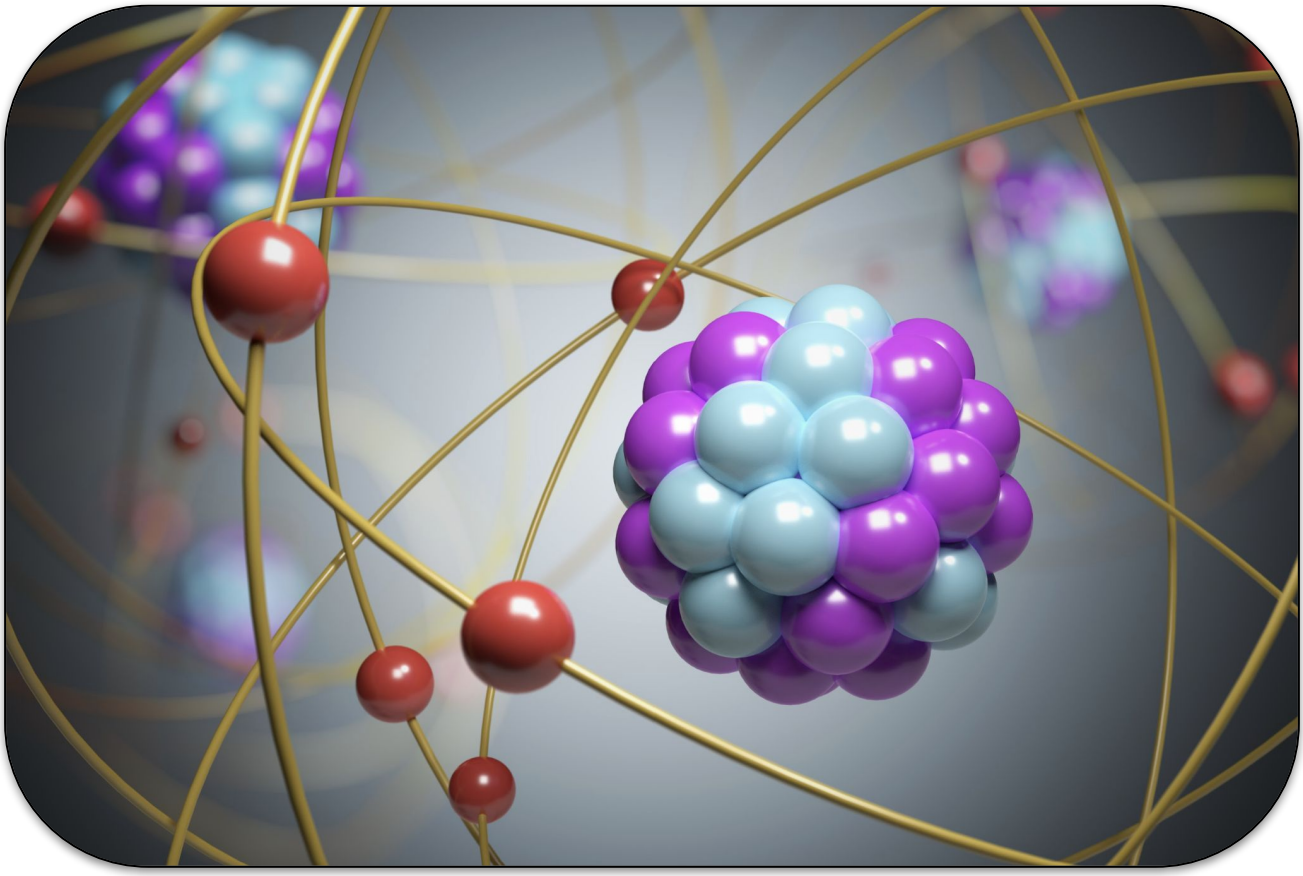
Pacing Guide

In addition to the Scope and Sequence, Summit K12 has also developed a Pacing Guide that can be adapted for teaching the Texas Essential Knowledge and Skills (TEKS) in any preferred order or according to a district provided scope and sequence. The Pacing Guide is arranged by reporting category and includes suggested instructional time for each TEKS, but the actual order of instruction is flexible and should be adjusted according to student needs and district priorities.

Summit K12 suggests introducing the fundamental concepts and principles of science prior to beginning instruction. To assist with this, the Scientific and Engineering Practices (SEPS) section of the LMS provides valuable resources that can be utilized at the teacher's discretion. Within the "Introduction to Science" unit, there are lessons on topics such as the definition of science, scientific conversations, and science notebooking. In addition, SEPS presentations are available to aid in teaching and practicing these skills.

Individual TEKS Pacing Guides

On pages 8-30, you will find more in depth pacing guides for each individual TEKS. Please note that the time allotment lists the estimated time it may take to complete each activity in the Lesson Guide. Please use your professional judgment to determine which activities are best suited for your students, while keeping in mind the recommended pacing located on page 6.



Reporting Category 1:
Matter and Energy

NOTE: The time allotment for each TEKS lists the estimated time it may take to complete each activity in the Lesson Guide. Please use your professional judgment to determine which activities are best suited for your students, while keeping in mind the recommended pacing located on pg. 6.

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5.6A: Compare and Contrast Physical Properties of Matter

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Air Has Mass	30 minutes
	Establish Relevance: Why Do Some Balloons Have Strings?	15 minutes
Investigate and Learn **Suggested Activities*	* Investigation: Comparing Volume	60 minutes
	* Investigation: Relative Density	45 minutes
	* Investigation: Solubility	60 minutes
	* Investigation: Attraction and Conduction	45 minutes
	* Investigation: Thermal Energy Transfer	60 minutes
	TEKS Video: Compare and Contrast Physical Properties of Matter	15 minutes
Apply and Extend	Investigation: Insulating Properties	60 minutes
	Engineering Challenge: Hot Cocoa	60 minutes
	Literacy Connection: The Crow and the Pitcher	30 minutes
	Study Guide: Compare and Contrast Physical Properties of Matter	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Air Has Mass	30 minutes
	* Connecting to the Anchoring Phenomenon	30 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Identify an Unknown Substance	60 minutes

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5.6B: Mixtures Maintain Physical Properties

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Building a Salad	30 minutes
	Establish Relevance: What Happens When Substances Come Together?	15 minutes
Investigate and Learn **Suggested Activities*	* Stations: Maintained or Changed?	120 minutes
	* Investigation: Zookeeper Cleanup	45 minutes
	TEKS Video: Mixtures Maintain Physical Properties	15 minutes
Apply and Extend	Graphic Organizer: Frayer Model	30 minutes
	Problem Solvers: Environmental Engineers	45 minutes
	Research: Electromagnets	60 minutes
	Study Guide: Mixtures Maintain Physical Properties	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Building a Salad	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Hot Chocolate	30 minutes

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5.6C: Solutions

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Laundry Pod	30 minutes
	Establish Relevance: Why Do My Clothes Smell Fresh?	15 minutes
Investigate and Learn **Suggested Activities*	* Activity: Dissolving Solids	60 minutes
	* Investigation: Solution Savvy	60 minutes
	* Argumentation: Conserving Matter	60 minutes
	TEKS Video: Solutions	15 minutes
Apply and Extend	Investigation: Sweet Solution	60 minutes
	Activity: Flavored Drink Comparison	30 minutes
	Activity: Harvesting Salt	30 minutes
	Literacy Connection: Engineering Metal Alloys	30 minutes
	Study Guide: Solutions	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Laundry Pod	30 minutes
	* Connecting to the Anchoring Phenomenon	20 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Making Icing	45 minutes

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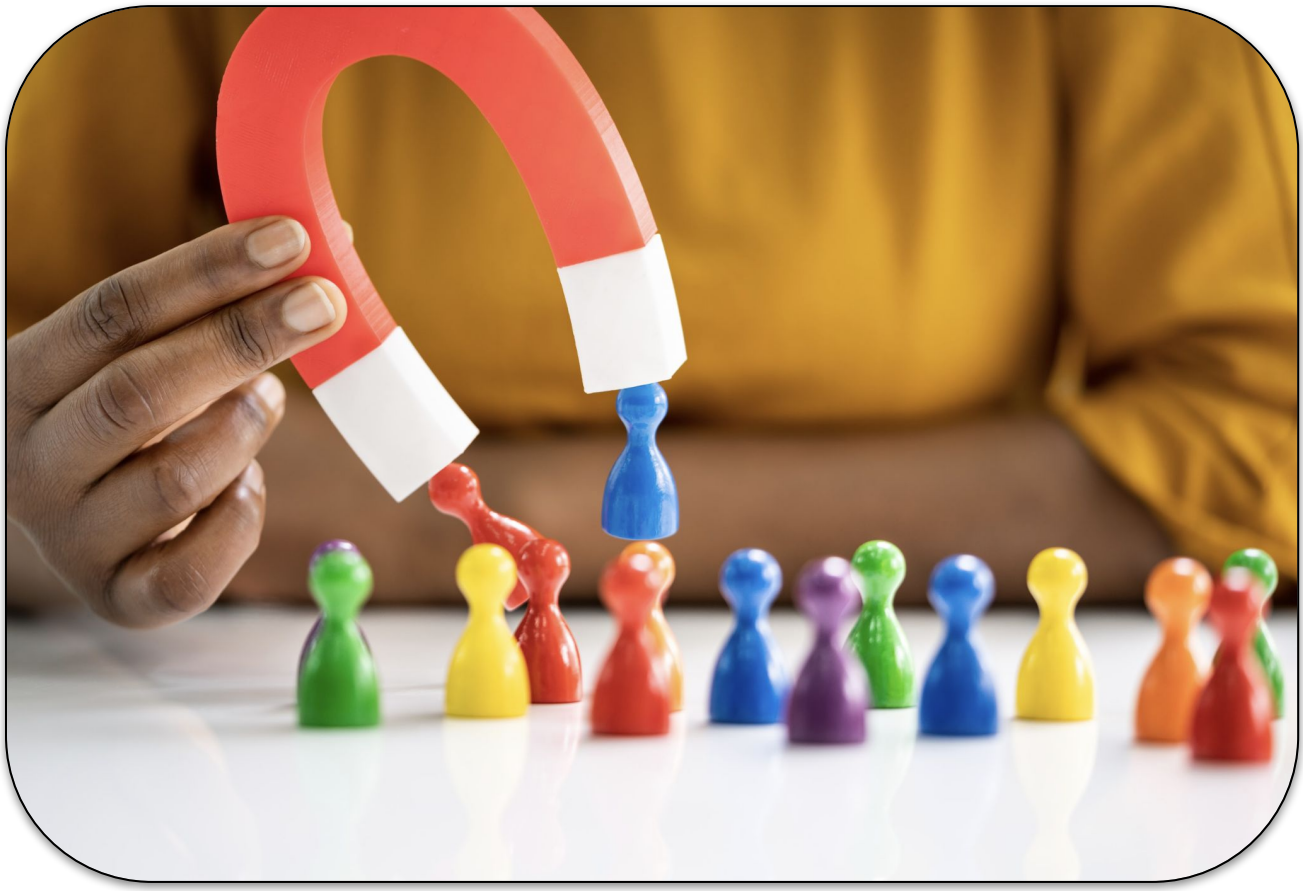
5.6D: Particles Make Matter

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Cloud Breath	30 minutes
	* Establish Relevance: Balloon Exploration	15 minutes
Investigate and Learn **Suggested Activities*	* Investigation: Exploring Small Particles Part 1 (Gas)	45 minutes
	* Investigation: Exploring Small Particles Part 2 (Liquid)	45 minutes
	* Investigation: Exploring Small Particles Part 3 (Solid)	45 minutes
	* Virtual Investigation: States of Matter	45 minutes
	TEKS Video: Particles Make Matter	15 minutes
Apply and Extend	Literacy Connection: Particles Make Matter	30 minutes
	Activity: Particles of Matter Comic Strip	20 minutes
	Research: Exploring Nanotechnology	2 days
	Engineering Challenge: Air Purification System	2 days
	Study Guide: Particles Make Matter	20 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Cloud Breath	45 minutes
	* Connecting to the Anchoring Phenomenon	30 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Balloon Animal CER	45 minutes



Reporting Category 2:
Force, Motion, and Energy

NOTE: The time allotment for each TEKS lists the estimated time it may take to complete each activity in the Lesson Guide. Please use your professional judgment to determine which activities are best suited for your students, while keeping in mind the recommended pacing located on pg. 6.

5.7A: Nature of Forces

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Juggling	30 minutes
	Establish Relevance: The Motion of Juggling	15 minutes
Investigate and Learn **Suggested Activities*	* Investigation: Equal and Unequal Forces	60 minutes
	* Investigation: Unequal Forces	60 minutes
	* Investigation: Energy Transfer	60 minutes
	* Argumentation: Patterns of Motion	90 minutes
	* Planning an Investigation: Forces, Motion, and Energy	60 minutes
	TEKS Video: Nature of Forces	15 minutes
Apply and Extend	Writing: Object's Perspective	30 minutes
	Article: Crash Test Dummies	30 minutes
	Engineering Challenge: Dog Toy	60 minutes
	Study Guide: Nature of Forces	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Juggling	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Compare and Contrast Patterns of Motion	30 minutes

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5.7B: Effects of Forces

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: May the Force Affect You - Part 1	45 minutes
Investigate and Learn **Suggested Activities*	* Figuring Out the Science: May the Force Affect You - Part 2	45 minutes
	* Figuring Out the Science: May the Force Affect You - Part 3	45 minutes
	* Figuring Out the Science: May the Force Affect You - Part 4	45 minutes
	* Figuring Out the Science: May the Force Affect You - Part 5	45 minutes
	TEKS Video: Effects of Forces	15 minutes
Apply and Extend	Figuring Out the Science: Final CER	45 minutes
	Inquiry: The Force of Magnets	30 minutes
	Article: Application of Force	30 minutes
	Engineering Challenge: Furniture Rearranging	45 minutes
	Study Guide: Effects of Forces	30 minutes
Evaluate **Suggested Activities*	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Experimental Investigation	45 minutes

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5.8A Transformation of Energy

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Solar Cell	30 minutes
	Establish Relevance: Transformations in My Life	30 minutes
Investigate and Learn **Suggested Activities*	* Argumentation: Light Bulb Progression	90 minutes
	* Stations: Energy Transformations	60 minutes
	* Virtual Investigation: Energy Forms and Changes	60 minutes
	TEKS Video: Transformation of Energy	15 minutes
Apply and Extend	Activity: Exploring Solar Cells	30 minutes
	Activity: Energy Transformations Diagram	30 minutes
	Research: Evolution of the Battery: Why Discoveries Are Important to Science, Part 1	30 minutes
	Research: Evolution of the Battery: Why Discoveries Are Important to Science, Part 2	30 minutes
	Engineering Challenge: Sound Art	30 minutes
	Study Guide: Transformation of Energy	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Solar Cell	15 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Silent Communication	45 minutes

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5.8B Electric Circuits

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Wireless Charging	30 minutes
	Establish Relevance: Is It Really Wireless?	15 minutes
Investigate and Learn **Suggested Activities*	* Investigation: Paper Circuits	45 minutes
	* Stations: Circuits	90 minutes
	* Activity: Electrical Engineers	45 minutes
	TEKS Video: Electric Circuits	15 minutes
Apply and Extend	Planning an Investigation: Colorful Circuits	150 minutes
	Investigation: Luck of the Draw	45 minutes
	Study Guide: Electric Circuits	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Wireless Charging	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Circuit Construction	80 minutes

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5.8C Light

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Pool Ladder	30 minutes
	Establish Relevance: Patterns in Phenomena	15 minutes
Investigate and Learn **Suggested Activities*	* Investigation: Light Travels	60 minutes
	* Investigation: Broken Straw	60 minutes
	* Activity: Reflection	60 minutes
	* Engineering Design Process: Light Maze	120 minutes
	TEKS Video: Light	15 minutes
Apply and Extend	Literacy Connection: Light Can Reflect, Refract, or Be Absorbed	30 minutes
	Activity: Reflection and Refraction Comparison	30 minutes
	Writing: How Far Does Light Travel?	30 minutes
	Planning an Investigation: What Do I Wonder About Light?	90 minutes
	Study Guide: Light	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Pool Ladder	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: How Does Light Behave?	30 minutes

Reporting Category 3:
Earth and Space

NOTE: The time allotment for each TEKS lists the estimated time it may take to complete each activity in the Lesson Guide. Please use your professional judgment to determine which activities are best suited for your students, while keeping in mind the recommended pacing located on pg. 6.

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5.9A Sun, Earth, Moon System

* additional time required

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Day Turns to Night	15 minutes
	* Establish Relevance: Properties of Light	15 minutes
Investigate and Learn **Suggested Activities*	* Field Investigation: Sundial	60 minutes*
	* Investigation: Modeling Earth's Rotation	45 minutes
	* Stations: Sun, Earth, Moon System	90 minutes
	TEKS Video: Sun, Earth, Moon System	15 minutes
Apply and Extend	Field Investigation: Observing the Sun	30 minutes*
	Activity: A Model of Day and Night	45 minutes
	Writing: Time of Day	30 minutes
	Study Guide: Sun, Earth, Moon System	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Day Turns to Night	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Predicting Shadows	30 minutes

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5.10A Water Cycle and Weather

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Hurricane Radar	15 minutes
	* Establish Relevance: Scale, Proportion, and Quantity	15 minutes
Investigate and Learn **Suggested Activities*	* Field Investigation: Modeling the Sun and Ocean System	60 minutes
	* Activity: Weather Data Task Cards	60 minutes
	* Argumentation: A Tale of Two Storms	90 minutes
	TEKS Video: Water Cycle and Weather	15 minutes
Apply and Extend	* Engineering Design Process: Rainwater Collection System	225 minutes
	Article: Lake Effect Snow	30 minutes
	Writing: Weather Diary	30 minutes
	Activity: Weather and the Water Cycle	30 minutes
	Study Guide: Water Cycle and Weather	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Hurricane Radar	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Storm Cloud Rising	30 minutes

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5.10B Sedimentary Rocks and Fossil Fuels

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Quarry	15 minutes
	* Establish Relevance: Science and Society	15 minutes
Investigate and Learn **Suggested Activities*	* Argumentation: Completing a Cycle	45 minutes
	* Activity: Comparing Sedimentary Rocks	45 minutes
	* Investigation: Formation of Fossil Fuel Research	60 minutes
	* Investigation: Fossil Fuel Model	60 minutes
	TEKS Video: Sedimentary Rocks and Fossil Fuels	15 minutes
Apply and Extend	Writing: The Barnett Shale	30 minutes
	Activity: Modeling the Formation of Fossil Fuels	30 minutes
	Writing: CER - Sandstone vs. Shale	45 minutes
	Study Guide: Sedimentary Rocks and Fossil Fuels	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Quarry	15 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Forming Oil	30 minutes

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5.10C Formation of Landforms

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Antelope Canyon	30 minutes
	* Establish Relevance: Landforms	30 minutes
Investigate and Learn **Suggested Activities*	* Investigation: Water Creates Landforms	60 minutes
	* Activity: Deltas Over Time	60 minutes
	* Activity: Forming Sand Dunes	60 minutes
	* Activity: Glaciers Change the Land	60 minutes
	TEKS Video: Formation of Landforms	15 minutes
Apply and Extend	Activity: Comparing Valleys	30 minutes
	Activity: Landforms Card Sort	30 minutes
	Writing: Sediments are Cycled	30 minutes
	Article: The Nueces Delta Preserve	30 minutes
	Study Guide: Formation of Landforms	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Antelope Canyon	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: How It's Made	30 minutes

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5.11A Natural Resources

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Impactful Choices	15 minutes
	Establish relevance: Impactful Choices	15 minutes
Investigate and Learn **Suggested Activities*	* Activity: Environmental Impacts	45 minutes
	* Field Investigation: School Processes	45 minutes
	* Engineering Design Process: Engineering a Better World	225 minutes
	TEKS Video: Natural Resources	15 minutes
Apply and Extend	Argumentation: Recycling Woes	45 minutes
	Article: Landscaping with Native Plants	30 minutes
	Connection to STEM Career: Conservation Biologist	30 minutes
	Activity: Proper Disposal Card Sort	30 minutes
	Study Guide: Natural Resources	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Landfill	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Cause and Effect Table	45 minutes

Reporting Category 4:
Organisms and Environments

NOTE: The time allotment for each TEKS lists the estimated time it may take to complete each activity in the Lesson Guide. Please use your professional judgment to determine which activities are best suited for your students, while keeping in mind the recommended pacing located on pg. 6.

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5.12A Organism Survival

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Echolocation	30 minutes
	* Establish Relevance: Structure and Function	15 minutes
Investigate and Learn **Suggested Activities*	* Field Investigation: Ecosystem Factors	60 minutes
	* Argumentation: Arctic Food Web	90 minutes
	* Planning an Investigation: Terrarium Interactions	120 minutes
	TEKS Video: Organism Survival	15 minutes
Apply and Extend	Activity: A Pond and Drought	30 minutes
	Activity: Terrarium vs. Aquarium	30 minutes
	Writing: Healthy Ecosystem	30 minutes
	Activity: Land Bridge	30 minutes
	Study Guide: Organism Survival	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Echolocation	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: I'm a Survivor	20 minutes

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5.12B Changes in Ecosystems

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Locust Swarm	15 minutes
	* Establish Relevance: Entomology in Agriculture	15 minutes
Investigate and Learn **Suggested Activities*	* Activity: Food Web Flow	45 minutes
	* Argumentation: Coping with Change	90 minutes
	* Stations: Predicting Changes	90 minutes
	TEKS Video: Changes in Ecosystems	15 minutes
Apply and Extend	Activity: Lava Turns to Land	30 minutes
	Activity: Recovery Card Sort	30 minutes
	Activity: Don't Be So Brood	30 minutes
	Study Guide: Changes in Ecosystem	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Locust Swarm	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: How Cold Is Too Cold?	30 minutes

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5.12C Ecosystems and Human Activity

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Agricultural Drones	15 minutes
	* Establish Relevance: Technology in Agriculture	15 minutes
Investigate and Learn **Suggested Activities*	* Activity: Beneficial or Harmful	45 minutes
	* Engineering Design Process: Improving Practices	225 minutes
	TEKS Video: Ecosystems and Human Activity	15 minutes
Apply and Extend	Activity: Human Cause and Effect	30 minutes
	Writing: Amphibians Are Disappearing	30 minutes
	Activity: When the Cows Come Home	45 minutes
	Study Guide: Ecosystems and Human Activity	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Agricultural Drones	30 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Civic Commitment	20 minutes

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5.13A Structure and Function of Organisms

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Mimicry	15 minutes
	* Establish Relevance: Structures for Survival	15 minutes
Investigate and Learn **Suggested Activities*	* Investigation: Air Plants	45 minutes
	* Investigation: Patterns in Structures	45 minutes
	* Investigation: Specialized Structures	45 minutes
	* Research: Welcome Home	90 minutes
	TEKS Video: Structures and Functions of Organisms	15 minutes
Apply and Extend	Activity: Comparing Plant Structures	30 minutes
	Activity: Comparing Animal Structures	30 minutes
	Argumentation: Bird Beaks	90 minutes
	Literacy Connection: Discoveries from Plants	30 minutes
	Study Guide: Structure and Function of Organisms	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Mimicry	15 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Won't You Be My Neighbor?	30 minutes

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5.13B Instinctual and Learned Behavioral Traits

Lesson Section	Activity	Time Allotment
Engage and Establish Relevance **Suggested Activities*	* Exploring the Investigative Phenomenon: Guide Dogs	15 minutes
	* Establish Relevance: Service Animals	15 minutes
Investigate and Learn **Suggested Activities*	* Activity: Instinctual Behavioral Traits	45 minutes
	* Activity: Learned Behavioral Traits	45 minutes
	* Research: Comparing Behaviors	90 minutes
	TEKS Video: Instinctual and Learned Behavioral Traits	15 minutes
Apply and Extend	Activity: Behavioral Traits Card Sort	30 minutes
	Literacy Connection: Gorilla Sign	30 minutes
	Writing: Wildlife Commentary	30 minutes
	Study Guide: Instinctual and Learned Behavioral Traits	30 minutes
Evaluate **Suggested Activities*	* Explaining the Investigative Phenomenon: Guide Dogs	15 minutes
	* Connecting to the Anchoring Phenomenon	15 minutes
	Concept Mastery Assessments	20 min each
	Vocabulary Mastery	15 minutes
	Performance Task: Classifying Traits CER	30 minutes