



SUMMIT K12

2024

3RD - 5TH DYNAMIC SCIENCE

Empowering ALL Texas Learners to Reach their Summit

**Built By Texas Educators
For Texas Educators**

Texas based publisher with curricula created by over 75 current and former Texas educators

**Built for Texas
TEKS-SEPs-RTCs-ELPS**

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SBOE Approved!

K-8 English, K-6 Spanish
Biology, Chemistry, Physics, IPC
100% TEKS/100% ELPS

Concise and Complete Teacher Supports

Instructional Resources
Video Resources
Supplemental Resources
Course Information

Teacher Resources
Dynamic Science - 5th

- Cat 1: Matter and Energy
 - 5.6A: Compare and Contrast Physical Properties
 - 4.6A: Observable Physical Properties
 - 5.6B: Mixtures Maintain Physical Properties
 - 4.6B: Mixtures
 - 4.6C: Mixtures Conserve Matter
 - 3.6D: Combining Materials
 - 5.6C: Solutions
 - 5.6D: Particles Make Matter
- Pacing Guide
- Lesson Guide**
- Assessments
- TEKS Lesson Video
- Vocabulary Mastery
- Study Guide
- Study Guide Key
- Interactive E-Poster

- Cat 2: Force, Motion and Energy
- Cat 3: Earth and Space
- Cat 4: Organisms and Environments

Lesson Guide

TEKS 5.6D

5.6D Learning Activities

SummitK12 Suggested Activities

ENGAGE		
	Exploring the Investigative Phenomenon: Cloud Breath	30 minutes
	Establish Relevance: Balloon Exploration	15 minutes
INVESTIGATE AND LEARN		
	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
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
PHENOMENON		
	Explaining The Investigative Phenomenon	45 minutes
	Connecting to the Anchoring Phenomenon	30 minutes
PERFORMANCE TASK		
	Performance Task: Balloon Animal CER	45 minutes

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Particles Make Matter

ENGAGE

Activate students' prior knowledge, experiences, wonderings, and initial explanations about an investigative phenomenon and the guiding question for this lesson.

EXPLORING THE INVESTIGATIVE PHENOMENON: CLOUD BREATH

INSTRUCTIONAL RESOURCES

Pacing Guides
Lesson Guides
Assessments
TEKS Lessons/Videos
Vocabulary Mastery
Study Guides/Keys
Interactive E-Posters

VIDEO RESOURCES

Phenomena
TEKS Lesson Videos
Texas Virtual Field Investigations
Kate the Chemist Labs

SUPPLEMENTAL RESOURCES

SEPs Background/Vocabulary
Science Literacy
Science Around You
Graphic Organizers

COURSE INFORMATION

Pacing Guide
5E Model
Phenomena
Science Lab Explorations
TEKS-SEPs-RTCs Crosswalk

TEACHER SUPPORTS INCLUDE:

- Lesson and Lab Guides
- Scope and Sequence
- Pacing Guides
- Reports and Dashboards
- Anchoring Phenomena Table
- 3D Teaching and Learning
- Image Bank
- Science E-Books
- Formative Assessments
- Year-Round Responsive Support
- Asynchronous Online Teacher Training
- Zoom and Onsite Professional Development

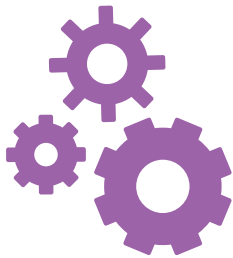
ASSESSMENT BANK

Date Created	Custom Assessment Name	Avg. Score	PLD	Assign
9/28/24	First six weeks Assessment	65%	Approaches	
11/4/24	Force and Motion Benchmark	87%	Meets	
12/4/24	Extra Credit	92%	Masters	
1/12/25	Dual coded Category 4 items only	81%	Meets	
2/3/25	Practice with new item types only	90%	Masters	
3/2/25	Dr. Kate's Matter and Energy Hi Rigor Quiz spring 2025	Start		

Robust assessment bank including new item types.

Teaching Science through Phenomena using the 3D Model

Science TEKS Content Standards



Scientific and Engineering Practices

Recurring Themes and Concepts



TEKS-SEPs-RTCs Crosswalk (5th Grade Example)

Grade	Category	SEPs TEKS	5th Grade Dynamic Science TEKS Lessons, Labs, Investigations, and Explore Activities																	Totals by SEPs				
			5.6A	5.6B	5.6C	5.6D	5.7A	5.7B	5.8A	5.8B	5.8C	5.9A	5.10A	5.10B1	5.10B2	5.10C	5.11A	5.12A	5.12B		5.12C	5.13A	5.13B	
5	Scientific and Engineering Practices	5.1A	Lab	Lab	Lab	X	Lab	Lab	Lab	Lab	Lab		Lab		Lab		Lab	Lab	Lab	Lab	Lab	Lab	Lab	17
5	Scientific and Engineering Practices	5.1B	X	Lab	X	X	Lab	Lab	Lab	Lab	X					Lab				Lab				11
5	Scientific and Engineering Practices	5.1C	X	X	X				X		Lab				X	X	X	X		Lab			X	11
5	Scientific and Engineering Practices	5.1D	Lab	Lab	X	X	X	Lab		Lab	Lab	X	X		X		SL	Lab				X	Lab	15
5	Scientific and Engineering Practices	5.1E	Lab	Lab	Lab		Lab	Lab	Lab	Lab	Lab		Lab		Lab		X	Lab			Lab	Lab		14
5	Scientific and Engineering Practices	5.1F	Lab	X	X	X	X	X	X	X	X		X	X	SL	X	X		X	X				16
5	Scientific and Engineering Practices	5.1G			X	Lab	X	X		X			Lab	X	Lab	X	Lab			Lab	Lab	Lab		13
5	Scientific and Engineering Practices	5.2A		SL			SL	SL		X	SL	X	Lab	X	X		X						SL	11
5	Scientific and Engineering Practices	5.2B		Lab	Lab		Lab	SL	Lab			SL	Lab				Lab	Lab	Lab	Lab	Lab	Lab		12
5	Scientific and Engineering Practices	5.2C		X	Lab		SL	X			SL					X	X		X	X		SL		10
5	Scientific and Engineering Practices	5.2D						X		Lab							X							3
5	Scientific and Engineering Practices	5.3A	X		X	X	Lab	X		X		X		X		X	Lab	Lab	X	X	X	X		14
5	Scientific and Engineering Practices	5.3B	X	X	X	X	Lab	X	X	X		X	X	X	Lab		Lab	X	X	X	X	Lab		18
5	Scientific and Engineering Practices	5.3C	X	X	Lab	X	Lab	X			Lab					X				Lab	Lab	Lab		10
5	Scientific and Engineering Practices	5.4A				X		X	X				X	X	X	X	X		X		SL	X		11
5	Scientific and Engineering Practices	5.4B	X			X			X	X		X		X	X									7
5	Recurring Themes and Concepts	5.5A		Lab	Lab		Lab			X	X		Lab	X		X	Lab			Lab		Lab	Lab	12
5	Recurring Themes and Concepts	5.5B		Lab	Lab	X	Lab			Lab		SL		Lab	X	Lab			Lab	Lab	Lab			13
5	Recurring Themes and Concepts	5.5C	X						SL			X			SL									4
5	Recurring Themes and Concepts	5.5D						X		X	SL						SL	Lab				SL		6
5	Recurring Themes and Concepts	5.5E					SL		X		SL		X				X	SL	X					7
5	Recurring Themes and Concepts	5.5F						X	X	X							SL	Lab	X	SL	Lab			8
5	Recurring Themes and Concepts	5.5G	X			X	X		SL								SL		Lab	Lab	SL			8
Totals by Content TEKS			12	13	14	12	16	15	14	13	15	7	13	9	13	8	20	9	14	13	17	4	251	

KEY

Lab	Lab Investigations
X	Inquiry or Explore Activity
SL	Science Literacy Process Skill or RTC

Kate the Chemist 3rd-5th Video Series



Summit K12 has teamed up with UT Austin Professor and best-selling children's author, Dr. Kate Biberdorf, to create Phenomena-based videos specifically for the 2024 Science TEKS.

- K-12 Phenomena-Based Videos
- Teacher Pre-Lab Prep Videos
- Student Pre-Lab Videos
- Full Length Virtual Science Lab Videos

3rd-5th Texas Virtual Field Investigations

ALL 3rd-5th students will have the opportunity to investigate phenomena throughout dozens of the most popular state parks and engineering marvels in Texas.

The 2024 TEKS Virtual Field Investigations series was created specifically for the Texas Science Adoption.

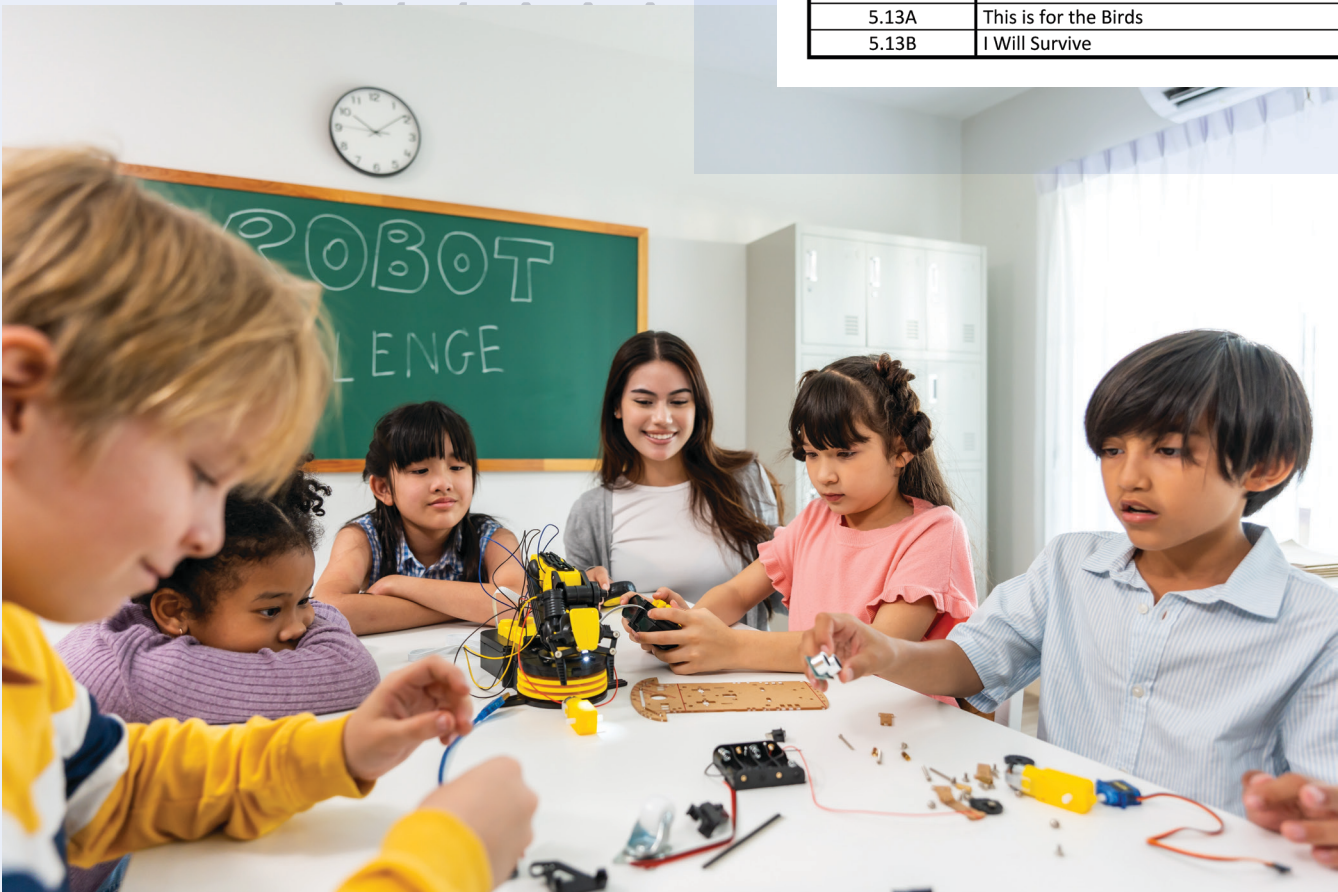


Hands on Investigations and Explorations

Investigations that support students figuring out concepts through phenomena.

Lab Explorations – 5th Grade

TEKS	Name of Lab
5.6A	Now You See It, Now You Don't
5.6B	In the Mix of Things
5.6C	The Solution to the Problem
5.6D	It's a Small, Small World
5.7A	A Show of Force
5.7B	When the Rubber Meets the Road
5.8A	One Thing Leads to Another
5.8B	Go With the Flow
5.8C	I See the Light
5.9A	As the World Turns
5.10A	Water, Water, Everywhere
5.10B1	Rock of Ages
5.10B2	Bone Deep in Fossils
5.10C	This Land is My Land
5.11A	Compost in Bottle
5.12A	You Can Count On Me
5.12B	Follow the Yellow Brick Road
5.12C	When the Cows Come Home
5.13A	This is for the Birds
5.13B	I Will Survive



E-Poster and High Quality TEKS Lesson Videos

Analyzing Animal Structures

What structures help this animal survive in its environment?
What is the function or purpose of each structure?



The Barred owl possesses long and rounded wings with feathers that allow them to fly without making any noise.

Their toes have sharp, curved talons for quickly picking up prey when in flight.

They also use their color to camouflage against predators.

IN
ENGLISH
AND
SPANISH

TEKS 5.13A

TEXAS-5th Grade 3:16 1x auto

Structures and Functions for Living and Survival

Animal _____ and _____



- ◆ fur - _____ in snow; stay warm
- ◆ front facing eyes - to see prey



- ◆ _____ - to graze all day for food
- ◆ ears - to listen for predators; flexible, round ears can turn in almost all directions



- ◆ _____ - to move quickly through the water
- ◆ waterproof feathers - to stay dry in water

Plant _____ and _____



- ◆ spines - to keep predators away
- ◆ _____ - to retain water



- ◆ flowers - to attract pollinators
- ◆ _____ - to protect plants



- ◆ brightly colored _____ attracts pollinators
- ◆ small leaves to reduce water loss

adaptation
camouflage

environment
function

hooves
species

structure
survival

webbed feet



TEXAS-5th Grade

Science Literacy

Over 200 Science-Literacy E-books in K-8 written specifically for the 2024 State Science Adoption

Differentiated Science Literacy

Back

Two types of assessments for every e-book

Science Literacy Teacher's Guide

Filter by Category: All

CAT	Title	Science TEKS	Comprehension Strategy	Read eBook	Science Quiz	RLA Quiz	Lock/Unlock
1	Matter in a Frozen Land	5.6A	Make Inferences	⊙ Start	⊙ Start	⊙ Start	
1	Matter's Many Properties	4.6A	Make Inferences	⊙ Start	⊙ Start	⊙ Start	
1	Describing Matter	3.6A	Make Inferences	⊙ Start	⊙ Start	⊙ Start	
1	Matter, Matter, Everywhere	3.6A	Make Inferences	⊙ Start	⊙ Start	⊙ Start	
1	Measuring Matter	3.6A	Make Inferences	⊙ Start	⊙ Start	⊙ Start	
1	What is Matter?	3.6A	Make Inferences	⊙ Start	⊙ Start	⊙ Start	
2	Explaining Motion	5.7A	Create Mental Images	⊙ Start	⊙ Start	⊙ Start	
2	Force and Motion	5.7A	Create Mental Images	⊙ Start	⊙ Start	⊙ Start	


IN ENGLISH AND SPANISH



- Includes Science/RLA study guides, Lesson Guides, and assessments
- Extend science instructional minutes during the RLA block
- Cross-curricular passages in 3rd-5th grades covering the RLA and Science TEKS and STAAR® blueprints

Vocabulary Mastery

TEKS Content Vocabulary | Science Tools Vocabulary |
SEPs & RTCs Vocabulary | Science Cognates



species
especies
noun

AAn Select domain abiotic communities **species**

of birds is the sulphur-crested cockatoo sitting on the branch in Australia.

species
especies
noun

A species is a group of organisms with same main characteristics that can produce fertile offspring.

IN
ENGLISH
AND
SPANISH



phenomena
fenómenos
noun

Tornados and hurricanes are different types of Select phenomena physical properties buildings observations

phenomena
fenómenos
noun

A phenomena is an observable event that can happen in nature.

Image Bank

- 500-1,000 images per grade level/subject
- Minimum 15-25 images per content TEKS
- Images for all SEPs Vocabulary Words
- Images for all Science Tools Vocabulary

Summit K12 Image Bank



Comprehensive Professional Development

Professional Development for ALL Stakeholders

Science Coordinators

Science Teachers

Principals & Superintendents

Parents/Guardians

Instructional Coaches

SCIENCE COORDINATOR IMPLEMENTATION PD

INITIAL TEACHER TRAINING

TEKS CHANGES BY GRADE LEVEL

TEACHING WITH PHENOMENA

DELIVERY MODELS

- Asynchronous, Zoom, and On-site

DIFFERENTIATION/ACCELERATION

SCIENCE-LITERACY/VOCABULARY

3D TEACHING & LEARNING

"Every student in Texas will be deeply involved in the doing of science and sensemaking."

"We need to prepare teachers to teach science in a different way, but we also need to help principals understand that [the new 3D] science classrooms are going to look and sound different than [current classrooms]."



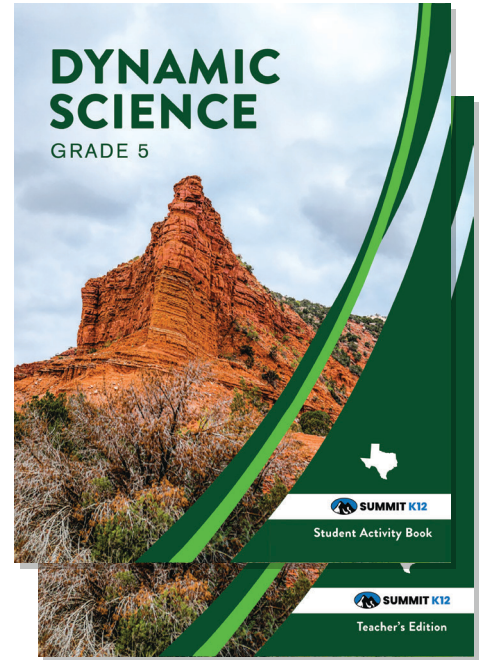
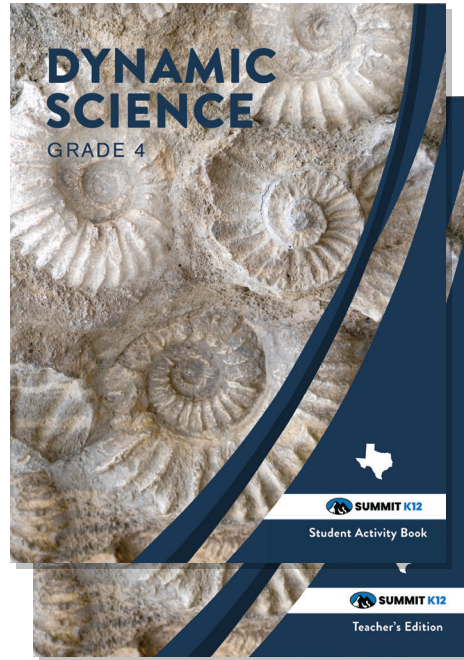
DR. LINDA COOK

Dr Linda Cook's experiences include Extensive Professional Development Work and presentations related to the Framework for K-12 Science Education; Ready, Set, Science.

- Summit K12 Professional Development Strategy and Implementation Planning
- NSELA Professional Development Committee 2023-2026
- NSELA President-Elect, President, and Past President 2020-2023
- President of the Metroplex Area Science Supervisors (2009-2010)
- Director of K-12 Science, Coppell ISD, 15 years
- PhD Curriculum and Instruction focused on Global Science Education

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Convenient, Pre-packaged Classroom Lab Kits



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2024

DYNAMIC SCIENCE

State Adoption Pricing

K-8th Grade English/Spanish, Biology, Chemistry, Physics, IPC


\$6.95 PER STUDENT/YEAR*

*8-year Online Package with Print Teacher's Edition

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DYNAMIC SCIENCE ONLINE PACKAGES

COMPREHENSIVE 100% TEKS/ELPS STATE APPROVED

PACKAGE	TOTAL PRICE	PRICE PER YEAR
Online 1-Year	\$10.95	\$10.95
Online 2-Year	\$19.90	\$9.95
Online 4-Year	\$31.80	\$7.95
 Online 8-Year	\$55.60	\$6.95

DYNAMIC SCIENCE ONLINE + PRINT PACKAGES

COMPREHENSIVE 100% TEKS/ELPS STATE APPROVED + PRINT TE

PACKAGE	TOTAL PRICE	PRICE PER YEAR
Online 1-Year + Print TE	\$13.95	\$13.95
Online 2-Year + Print TE	\$23.90	\$11.95
Online 4-Year + Print TE	\$35.80	\$8.95
 Online 8-Year + Print TE	\$55.60	\$6.95

3D Student Consumable Print K-12 (from 1-8 Years, up to 25% off)

Science Lab Investigation Kits (starting at \$1,345 per classroom)