

Alabama   
**Inspire**  
Science



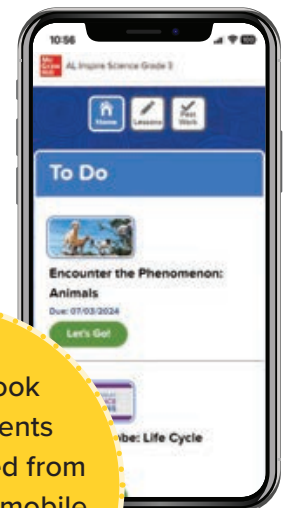




# Welcome to *Alabama Inspire Science*

## Engaging, Flexible, Cross-Curricular Learning

*Alabama Inspire Science* provides an in-depth, collaborative, project-based learning experience designed to engage students, empower them to ask questions, and learn to think critically. Designed with the Alabama Science Course of Study in mind, *Alabama Inspire Science* provides the structure for students to develop a solid background of foundational science knowledge while they learn to practice problem solving and critical thinking skills inherent in science.



Student eBook and assignments can be accessed from anywhere on a mobile device using the K–12 Portal App!



## Encourage Young Students to Explore Their World

Children are natural problem-solvers and innovators. Fueled by curiosity, they approach each day with a sense of wonder and a drive to learn. *Alabama Inspire Science* helps students retain and expand on this natural inclination by empowering them to explore and learn from our world's amazing natural phenomena in exciting, hands-on ways. A new generation of innovators is ready to grow up now and many are tomorrow's scientists. **Are you ready to help guide them to meet the challenges of the 21st Century?**



# Designed for the Rigor of the Alabama Science Course of Study

*Alabama Inspire Science* represents a program that ensures Alabama educators have the resources and tools to deliver high-quality instruction to help students meet the rigor and challenge of the Alabama Science Course of Study.

## Comprehensive Alabama Science Course of Study Planning

At the beginning of each module, Alabama Science Course of Study codes and descriptions help teachers quickly see performance expectations addressed in the module.

## Building to the Alabama ELA Content Standards

Each lesson includes Correlations to the Alabama ELA Standards and the **Open Court Reading** program to help teachers and students make connections to literacy activities.

Module: **Electricity and Magnetism**

## Three-Dimensional Learning

The following SEPs, DCIs, and CCCs build to the Alabama Content Standard

### SEP Science and Engineering Practices

- Asking Questions and Defining Problems

### DCI Disciplinary Core Ideas

- Motion and Stability: Forces and Interactions

### CCC Crosscutting Concepts

- Cause and Effect: Mechanism and Prediction
- Systems and System Models


46A Module: **Electricity and Magnetism**



A large graphic on the left side of the page features three interlocking ribbons in blue, orange, and green, forming a complex knot-like structure. The ribbons are 3D-rendered with shadows and highlights. To the right of this graphic, the text 'Alabama Content Standards' is displayed in a bold, black font. A small black silhouette of the state of Alabama is positioned to the left of the word 'Alabama'.


## Alabama Content Standards

**3** Conduct investigations to determine cause and effect relationships between objects not in contact with one another, including magnetic and electrostatic forces. *Examples: the force on hair from an electrically charged balloon, the attraction of the plastic wrap to your hand after you remove it from a package, force between two permanent magnets at a distance, force between two magnets and steel paper clips*

**4**  Apply scientific ideas about magnetic interactions to solve a problem using the engineering design process. *Examples: constructing maglev systems, constructing a latch to keep a door shut*

### **CROSS-CURRICULAR** Connections

In addition to in-depth coverage of the three dimensions, this module also covers connections to Math, English-Language Arts, Social Studies, Engineering, and Environmental topics.

 **GO ONLINE** Explore the videos in Module Planning Resources that support professional development of three-dimensional learning.

Module: **Electricity and Magnetism** 46B

## Three Dimensions at a Glance Building to Alabama Science Course of Study

Use this chart to locate where students will encounter each of the three dimensions that build to the Alabama Science Course of Study expectations within the module.

### Three Dimensions at a Glance

Throughout this module and in the culminating module project, students will integrate relevant Science and Engineering Practices and Crosscutting Concepts into their learning and understanding of the Disciplinary Core Ideas. Use this chart to locate where students will encounter each of the three dimensions that build to the Alabama Content Standards.

DIMENSIONS	LESSON 1	LESSON 2	STEM MODULE PROJECT
<b>SEP</b> Planning and Carrying Out Investigations	•	•	•
<b>DCI</b> Motion and Stability: Forces and Interactions	•	•	•
<b>CCC</b> Cause and Effect: Mechanism and Prediction		•	•
<b>CCC</b> Patterns	•	•	•

2C Module: Forces and Motion

### Lesson 1 Motion

#### Building to the Alabama Content Standards

In this lesson, students will explore content and develop skill leading to mastery of the following Alabama Content Standards:

**2** Observe and measure an object's motion to provide evidence that a pattern of motion can be used to predict future motion. *Examples: a child swinging on a swing, a ball rolling back and forth in a bowl, two children going up and down on a seesaw, a model vehicle rolling down ramps of varying heights, a swinging pendulum*

<b>SEP Science and Engineering Practices</b> <b>Planning and Carrying Out Investigations</b> <small>Designing and conducting investigations with controlled variables; providing evidence to support explanations or design solutions.</small>	<b>DCI Disciplinary Core Ideas</b> <b>Motion and Stability: Forces and Interactions</b>	<b>CCC Crosscutting Concepts</b> <b>Patterns</b> <small>Similarities and differences in patterns can be used to sort, classify, communicate and analyze simple rates of change for natural phenomena and designed products. Patterns of change can be used to make predictions. Patterns can be used as evidence to support an explanation.</small>
<b>Alabama ELA Connections</b> 14, 16	<b>Open Court Reading Connections</b> Grade 3, Unit 6: Lesson 3	

6A Module: Forces and Motion

## Focused Lesson Planning for Effective Standards-Based Instruction

Within the lesson opener, find the extension of Building to Performance Expectations to help focus student learning by standard and integrated Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts.

Connections to the Alabama ELA Standards and the *Open Court Reading* program help teachers and students make connections to literacy activities.



Lesson 1: Motion

Lesson at a Glance

Full Track is the recommended path for the complete lesson experience. FlexTrack A and FlexTrack B provide timesaving strategies and alternatives.

		Full Track 45 min/day (full year)	
		Day-to-Day	Pacing Resources
Assess Prior Knowledge	Page Keeley Science Probe: <i>How Does it Move?</i>		Page 5
Engage	Encounter the Phenomenon: Why does the ride move like that?	Day 1	Pages 6–7 Video: <i>Carnival</i>
Explore	Inquiry Activity: <i>Moving Marbles</i>	Day 2	Pages 8–9
Explain	Objects Move	Day 3	Pages 10–11
	Motion	Day 4	Pages 12–13
	Types of Motion Simulations	Day 5	Page 14
Elaborate	STEM Connection: <i>Statistician</i>		Page 15
	Inquiry Activity: <i>Movement of a Wind-Up Toy</i>	Day 6	Pages 16–17
Evaluate	Explain the Phenomenon: Why does the ride move like that?	Day 7	Pages 18–20
	Module Project Planning		Page 41
		<b>7 Days</b>	

6C Module: Forces and Motion

**Essential Question:** What are patterns of motion?

**Objective:** Students will observe and measure an object's motion to recognize that patterns can be used to predict future motion.

**Vocabulary:** direction, distance, motion, position, speed

		FlexTrack A 30 min/day (5 days per week)		FlexTrack B 30 min/day (3 days per week)	
		Pacing	Resources	Pacing	Resources
Day 1			Page 5 Employ the Volleyball, Not Ping Pong strategy.		Page 5 Employ the Volleyball, Not Ping Pong strategy.
			Page 7 Video: <i>Carnival</i>	Day 1	Page 7 Video: <i>Carnival</i>
Day 2			Pages 8–9 Set up ramps for students ahead of time.	Day 2	Pages 8–9 Set up ramps for students ahead of time.
Day 3			Pages 10–11 Omit question 2.		Pages 10–11 Omit question 2.
Day 4			Page 12	Day 3	Video: <i>Patterns in Motion</i>
Day 5			Page 13		
			Page 14		
Day 6					
Day 7			Pages 18–20 Complete Explain the Phenomenon as a whole class to save time.	Day 4	Pages 18–20 Complete Explain the Phenomenon as a whole class to save time.
		<b>7 Days</b>		<b>4 Days</b>	

Lesson 1 Motion 6D

## Flexibility for Busy Class Schedules

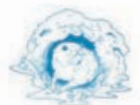
Alabama Inspire Science provides Grades K–5 teachers with the flexibility to decide what works for their classroom schedule and student learning needs. With a choice between the Full Track and two FlexTracks in the Teacher Edition or the online Essential Lesson Guide, teachers will find it easy to integrate science into their classroom literacy instruction so that students have continued emphasis on reading, writing, listening, and speaking.

Finding time for science becomes easier with the Essential Lesson Guide.

### Essential Lesson Planning Guide

#### What is the Essential Lesson Planning Guide?

The Essential Lesson Planning Guide is a lesson plan designed for teachers who are looking to make the most of limited science instructional time. This lesson plan uses only 60 minutes of science time every week but still ensures the entire *Alabama Inspire Science* Alabama Course of Study: Science-based curriculum can be taught within the allotted number of instructional days. In some cases, specifically for fourth and fifth grades, additional reading time may be needed so students are able to learn and apply the information necessary to meet the Alabama Course of Study: Science standards. Each lesson spans two weeks and is designed using the 5E Learning Cycle.



#### Instructional Overview

**STEP 1** Use the chart below to plan your lesson. Set aside time each week for science.

WEEK 1 INSTRUCTION		WEEK 2 INSTRUCTION	
MODULE OVERVIEW	10 min	EXPLAIN	35 min
ENGAGE	15 min	EVALUATE	15 min
EXPLORE	10–35 min	THREE-DIMENSIONAL THINKING	5 min
		MODULE WRAP-UP*	5 min

\* last lesson of each module

**STEP 2** Gather and bookmark these resources for easy access:

- Digital / Online access
- Teacher Edition and Student Edition
- Learning Transfer Strategy Guide
- Science Read Alouds (K/1)

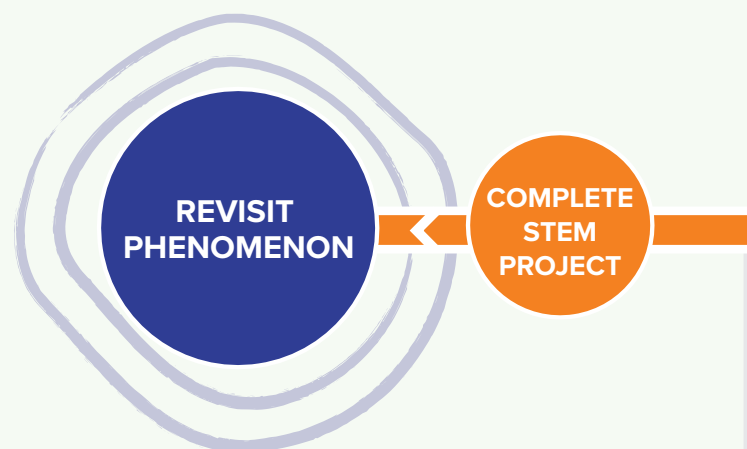
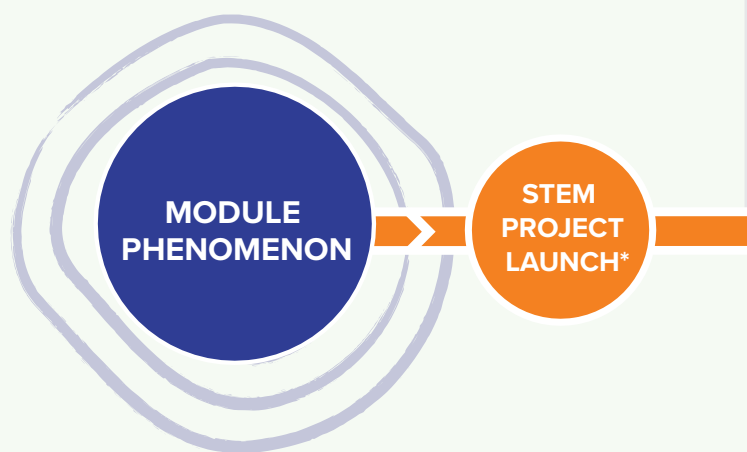
**STEP 3** Choose your inquiry path for EXPLORE and gather your materials.

# Learning Through Storylines

Children (and adults too!) live in a world full of the unknown—one governed by phenomena big and small that inspire us to pose hypotheses, make observations, ask questions, and seek explanations to increase understanding.

*Alabama Inspire Science* starts with Module Storylines designed to anchor and engage students as they investigate each lesson-level phenomenon. Within each lesson-level phenomenon, they will gather pieces of the puzzle to help solve and explain the module-level phenomenon.

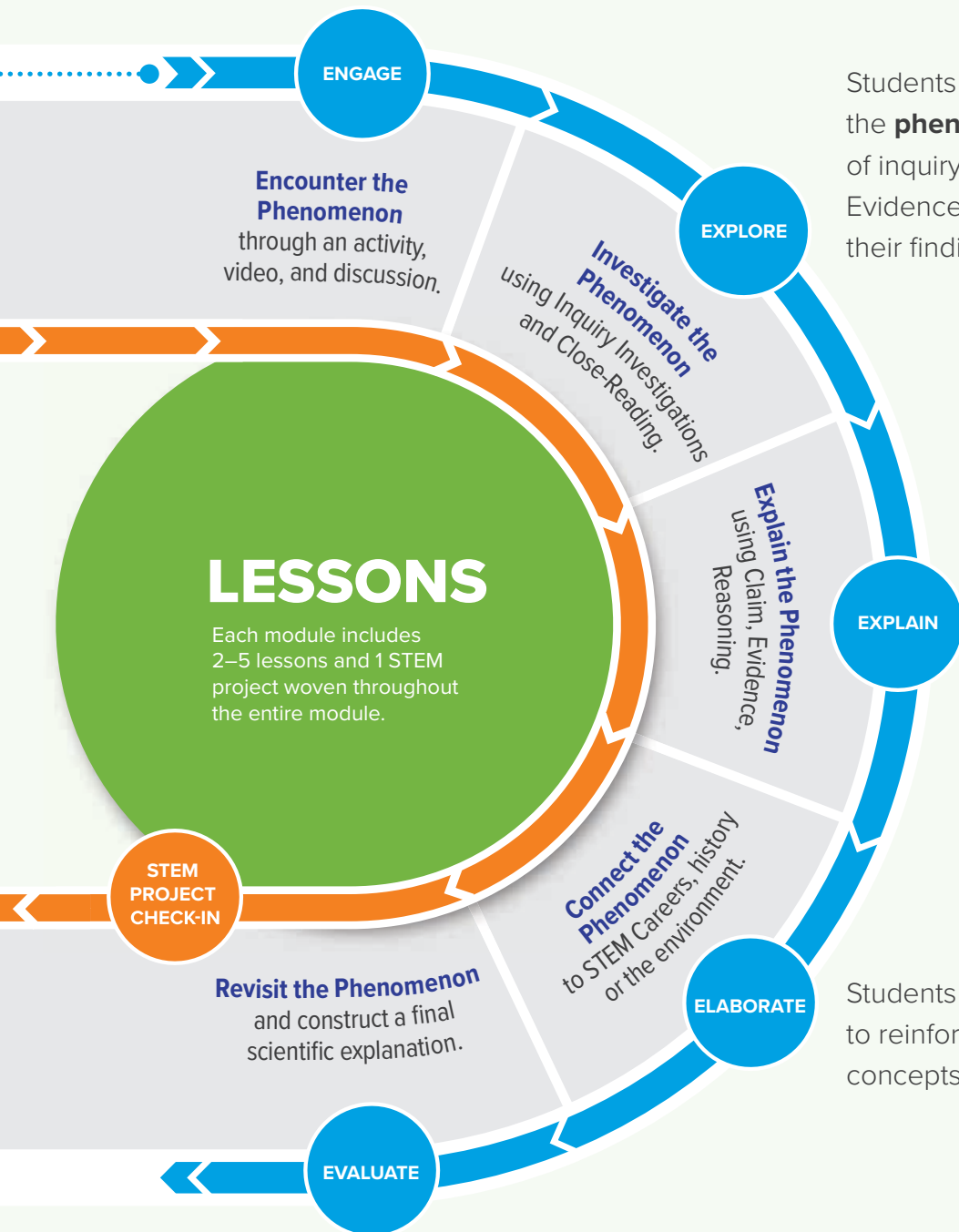
*Alabama Inspire Science* is built around the 5E+IA framework to guide students toward scientific understanding using a thorough and methodical process aligned with Alabama Science Course of Study.



\*In Grades K–1, the STEM module project is launched and completed at the end of the Module to reflect the simplified approach to science typically done in early elementary.



Each module and lesson in *Alabama Inspire Science* begins by introducing a natural **phenomenon**, which students are charged with investigating as they progress through the text.



Students begin to explore and investigate the **phenomenon** through different types of inquiry activities, using the CER (Claim, Evidence, Reasoning) framework to record their findings and results.

Students delve into an array of informational text, supportive resources, and interactive activities designed to help them synthesize and convey their understanding of **phenomena** while practicing close-reading skills.

Students apply knowledge to new situations to reinforce deep understanding of lesson concepts introduced by the **phenomenon**.

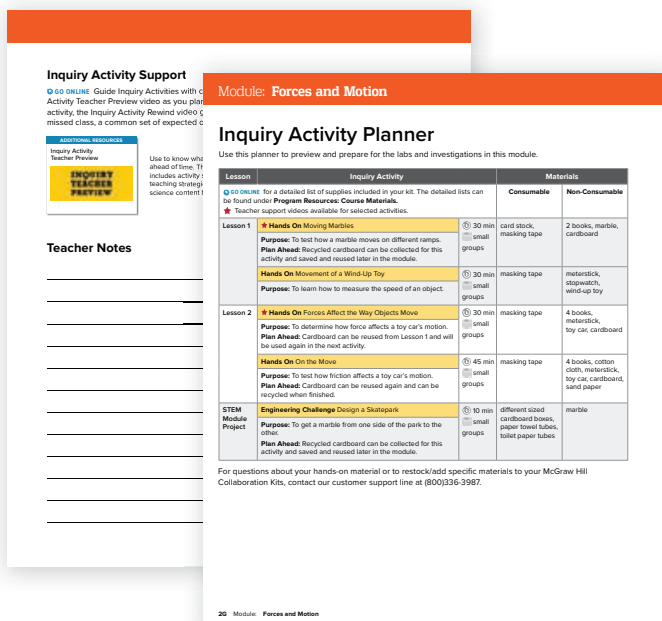
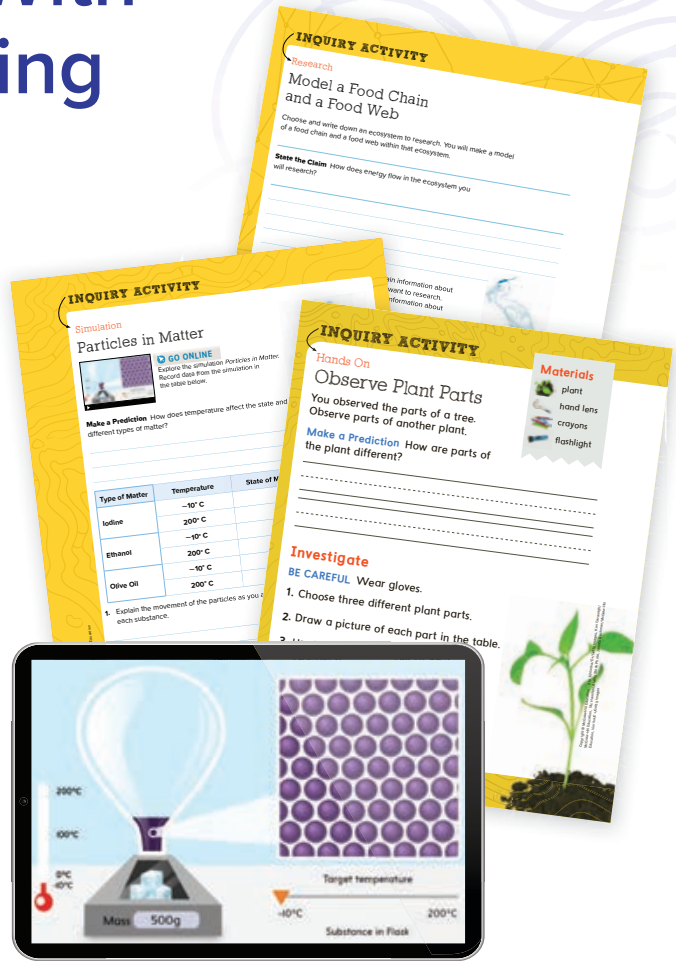
Students explain the **phenomenon** so that teachers can gauge progress and assess understanding.

# Empower Students With Inquiry-Based Learning

While working through Inquiry Activities in each lesson, students use the same techniques as scientists and engineers to ask questions, think critically, and design solutions to real-world problems. Easily implementable in any classroom, Inquiry Activities drive home science topics in meaningful, engaging ways.

Types of Inquiry Activities in *Alabama Inspire Science* to enable students to investigate phenomena and record findings in the same way as real-world practitioners do:

- Hands-On
- Simulations
- Data Analysis
- Engineering
- Research



## Inquiry Activity Planning

Planning and preparing for students to become elbows-deep in science is made easier with the *Alabama Inspire Science* Inquiry Activity Planner that clearly identifies all the materials needed within the module.



**Structured Inquiry**

This is a structured inquiry activity.

**Guided Inquiry**

To make this a guided inquiry, provide the students with the same activity question about the apparent brightness of stars, prediction, and list of materials they will need. Have them design a procedure, determine a way to organize and analyze their data. Write a statement answering the activity question using evidence to support their conclusion.

**Open Inquiry**

To make this an open inquiry allow students to come up with their own question and prediction about the apparent brightness of stars, determine what materials and data collecting procedures they will use, analyze the data and use it to support a written conclusion answering the activity question.

## Inquiry Spectrum

Not all inquiry activities are the same. Depending upon the available time and student readiness, structured inquiry might be perfect, or your class may be ready for open inquiry. The *Alabama Inspire Science* Inquiry Spectrum provides flexible options to adjust the inquiry level to align with the learning needs of each student.

Each lesson offers inquiry activities developed with a recommended inquiry spectrum level, giving you guidance but with the flexibility to modify the level of instruction based on your students' needs.

## Inquiry Rewind Videos:

- Encourage student engagement.
- Show the activity materials and the step-by-step procedure.
- Demonstrate the expected outcomes for each step of the activity.
- Provide opportunities for students to pause the video and utilize the Claim, Evidence, and Reasoning skills they have learned through *Alabama Inspire Science*.
- Support easy implementation for new teachers, substitute teachers, absent students or remote learning.



## Collaboration Kits

When students are engaged in their learning, they succeed, and nothing is more engaging than rolling up your sleeves and digging into hands-on activities. Developed specifically for group projects, the *Alabama Inspire Science* Collaboration Kits make it easy to implement hands-on activities in your classroom—freeing you to focus on the activity itself.

# Support Every Learner

Alabama Inspire Science incorporates the research-based Universal Design For Learning Principles to ensure that all students have access to rigorous curriculum.

Robust differentiation support is found within the Teacher’s Edition, as well as through leveled informational text resources such as the leveled readers and Investigator articles. Support with practical strategies is found at the module and lesson level at multiple points. Leveled text aligns with the Lexile ranges appropriate for each grade level.

## Intervention and Acceleration

**Module Concept** Fossils provide evidence of the organisms and their habitats that lived long ago. In a specific habitat, some organisms will survive easily, others will struggle, and some will not survive at all. As an environment changes, the types of plants and animals that live there will change too. Help students connect these key module concepts by providing multiple means of actions and expression.

### AL Approaching Level

Display an idea web titled *Habitats*, with areas labeled *night*, *day*, *cold*, *hot*, *wet*, and *dry*. Have students name animals that they think live in each habitat described in the web. Point out to students that each type of environment is more or less suited to specific organisms.

### OL On Level

Distribute photos of animals in their natural environments to students. Discuss ways that an environment can change (deforestation, flooding, drought). Ask, [How would a change in the environment affect the animal in your photo?](#) Have students write, speak, or draw a response.

### BL Beyond Level

Have students choose a wild animal and research how its environment had been affected by human activity. Have students create a written, oral, or visual presentation of how the animal has responded to the changes in its environment.

## Module Level Differentiation Support



## Intervention and Acceleration

- AL** Have students draw an animal using camouflage to blend in with its surrounding environment and explain how the camouflage helps it.
- OL** Display an idea web with *Adaptation* in the center. Have students provide examples of animal adaptation for survival. Record their ideas in the web.
- BL** Have students research an animal that uses mimicry. Then have them draw a picture of it and write a sentence or two explaining how it uses mimicry.

## Lesson Level Differentiation Support



**Teacher Toolbox****Science Background**

This is a photo of steps decorated with a mosaic. A mosaic is a piece of art made by assembling small pieces of stone, colored glass, and other materials.

A physical change occurs when matter changes in size, shape, or state, but the type of matter (or material) itself does not change. Matter can be put together and broken apart. Mass is the amount of matter an object contains. The mass of matter remains the same, even though the shape of matter may change. For example, the total mass of a board will remain the same if the board is cut into two pieces. The mass of a lump of clay stays the same even if the shape of the clay changes.

**Identifying Preconceptions**

Students may think that when more pieces are used, more material is used. Help students understand that when something is cut into pieces, there is still the same amount of material.

**Cognates**

Cognates are words in two different languages that share a similar meaning, spelling, and pronunciation. Review differences in spelling and pronunciation of these terms with your Spanish-speaking English learners.

<b>assemble</b> ensamblar	<b>reversible</b> reversible	<b>temperature</b> temperatura
<b>thermometer</b> termómetro	<b>plastic</b> plástico	<b>block</b> bloque

**Teacher Support**

Science Background and Identifying Preconception sections are found through the Teacher's Edition to provide scientific information around the topic and give educators insights into common ways students think.

**Language Building Resources**

*Alabama Inspire Science* lessons carefully and purposefully integrate reading, writing, speaking, listening, and collaborating into each lesson. This structure provides English Learners with purposeful language usage and access to resources to convey their understanding.

**Advanced and Gifted Learners**

In addition to the Approaching Level, On Level, and Beyond Level support included in the differentiated instruction strategies for each module and lesson, *Alabama Inspire Science* provides challenging activities directed at advanced and gifted learners.

**Advanced Learners and Gifted Learners**

Instruction should focus on adding depth and complexity in student understanding of the ways that materials can be put together to make other objects or changed by heating or cooling.

**DOK 3 Strategic Thinking** Have students revisit the investigations they conduct throughout the module to think about how they can investigate further questions. For example, what would happen if we added further heat to the ice and clay in the Heat and Materials Inquiry Activity? What observable changes can students predict?

**DOK 4 Extended** Have students research the melting and freezing points of several different materials, such as plastic, steel, clay, oil, and glass. Ask them to display their results in a table. Then have them choose one of the materials and tell what uses it would be good for based on its ability to withstand extreme temperatures. Have partners discuss their findings.

# Alabama Assessment Strategies

*Alabama Inspire Science* includes a variety of assessment options to support teachers with differentiation strategies and support students on their journey to mastery of the Alabama Science Course of Study and culminating with success on the Alabama Comprehensive Assessment Program (ACAP).

Each lesson in Grades 3–5 begins with a Formative Assessment Science Probe.



PAGE KEELEY, MEd

Page Keeley’s Science Probes present the lesson phenomenon in an engaging way to promote student thinking and discussion, revealing commonly-held preconceptions students bring to their learning to guide differentiated instruction strategies.

## Formative Assessment

Formative assessment—embedded at many points throughout each module and lesson—facilitates student reflection on their thinking (metacognition) and allows teachers to dynamically differentiate instruction. The table below shows the types of formative assessment resources in *Alabama Inspire Science* found online and in print.




FEATURE	INSTRUCTIONAL PURPOSE
<b>Science Probes</b>	Found at the beginning of each lesson, <b>Science Probes</b> reveal student preconceptions to guide instruction.
<b>Claim-Evidence-Reasoning</b>	With the <b>CER Framework</b> (Claim, Evidence, Reasoning), found in certain lessons, students will make claims and document their reasoning during the EXPLORE phase and add evidence and adjust their claims as needed later in the lesson.
<b>Three-Dimensional Thinking Questions</b>	Throughout each lesson, students will encounter questions that address at least two of the three dimensions of the Alabama Science Course of Study to check progress with the SEPs, DCIs, CCCs, and Performance Expectations.
<b>Talk About It</b>	Throughout each lesson, student-initiated or teacher-led <b>Talk About It</b> prompts encourage discussion to enable students to demonstrate their understanding of the phenomena, DCIs, or CCCs.
<b>Inquiry Activities</b>	In each <b>Inquiry Activity</b> , students will encounter formative assessment questions that help build three-dimensional thinking.





## Summative Assessment

Summative assessment tools at the module and lesson level help ensure lasting learning and alignment of student skills to the Performance Expectations with the following summative assessment tools found in *Alabama Inspire Science* in print Student Editions and online.

FEATURE	INSTRUCTIONAL PURPOSE	
<b>Module Pretest</b>	The <b>Module Pretests</b> , found at the beginning of each module in Grades 2–5, assess prerequisite knowledge of Disciplinary Core Ideas from prior grades to evaluate student readiness for the module.	
<b>Three-Dimensional Thinking Questions</b>	At the end of the lessons, students will demonstrate their understanding of at least two of the three dimensions of Alabama Science Course of Study to develop three-dimensional thinking skills.	
<b>Lesson Check</b>	Found in every lesson online, <b>Lesson Checks</b> determine how students are building a progression of learning toward the Performance Expectations.	
<b>Module Test</b>	Found at the end of each module online, <b>Module Tests</b> evaluate student proficiency against the Performance Expectations with multiple choice, extended response, constructed response, and performance-task items.	
<b>STEM Module Project Performance-Based Rubrics</b>	With each STEM Module Project, found at the end of each module, students will complete <b>Performance-Based Rubrics</b> and answer summative questions to demonstrate how they've applied their knowledge and understanding of the Performance Expectations to their project.	

### State Assessment Guide

The *Alabama Inspire Science* State Assessment Guide—available in digital format—provides Guided Practice and Practice items that will prepare students for end-of-year success.

# Cross-Curricular Connections

When students study science, they practice and build upon other skill sets along the way.

*Alabama Inspire Science* has been designed to maximize opportunities for cross-curricular connections, integrating ELA/Literacy and Mathematics standards so that by the time students reach the Grade 3 ACAP, they are ready. Correlations to *Open Court Reading* help connect your science and literacy classrooms. For fourth and fifth graders, these connections prepare them for the rigors of middle school science courses.



CLOSE READING

**Inspect**

**Read** the passage *Electric Current*. Underline text evidence that tells how people use electric currents.

**Find Evidence**

**Reread** Highlight text that tells what a circuit needs to have energy flow.

**Notes**

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Electricity is needed to power lights and appliances.

**Make Connections**

**Talk About It**

Think about how energy flows in static electricity. Compare it to how energy flows in a circuit.

**Notes**

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This is an example of a simple circuit using a battery.

**Electric Current**

Charged particles can build up on an object. They can also be made to flow. A flow of charged particles is called an electric current. You use electric current every day. Electric current provides the energy you need to power lights, radios, computers, and many other products. We use energy from electric current to produce light, sound, and motion.

108 EXPLAIN Module: Electricity and Magnetism
EXPLAIN Lesson 1 Electricity 109

**MAKE YOUR CLAIM**

Does the total number of cubes change when you rearrange the pieces?

**Make your claim. Use your investigation.**

**CLAIM**

The total number of pieces does not change when an object is rearranged

**EVIDENCE**

I found that Sample answer: the object had 12 original pieces. After I changed my object it had 12 pieces

**REASONING**

The evidence supports the claim because Sample answer: my second object kept the same number of cubes and took up the same amount of space

**Discuss your reasoning as a class. Tell about your discussion.**

**Cite evidence from the lesson.**

**You will revisit your claim to add more evidence later in this lesson.**

EXPLORE Lesson 1 Build with Materials 57

## Close Reading

The Close Reading activities in *Alabama Inspire Science* guide students to search for answers to text dependent questions within informational text passages, encouraging them to focus on meaning.

## Writing Prompts

With the CER Framework (Claim, Evidence, Reasoning) found in certain lessons, students will make claims and document their reasoning during the Explore phase of the lesson. Later, they add evidence and revise their claims as needed.



## Science Read Alouds

For students in Grades K–1, Science Read Alouds anchor module content and drive discovery by using the power of narrative storytelling to pique students’ interest in a science topic.



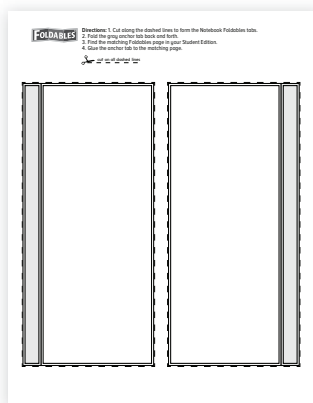
## Investigator Articles

For students in Grades 2–5, Investigator Articles supply real-world science and engineering stories, available in Approaching Grade Level and On Grade Level.



## Leveled Readers

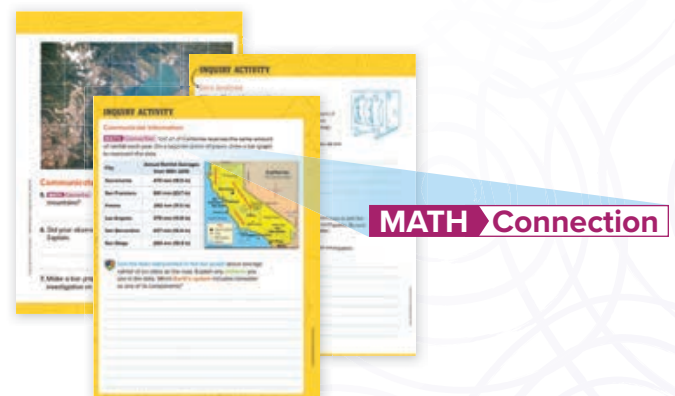
Every *Alabama Inspire Science* module includes a Leveled Reader title, written at four readability levels—Approaching, On, Beyond, and ELL. For Grades 1–5, these readers include a Paired Read to enhance the experience with a narrative-story.



## Dinah Zike’s Foldables® and Kinesthetic Vocabulary

Engage students as they organize their notes with Dinah Zike’s Study Guide and Notebook Foldables®, which help organize important lesson information.

Introduce and review vocabulary terms using the Visual Kinesthetic Vocabulary designed to construct meaning and promote mastery.



## Math Integration

Science and math are closely related in the real-world—a key reason for the Science and Engineering Practice of using Mathematical and Computational Thinking, as well as Analyzing and Interpreting Data. In *Alabama Inspire Science*, students engage with math the way science and engineers do by collecting and analyzing data, creating graphs, and making connections between mathematics and real-world events to solve challenging problems.



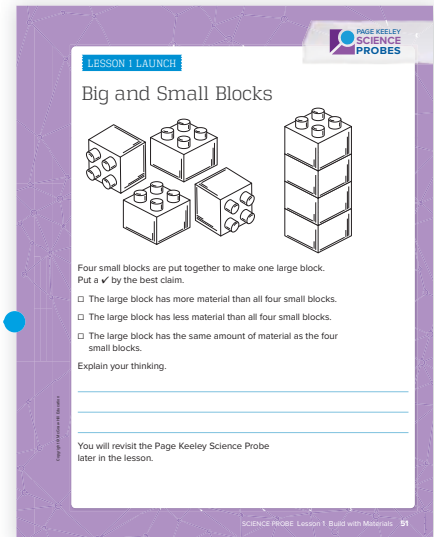
# Fuel Student Engagement

What happens when students are truly engaged?

The classroom has a buzzing undercurrent, students have an increased focus, and they are waiting to see what comes next. *Alabama Inspire Science* helps you fuel that engagement with features that keep students interested.

## Page Keeley Science Probes

When students do the talking, it is evidence that they are thinking and provides you an avenue to uncover and resolve preconceptions or misconceptions.



## Visualizing Phenomena in Action

Phenomenon Videos enable students to observe scientific topics in action, providing a visual experience that encourages thinking and collaborative conversations.

## STEM Career Connections

Introduce students to real-world STEM professions that they may have one day. Students will learn about careers and apply what they have learned to a related assignment. The wide variety of connections, whether real-world or avatar based, represents a broad range of careers, from jobs that require a high-school education to those that require a Ph.D.



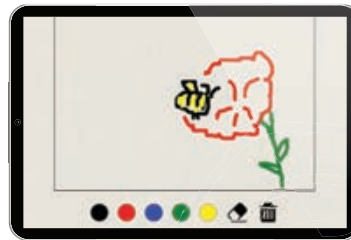
# Types of Interactive Resources

In the *Alabama Inspire Science* digital experience, students will interact with a wide variety of digital content types that will make learning science engaging and fun.

## Why Go Online?

The following list is a few of many offerings for *Alabama Inspire Science*:

- Engaging Interactive Content
- Video Demos of Hands-On Activities
- Science Content Videos
- Text Read Aloud and Highlighting Features
- Dynamic Search Tools



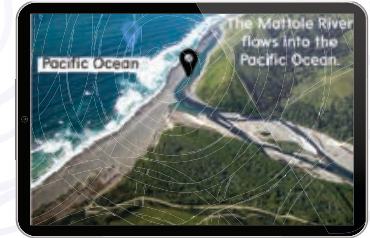
Drawing Tool



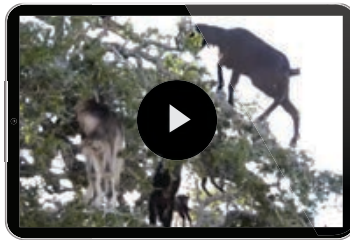
Drag and Drop



Science Content Videos



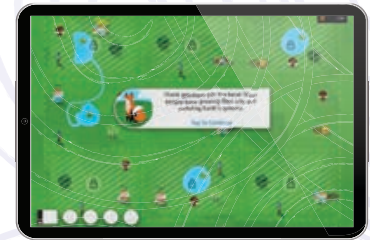
Pop Tips



Phenomena Videos



Simulations



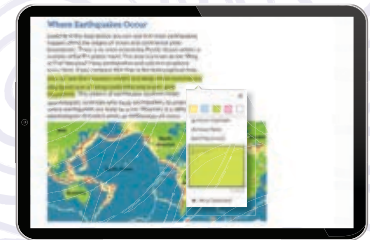
Games



Layer Reveal



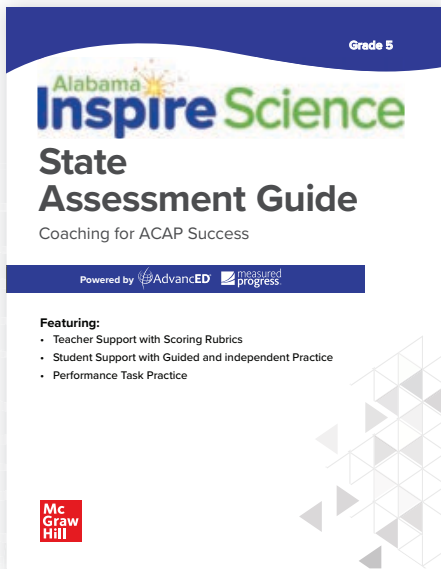
Choose Your Path



Interactive Text

Beyond the Classroom (Grades 2–5)





# State Assessment Guide

Following the scope and sequence of *Alabama Inspire Science*, this State Assessment Guide provides Guided Practice and Practice for both discrete items and performance tasks with teacher support for each. Also included are standards alignment correlations, DOK levels, evidence statements, answer keys with rationale for correct and incorrect answers, and scoring rubrics for performance tasks.

Unit Tests provide extra assessment support for groups of Alabama Content Standards to help you measure how students are progressing to the end of year goals for Alabama Content Standards mastery.

**Use this guide in your classroom in a variety of ways to meet the needs of your students.**

- ✓ Use the guided practice and independent practice sections before a Module Test to provide extra support.
- ✓ Use the practice sections after a Module Test but before a Unit Test for remediation.
- ✓ Administer the independent practice section first and use the guided practice as remediation.
- ✓ Use the Unit Test before implementing an *Alabama Inspire Science* unit for pre-assessment to serve as a benchmark, or after to identify reteaching opportunities.

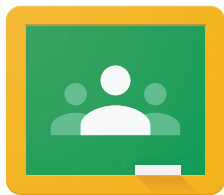




# Seamless Integration Services

We are proud to work with schools across Alabama to implement our programs into a range of classroom environments using different platforms. Both our Integration team and our Digital Technical Support team are ready to support you and your implementation.

To learn more, visit [mheducation.com/alabama](http://mheducation.com/alabama).



Google Classroom



**Clever**



# Continued Professional Learning

## Professional Development

We know it can be a challenge to implement a new science program with new standards. That's why *Alabama Inspire Science* comes with a library of relevant, self-paced, professional learning videos and modules to support you from implementation through instructional progression and mastery, all available 24/7, from any device.



## Program Implementation Support

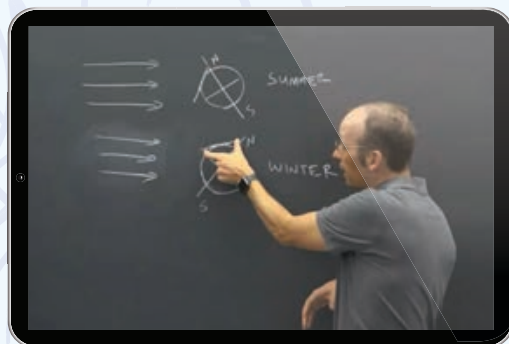
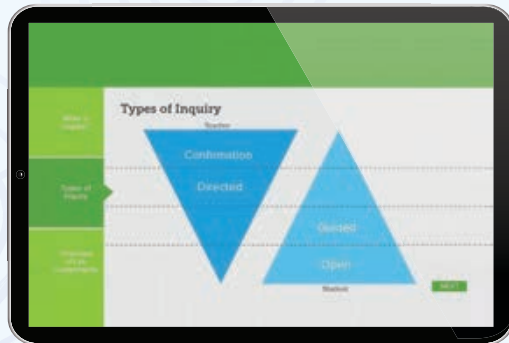
Implementation support provides everything you need to know to get up to speed for the first day of school.

**Quick Start Videos** explain program basics to help get you started.



Plan, Teach, and Assess **eLearning Modules** provide deep-dives of the program's instructional model and resources.

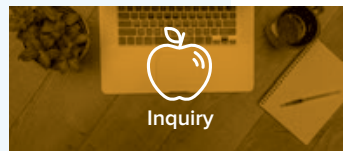
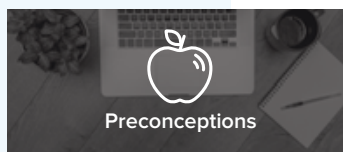
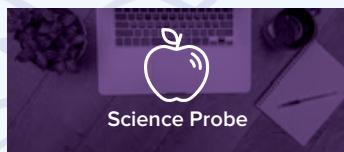




## Ongoing Pedagogy Support

With *Alabama Inspire Science*, you will find a wide range of resources on key instructional and pedagogical topics, including videos from our program authors and consultants.

- **STEM Classroom Videos** model lessons from real classrooms.
- **Science Preconceptions Videos** review common preconceptions and strategies to overcome them.
- **Instructional Coaching Videos** discuss best practice strategies and the “Why” behind the success.
- **Teacher Activity Videos** show planning tips and expected results to help with hands-on activity time.
- **Science Pedagogy Micro-Courses** provide facilitation guides for both self-guided or small group courses.





# Alabama **Inspire Science**



Learn More at [mheducation.com/alabama](http://mheducation.com/alabama)

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