Mc Graw Hill

Program Overview
Grades 6–8

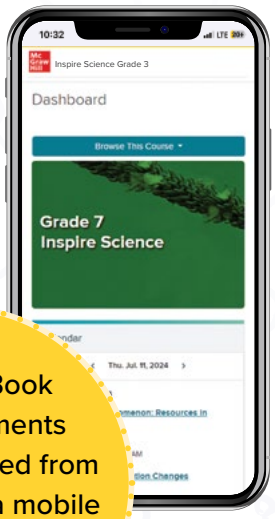
Mississippi

Inspire Science

Welcome to *Mississippi Inspire Science*

Engaging, Flexible, Cross-Curricular Learning

Mississippi 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 Mississippi College- and Career-Readiness Standards for Science in mind, *Mississippi 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!

Tap Into and Extend Student Curiosity

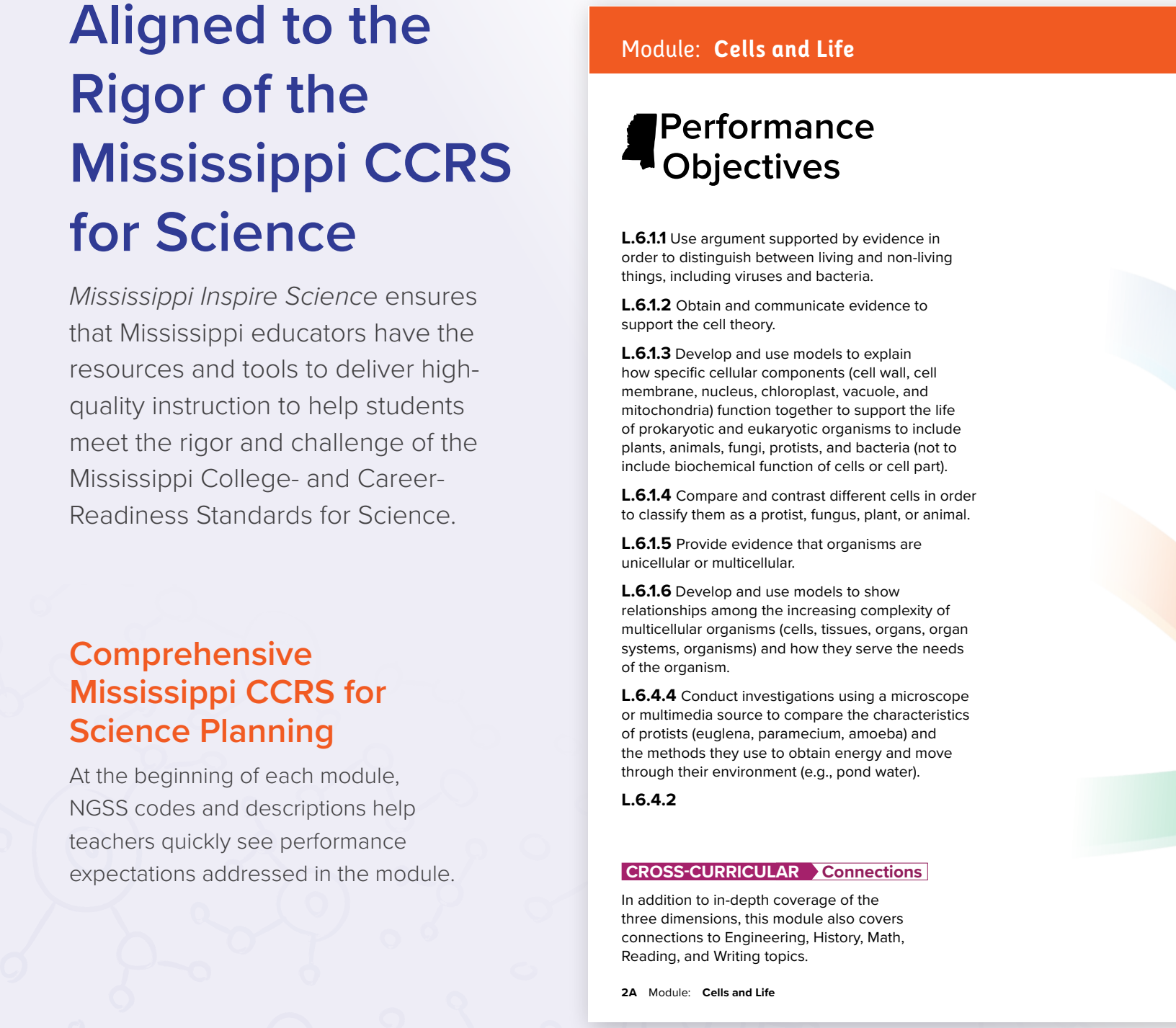
Middle school students have a wealth of new experiences competing for their attention which can lead to challenges with learning engagement. With *Mississippi Inspire Science*, each module and lesson are designed with student interest and curiosity in mind. When fueled by curiosity, students look to the world around them through the investigation of real-world phenomena in interesting, innovative, and hands-on ways. A new generation of innovators is ready to take on today's challenges to become tomorrow's scientists.

Aligned to the Rigor of the Mississippi CCRS for Science

Mississippi Inspire Science ensures that Mississippi educators have the resources and tools to deliver high-quality instruction to help students meet the rigor and challenge of the Mississippi College- and Career-Readiness Standards for Science.

Comprehensive Mississippi CCRS for Science Planning

At the beginning of each module, NGSS codes and descriptions help teachers quickly see performance expectations addressed in the module.



Module: **Cells and Life**

Performance Objectives

L.6.1.1 Use argument supported by evidence in order to distinguish between living and non-living things, including viruses and bacteria.

L.6.1.2 Obtain and communicate evidence to support the cell theory.

L.6.1.3 Develop and use models to explain how specific cellular components (cell wall, cell membrane, nucleus, chloroplast, vacuole, and mitochondria) function together to support the life of prokaryotic and eukaryotic organisms to include plants, animals, fungi, protists, and bacteria (not to include biochemical function of cells or cell part).

L.6.1.4 Compare and contrast different cells in order to classify them as a protist, fungus, plant, or animal.

L.6.1.5 Provide evidence that organisms are unicellular or multicellular.

L.6.1.6 Develop and use models to show relationships among the increasing complexity of multicellular organisms (cells, tissues, organs, organ systems, organisms) and how they serve the needs of the organism.

L.6.4.4 Conduct investigations using a microscope or multimedia source to compare the characteristics of protists (euglena, paramecium, amoeba) and the methods they use to obtain energy and move through their environment (e.g., pond water).

L.6.4.2

CROSS-CURRICULAR Connections

In addition to in-depth coverage of the three dimensions, this module also covers connections to Engineering, History, Math, Reading, and Writing topics.

2A Module: **Cells and Life**

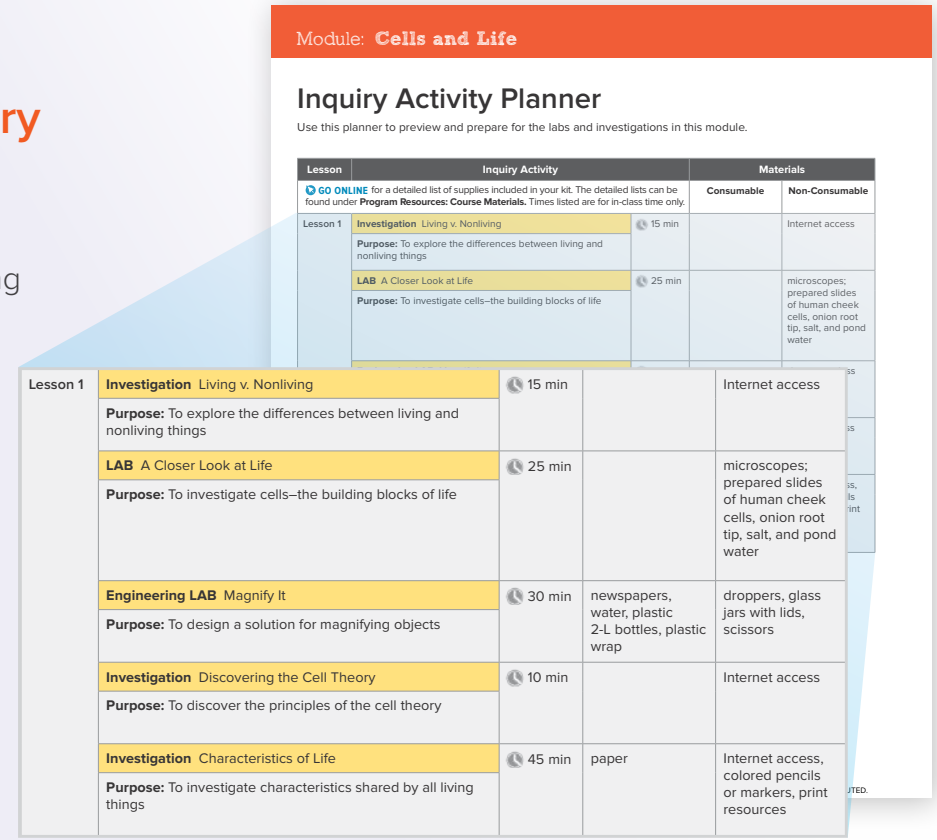
Three Dimensions at a Glance

Throughout this module and in the culminating module project, students will integrate relevant Science and Engineering Practices (SEPs) and Crosscutting Concepts (CCCs) into their learning and understanding of the Disciplinary Core Ideas (DCIs). Use this chart to locate where students will encounter each of the three dimensions that build to the Performance Objectives.

DIMENSIONS	LESSON 1	LESSON 2	MODULE PROJECT
SEP Develop and Use Models		•	•
SEP Engaging in Argument from Evidence	•	•	•
SEP Obtaining, Evaluating, and Communicating Information	•		
DCI **L.6.1: Hierarchical Organization**	•	•	•
DCI **L.6.4: Adaptation and Diversity**	•		
CCC Patterns	•	•	
CCC Scale, Proportion, and Quantity	•	•	•
CCC Structure and Function	•	•	•
CCC Systems and System Models	•		•

Designed for an Inquiry Focus for Proficiency

Mississippi Inspire Science is infused with inquiry-based learning to capture student interest and empower them to ask questions and think more critically. Within each lesson are multiple inquiry-based learning opportunities designed to give students the practice they need to achieve proficiency and succeed with science and engineering practices.



Module: **Cells and Life**

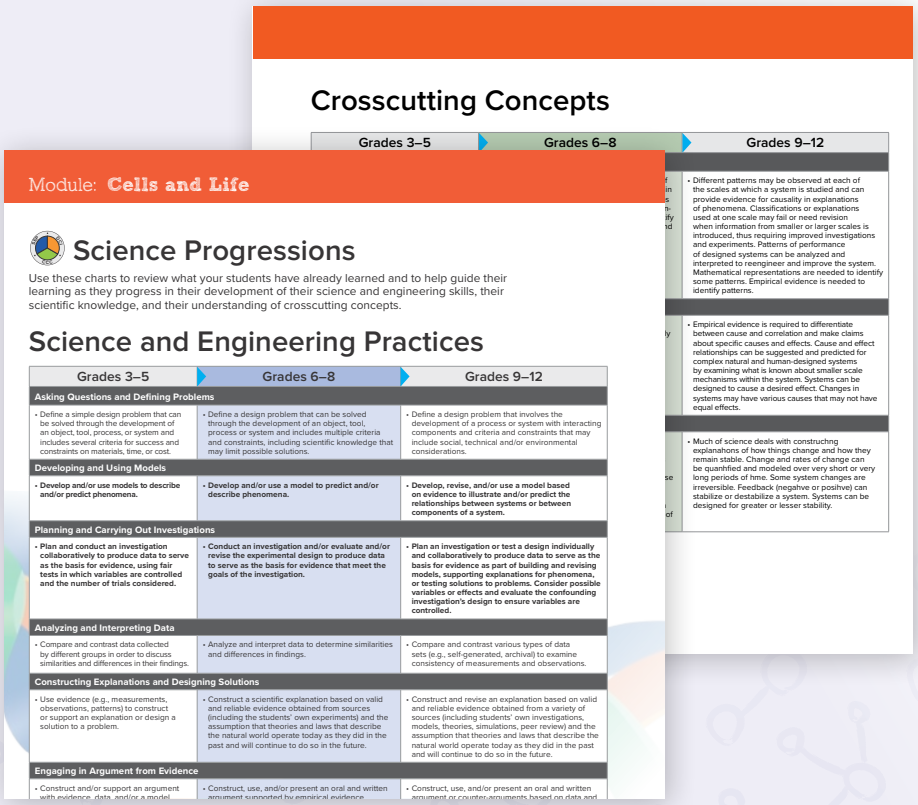
Inquiry Activity Planner

Use this planner to preview and prepare for the labs and investigations in this module.

Lesson	Inquiry Activity		Materials	
GO ONLINE for a detailed list of supplies included in your kit. The detailed lists can be found under **Program Resources: Course Materials.** Times listed are for in-class time only.			**Consumable**	**Non-Consumable**
Lesson 1	**Investigation** Living v. Nonliving **Purpose:** To explore the differences between living and nonliving things	15 min		Internet access
	LAB A Closer Look at Life **Purpose:** To investigate cells–the building blocks of life	25 min		microscopes; prepared slides of human cheek cells, onion root tip, salt, and pond water
Lesson 1	**Investigation** Living v. Nonliving **Purpose:** To explore the differences between living and nonliving things	15 min		Internet access
	LAB A Closer Look at Life **Purpose:** To investigate cells–the building blocks of life	25 min		microscopes; prepared slides of human cheek cells, onion root tip, salt, and pond water
	Engineering LAB Magnify It **Purpose:** To design a solution for magnifying objects	30 min	newspapers, water, plastic 2-L bottles, plastic wrap	droppers, glass jars with lids, scissors
	Investigation Discovering the Cell Theory **Purpose:** To discover the principles of the cell theory	10 min		Internet access
	Investigation Characteristics of Life **Purpose:** To investigate characteristics shared by all living things	45 min	paper	Internet access, colored pencils or markers, print resources

Science Progression

Each module includes a table illustrating in detail the Science and Engineering Practices and Crosscutting Concept Progressions across grade bands.



Module: **Cells and Life**

Science Progressions

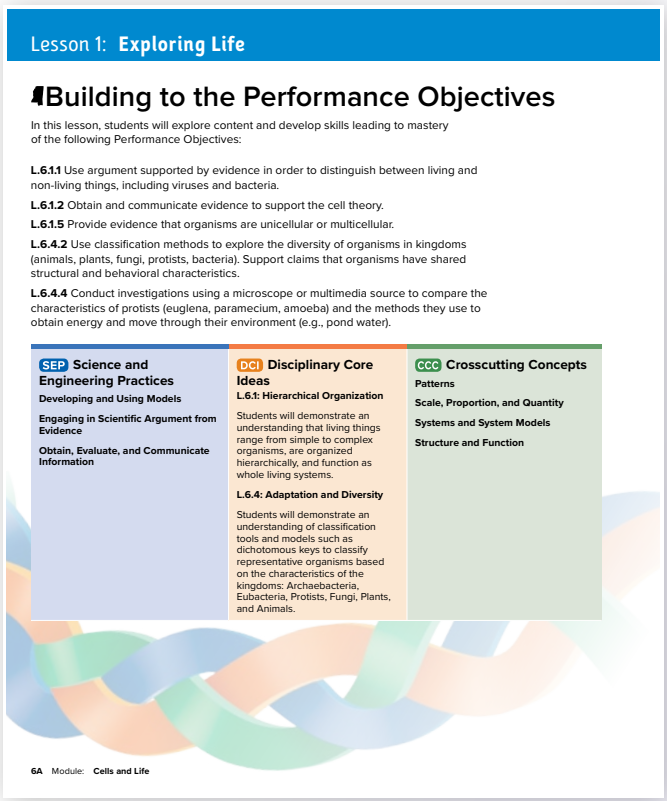
Use these charts to review what your students have already learned and to help guide their learning as they progress in their development of their science and engineering skills, their scientific knowledge, and their understanding of crosscutting concepts.

Science and Engineering Practices

Grades 3–5	Grades 6–8	Grades 9–12
Asking Questions and Defining Problems		
• Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost.	• Define a design problem that can be solved through the development of an object, tool, process or system and includes multiple criteria and constraints, including scientific knowledge that may limit possible solutions.	• Define a design problem that involves the development of a process or system with interacting components and criteria and constraints that may include social, technical and/or environmental considerations.
Developing and Using Models		
• **Develop and/or use models to describe and/or predict phenomena.**	• **Develop and/or use a model to predict and/or describe phenomena.**	• **Develop, revise, and/or use a model based on evidence to illustrate and/or predict the relationships between systems or between components of a system.**
Planning and Carrying Out Investigations		
• **Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.**	• **Conduct an investigation and/or evaluate and/or revise the experimental design to produce data to serve as the basis for evidence that meet the goals of the investigation.**	• **Plan an investigation or test a design individually and collaboratively to produce data to serve as the basis for evidence as part of building and revising models, supporting explanations for phenomena, or testing solutions to problems. Consider possible variables or effects and evaluate the confounding investigation's design to ensure variables are controlled.**
Analyzing and Interpreting Data		
• Compare and contrast data collected by different groups in order to discuss similarities and differences in their findings.	• Analyze and interpret data to determine similarities and differences in findings.	• Compare and contrast various types of data sets (e.g., self-generated, archival) to examine consistency of measurements and observations.
Constructing Explanations and Designing Solutions		
• Use evidence (e.g., measurements, observations, patterns) to construct or support an explanation or design a solution to a problem.	• Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.	• Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources (including students' own investigations, models, theories, simulations, peer review) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.
Engaging in Argument from Evidence		
• Construct and/or support an argument	• Construct, use, and/or present an oral and written	• Construct, use, and/or present an oral and written

Crosscutting Concepts

Grades 3–5	Grades 6–8	Grades 9–12
		• Different patterns may be observed at each of the scales at which a system is studied and can provide evidence for causality in explanations of phenomena. Classifications or explanations used at one scale may fail or need revision when information from smaller or larger scales is introduced, thus requiring improved investigations and experiments. Patterns of performance of designed systems can be analyzed and interpreted to reengineer and improve the system. Mathematical representations are needed to identify some patterns. Empirical evidence is needed to identify patterns.
		• Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects. Cause and effect relationships can be suggested and predicted for complex natural and human-designed systems by examining what is known about smaller scale mechanisms within the system. Systems can be designed to cause a desired effect. Changes in systems may have various causes that may not have equal effects.
		• Much of science deals with constructing explanations of how things change and how they remain stable. Change and rates of change can be quanfied and modeled over very short or very long periods of hme. Some system changes are irreversible. Feedback (negative or positive) can stabilize or destabilize a system. Systems can be designed for greater or lesser stability.



Lesson 1: **Exploring Life**

Building to the Performance Objectives

In this lesson, students will explore content and develop skills leading to mastery of the following Performance Objectives:

L.6.1.1 Use argument supported by evidence in order to distinguish between living and non-living things, including viruses and bacteria.

L.6.1.2 Obtain and communicate evidence to support the cell theory.

L.6.1.5 Provide evidence that organisms are unicellular or multicellular.

L.6.4.2 Use classification methods to explore the diversity of organisms in kingdoms (animals, plants, fungi, protists, bacteria). Support claims that organisms have shared structural and behavioral characteristics.

L.6.4.4 Conduct investigations using a microscope or multimedia source to compare the characteristics of protists (euglena, paramecium, amoeba) and the methods they use to obtain energy and move through their environment (e.g., pond water).

SEP Science and Engineering Practices

Developing and Using Models

Engaging in Scientific Argument from Evidence

Obtain, Evaluate, and Communicate Information

DCI Disciplinary Core Ideas

L.6.1: Hierarchical Organization

Students will demonstrate an understanding that living things range from simple to complex organisms, are organized hierarchically, and function as whole living systems.

L.6.4: Adaptation and Diversity

Students will demonstrate an understanding of classification tools and models such as dichotomous keys to classify representative organisms based on the characteristics of the kingdoms: Archaebacteria, Eubacteria, Protists, Fungi, Plants, and Animals.

CCC Crosscutting Concepts

Patterns

Scale, Proportion, and Quantity

Systems and System Models

Structure and Function

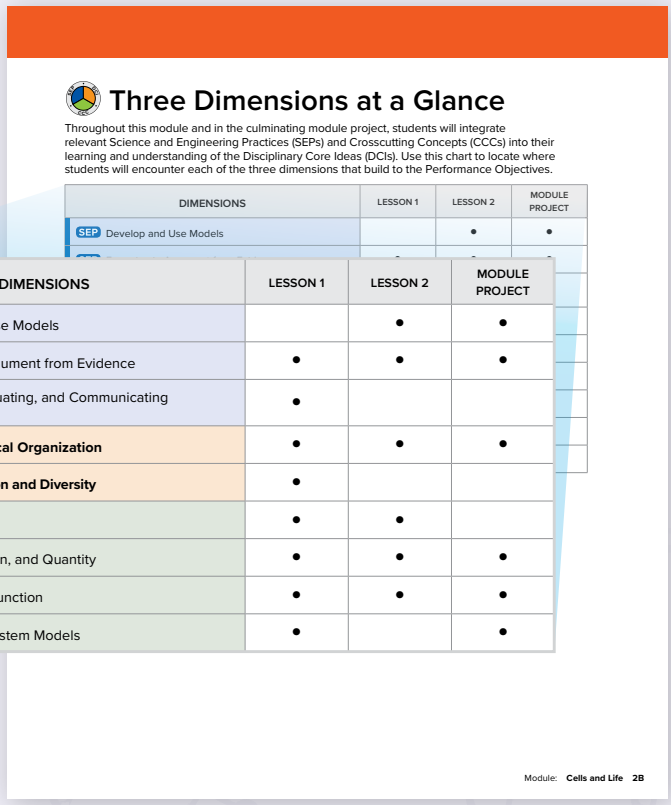
6A Module: **Cells and Life**

Focused Lesson Planning for Effective Standards-Based Instruction

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

Three Dimensions at a Glance, Aligns to Mississippi CCRS for Science

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



Three Dimensions at a Glance

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CCC Scale, Proportion, and Quantity	•	•	•
CCC Structure and Function	•	•	•
CCC Systems and System Models	•		•

Module: **Cells and Life** 2B

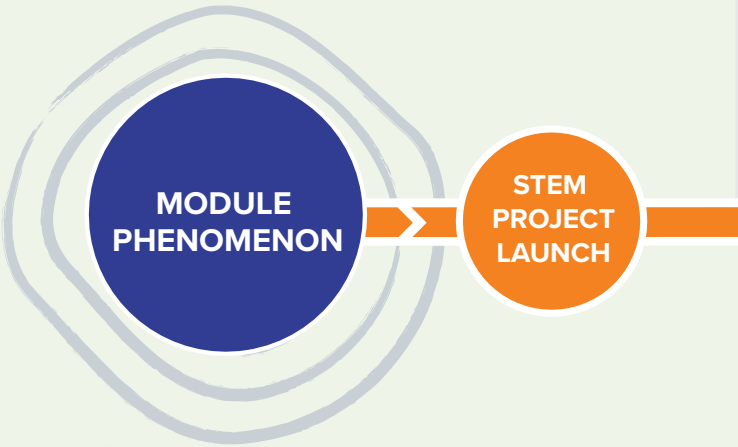
Learning Through Storylines

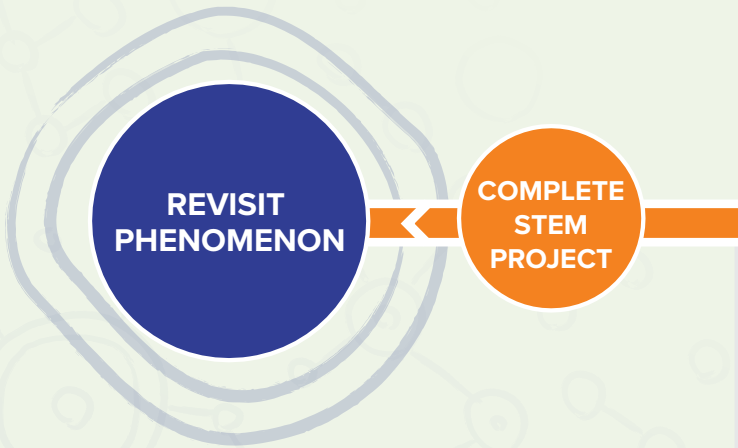
Students are surrounded by natural phenomena.

These phenomena are the centerpiece of each *Mississippi Inspire Science* module and lesson; find Module Storylines as the anchor to 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.

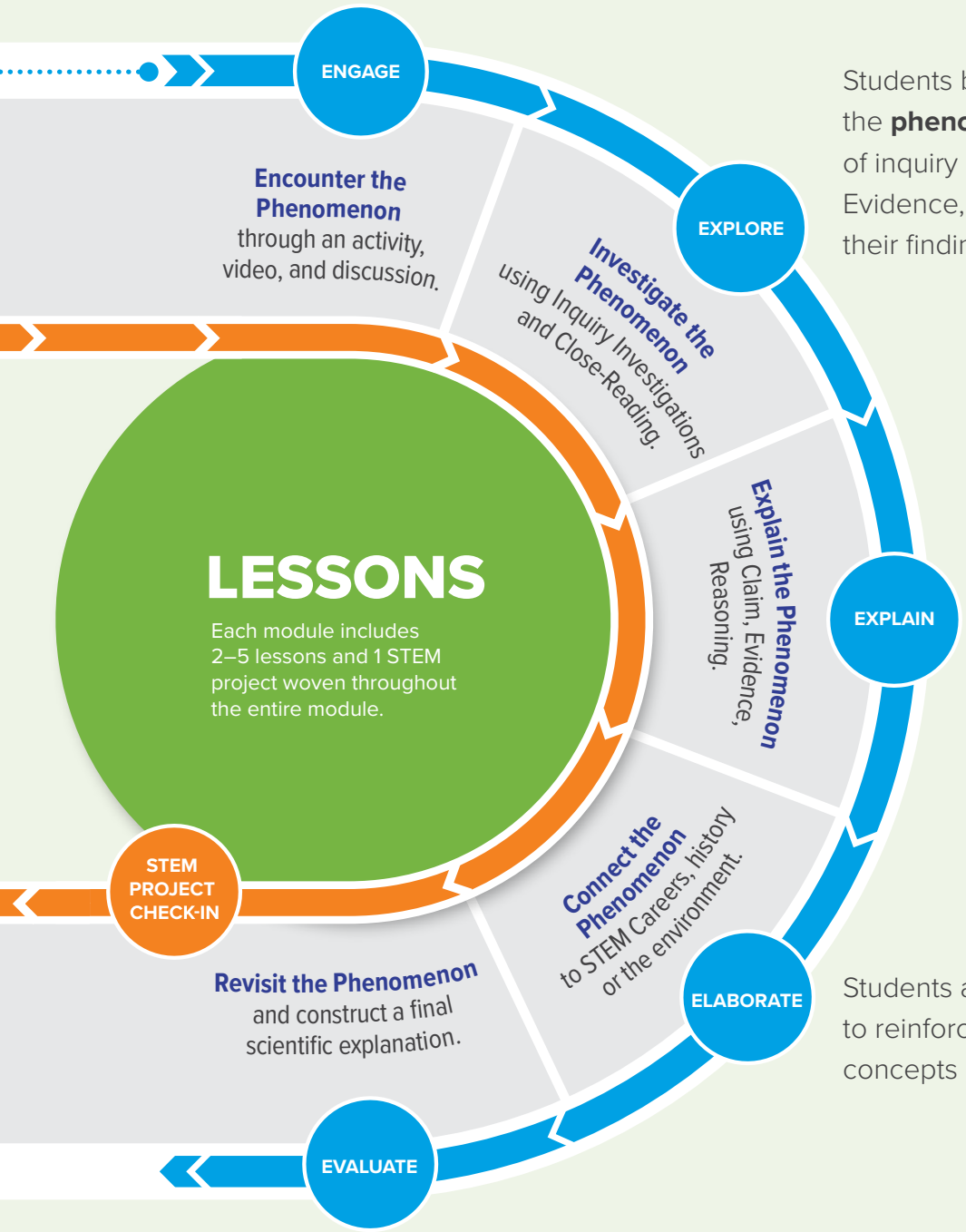
Students experience the topic through multiple related phenomena. This strategy offers students multiple entry points for connection to their lives and a deeper understanding of the world around them.

Mississippi Inspire Science is built around the 5E+IA framework to guide students toward scientific understanding using a thorough and methodical process aligned with Mississippi CCRS for Science.





Each module and lesson in *Mississippi 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**.

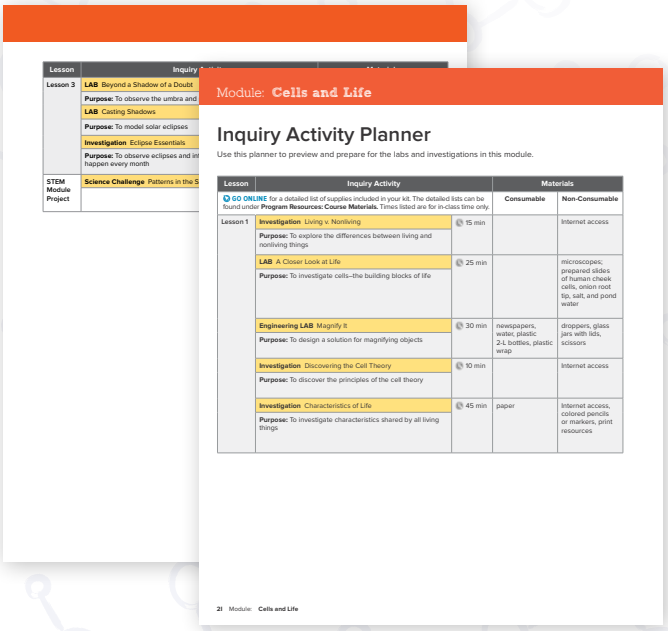
Students explain the **phenomenon** so that teachers can gauge progress and assess understanding.

Empower Students With Hands-On, Inquiry-Based Learning

During two to three Inquiry Activities per lesson—typically found in Explore/Explain or Elaborate—students use the same techniques as scientists and engineers as they use their results and findings to communicate their understanding. These Inquiry Activities drive home science topics in meaningful, engaging ways.

There are five types of Inquiry Activities in *Mississippi Inspire Science* that enable students to investigate phenomena and record findings in the same way as real-world practitioners do:

- Hands-On
- Engineering
- Investigations
- Simulations
- Data Analysis



Inquiry Activity Planning

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

Inquiry Spectrum

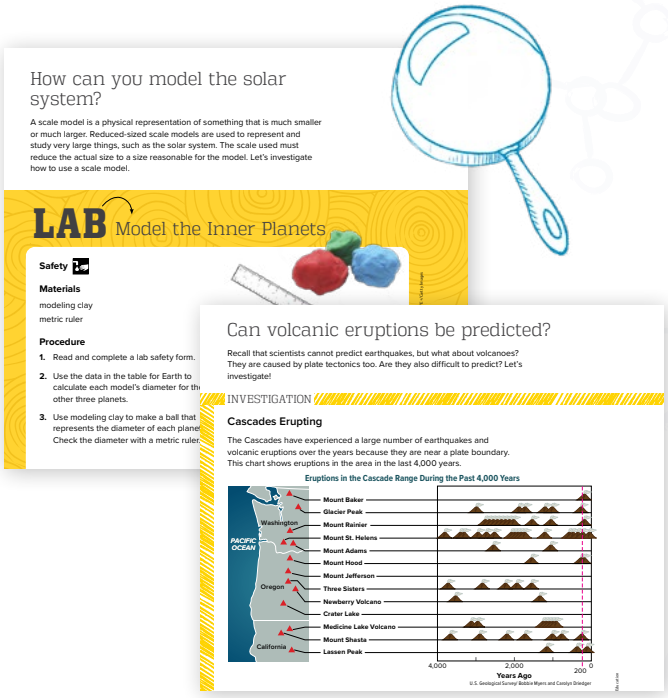
Not all inquiry activities are the same. Depending upon the available time and student readiness, structured inquiry might be perfect, or your class may be ready for open inquiry. The *Mississippi Inspire Science* Inquiry Spectrum provides flexible options to adjust the inquiry level to align with the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

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

Structured Inquiry
In this Inquiry Activity, students are given a question to investigate and procedure to follow.

Guided Inquiry
To make this a guided inquiry activity, have students plan their own investigation by selecting their own volumes and temperatures of water, making their predictions, and conducting their plan.

Open Inquiry
To make this an open inquiry activity, have students develop their own question about the link between amount of matter and its energy to investigate and design the investigation.



Student-Driven Data Analysis

All Inquiry Activities in *Mississippi Inspire Science* promote student engagement and allow each student to develop skills in both inquiry and science and engineering skills. The combination of Investigations and Labs enable students to cover the full range of the inquiry spectrum.

Labs provide students an opportunity to conduct an investigation and gather their own data to analyze, interpret, and apply to the lesson and module phenomena.

Investigations offer students practice with data sets, graphs and other scientific scenarios to further hone their abilities to think like scientists.

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 to support engagement, *Inspire Science* Collaboration Kits make it easy to innovate and incorporate investigative thinking about core science concepts.

Support Every Learner

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

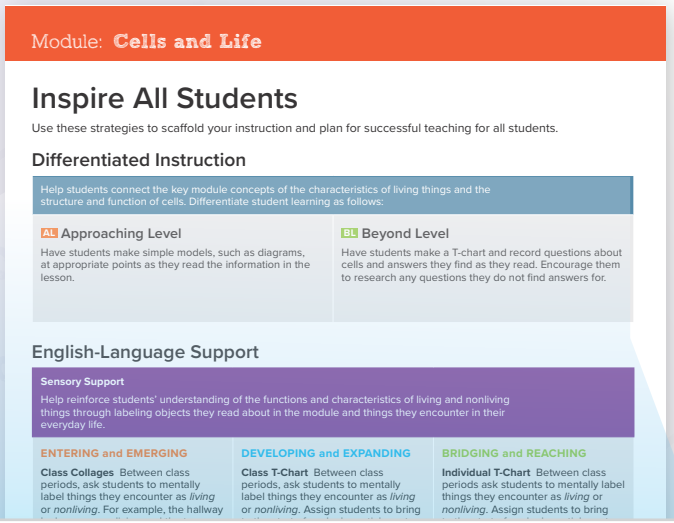
Support with practical strategies is found at the module and lesson level at multiple points. The Leveled text aligns with the Lexile ranges appropriate for each grade level.

Uniting Phenomena

Phenomena-driven instruction levels the playing field for learners by allowing them to access the core science instruction via a shared experience by observing a highly relevant real-world phenomenon. These shared experiences with supporting instruction ensure learning is truly accessible to ALL students.

Differentiated Instruction

Robust differentiation support including guiding questions for different student levels, as well as differentiation guidance is found in the Teacher's Edition. Module and lesson level practice strategies are also found at multiple points.


Module: **Cells and Life**

Inspire All Students

Use these strategies to scaffold your instruction and plan for successful teaching for all students.

Differentiated Instruction

Help students connect the key module concepts of the characteristics of living things and the structure and function of cells. Differentiate student learning as follows:

AL **Approaching Level**

Have students make simple models, such as diagrams, at appropriate points as they read the information in the lesson.

BL **Beyond Level**

Have students make a T-chart and record questions about cells and answers they find as they read. Encourage them to research any questions they do not find answers for.

English-Language Support

Sensory Support

Help reinforce students' understanding of the functions and characteristics of living and nonliving things through labeling objects they read about in the module and things they encounter in their everyday life.

ENTERING and EMERGING

Class Collages Between class periods, ask students to mentally label things they encounter as *living* or *nonliving*. For example, the hallway

DEVELOPING and EXPANDING

Class T-Chart Between class periods, ask students to mentally label things they encounter as *living* or *nonliving*. Assign students to bring

BRIDGING and REACHING

Individual T-Chart Between class periods ask students to mentally label things they encounter as *living* or *nonliving*. Assign students to bring

Help students connect the key module concepts of the characteristics of living things and the structure and function of cells. Differentiate student learning as follows:

AL **Approaching Level**

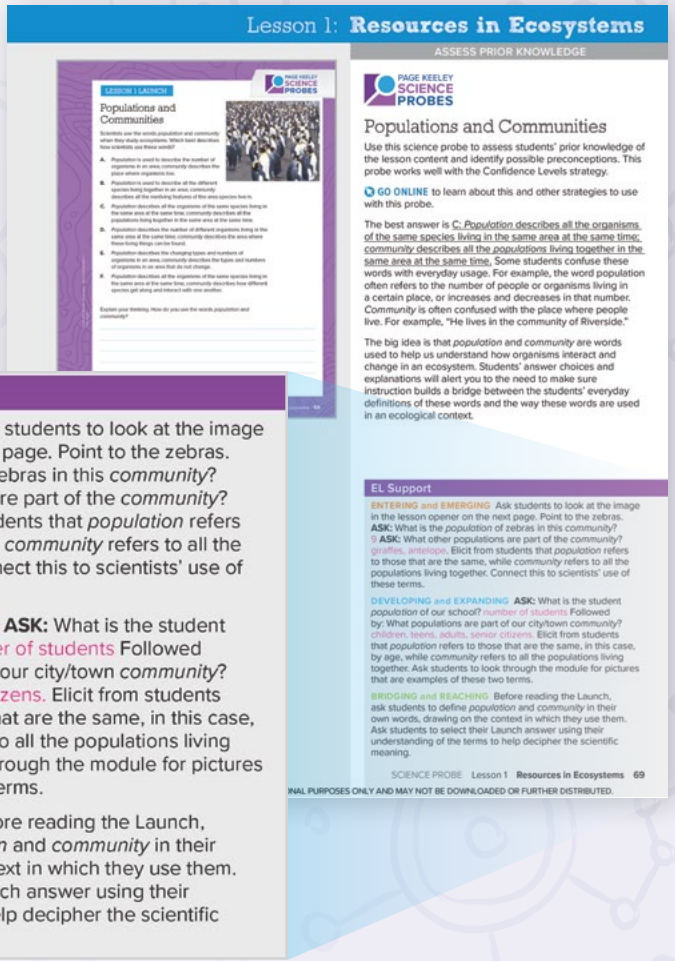
Have students make simple models, such as diagrams, at appropriate points as they read the information in the lesson.

BL **Beyond Level**

Have students make a T-chart and record questions about cells and answers they find as they read. Encourage them to research any questions they do not find answers for.

English-Language Support

Mississippi Inspire Science applies the best instructional practices for teaching EL students. Each module and lesson have scaffolded activities that offer students of any level of English language proficiency the opportunity to engage in academically challenging science and engineering content, while supporting language acquisition.



Lesson 1: **Resources in Ecosystems**

ASSESS PRIOR KNOWLEDGE

PAGE KEELEY SCIENCE PROBES

Populations and Communities

Use this science probe to assess students' prior knowledge of the lesson content and identify possible preconceptions. This probe works well with the Confidence Levels strategy.

GO ONLINE to learn about this and other strategies to use with this probe.

The best answer is C; *Population* describes all the organisms of the same species living in the same area at the same time; *community* describes all the *populations* living together in the same area at the same time. Some students confuse these words with everyday usage. For example, the word population often refers to the number of people or organisms living in a certain place, or increases and decreases in that number. *Community* is often confused with the place where people live. For example, "He lives in the community of Riverside."

The big idea is that *population* and *community* are words used to help us understand how organisms interact and change in an ecosystem. Students' answer choices and explanations will alert you to the need to make sure instruction builds a bridge between the students' everyday definitions of these words and the way these words are used in an ecological context.

EL Support

ENTERING and EMERGING Ask students to look at the image in the lesson opener on the next page. Point to the zebras. **ASK:** What is the *population* of zebras in this *community*? 9 **ASK:** What other populations are part of the *community*? giraffes, antelope. Elicit from students that *population* refers to those that are the same, while *community* refers to all the populations living together. Connect this to scientists' use of these terms.

DEVELOPING and EXPANDING **ASK:** What is the student *population* of our school? number of students Followed by: What populations are part of our city/town *community*? children, teens, adults, senior citizens. Elicit from students that *population* refers to those that are the same, in this case, by age, while *community* refers to all the populations living together. Ask students to look through the module for pictures that are examples of these two terms.

BRIDGING and REACHING Before reading the Launch, ask students to define *population* and *community* in their own words, drawing on the context in which they use them. Ask students to select their Launch answer using their understanding of the terms to help decipher the scientific meaning.

SCIENCE PROBE Lesson 1 Resources in Ecosystems 69

Language Building Activity

Essential Question: How does the organization of cells support like functions in multicellular organisms?

Fill in the Blank

Complete the text. Use the words below.

cells **diffuse** **organism** **organized** **oxygen**

1. Living things are made up of _____.
2. Another term for a living thing is an _____.
3. Living things are _____ in such a way so that the cells of the same type come together to form tissue.
4. When you breathe in, or inhale, your lungs take in _____.
5. In order for a cell to function properly, oxygen must be able to _____ through the cell membrane.

Noun or Verb

Look at the list of vocabulary terms below. Circle the nouns. Underline the verbs.

cell **diffuse** **organism** **organize** **oxygen**

1. How do you know which words are nouns?

_____

_____

2. How do you know which words are verbs?

_____

_____

Language Building Resources

Mississippi Inspire Science lessons carefully and purposefully integrate reading, writing, speaking, listening, and collaborating into each lesson. This structure provides EL students with purposeful language usage and resource access to convey their understanding.

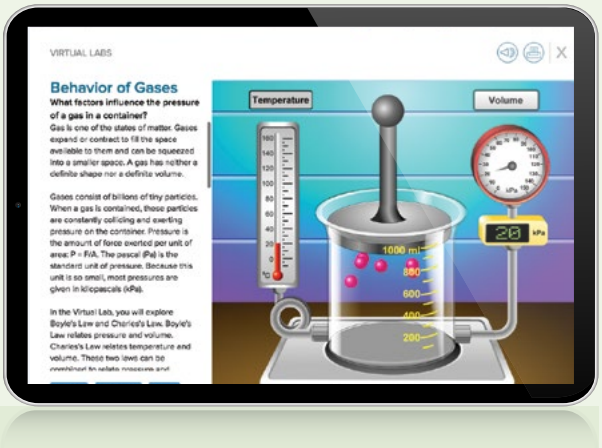
Bring Science to Life

Mississippi Inspire Science transports students beyond the walls of your classroom with cutting-edge digital content, including interactives, simulations, videos, and more.

Fun and easy-to-use, these features align with lesson topics to spark scientific curiosity, support discussion, enhance review, and deepen understanding.

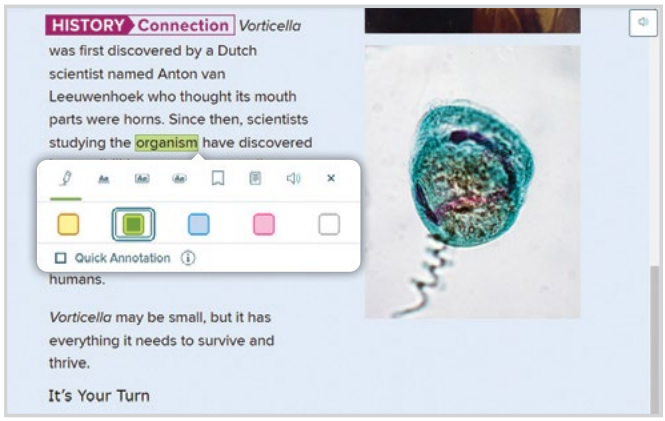
Simulations

Simulations offer a chance to experience real life scenarios that depict true events. These proven tools improve learning as well as create safe and engaging learning environments where failure is possible, something that is often missed when students are learning.



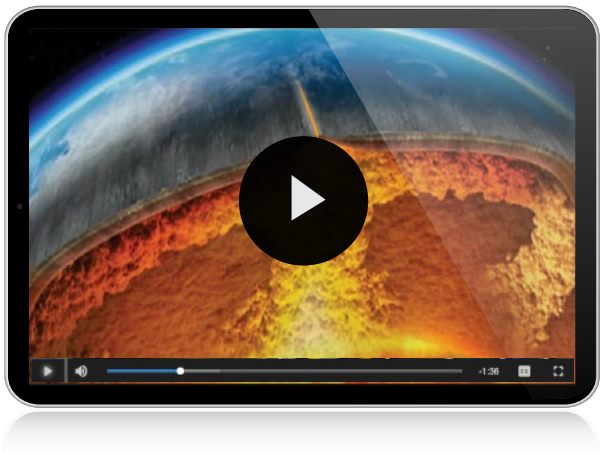
Virtual Labs

Virtual Labs provide an alternative engaging way for students to interact with an experiment that cannot always be done in a classroom setting. These interactive Virtual Labs are found throughout your *Mississippi Inspire Science* program.



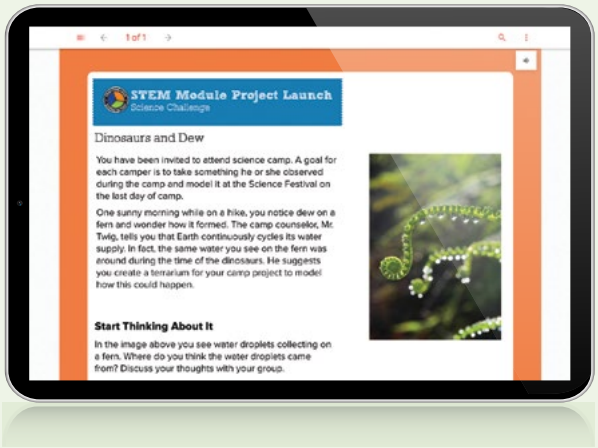
Interactive Text

Engage students in online literacy learning with tools like text to speech, note-taking, and text highlighting. Interacting with learning creates a dynamic experience that's more engaging and will improve student learning and retention.



Videos

Enhance teaching and learning with videos that reinforce concepts and spark discussion. Videos encourage students to hone their analytical skills by analyzing media using the theories and concepts they are studying and to experience worlds beyond their own.



Project-Based Learning

Mississippi Inspire Science provides activities and instruction that progress toward a culminating STEM Module project where students meet grade-level Performance Expectations.

McGraw Hill K–12 Portal App

Students can access their content anywhere, any time, on any device—with or without internet access—using the McGraw HIll K–12 Portal App.

Mississippi Assessment Strategies

Mississippi Inspire Science includes a variety of digital assessment options to support teachers with differentiation strategies and support students on their journey to mastery of the Mississippi CCRS for Science and culminating with success.

Each *Mississippi Inspire Science* lesson begins with a Formative Assessment Science Probe.

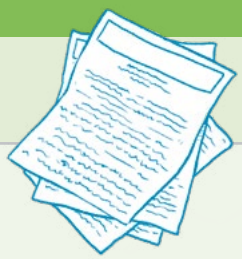
Page Keeley, M.Ed.

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

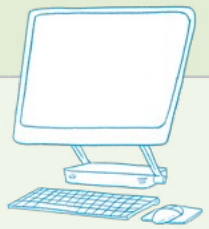
Formative assessment, embedded at many points throughout each module and lesson, facilitates student reflection on their thinking (metacognition) and allows teachers to dynamically differentiate instruction. The table below shows the types of formative assessment resources in *Mississippi Inspire Science*.

FEATURE	INSTRUCTIONAL PURPOSE
Page Keeley Science Probes	Found at the beginning of each lesson, **Science Probes** reveal student preconceptions to guide instruction.
Claim-Evidence-Reasoning	With the **CER Framework** (Claim/Evidence/Reasoning), found in all 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.
Three-Dimensional Thinking Questions	Students will encounter questions that address at least two of the three dimensions of the Mississippi CCRS for Science.
LABS and INVESTIGATIONS	In each **Lab** or **Investigation** (2–3 per lesson), students may encounter analyzing and concluding questions that help build Three-Dimensional Thinking.
SmartBook®	*SmartBook* transforms the way students read. A proven, adaptive learning program, it individualizes instruction to help students study more efficiently and retain more knowledge.



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 *Mississippi Inspire Science*.

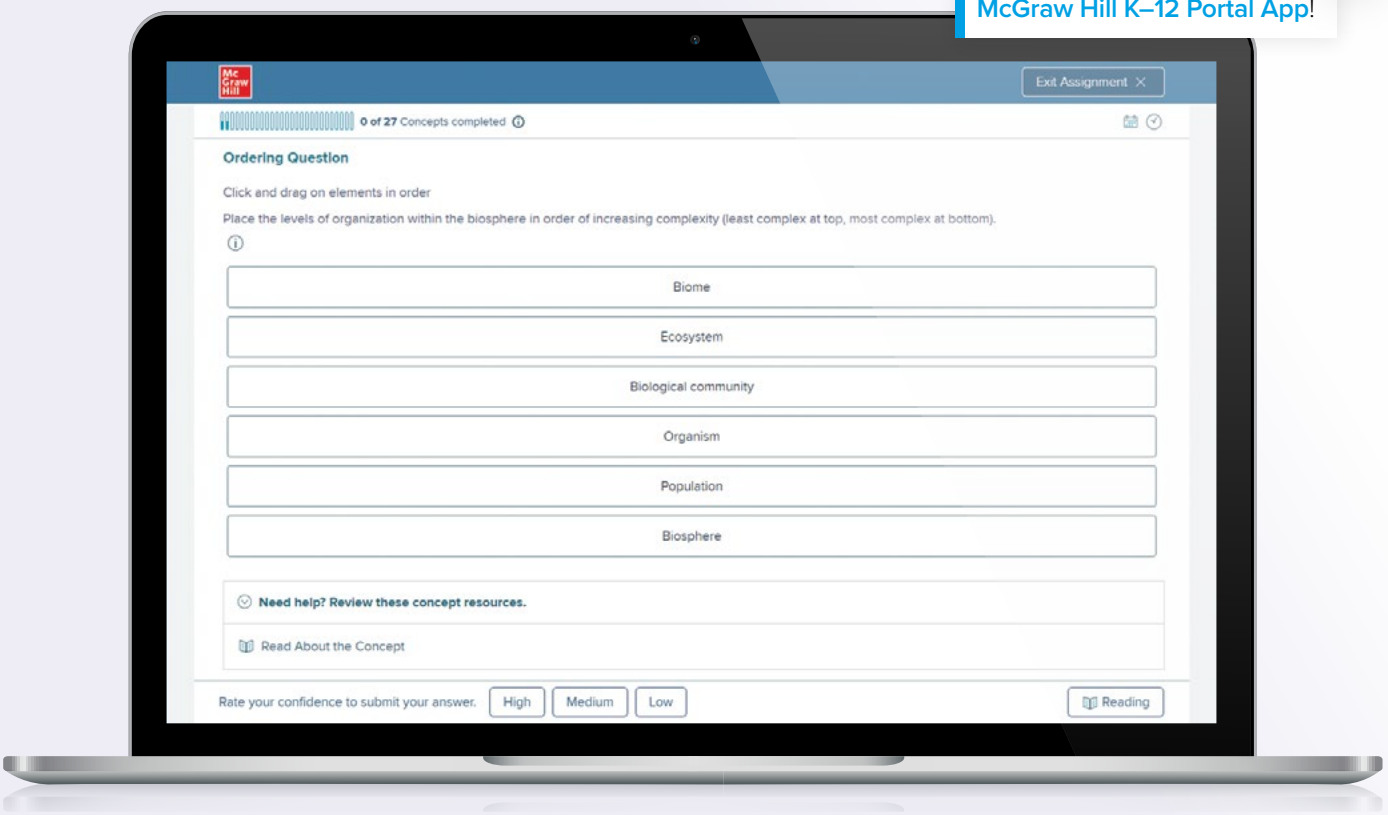
FEATURE	INSTRUCTIONAL PURPOSE	
Module Pretest	The **Module Pretests**, found at the beginning of each module, assess prerequisite knowledge of Disciplinary Core Ideas from prior grades to evaluate student readiness for the module.	
Three-Dimensional Thinking Questions	At the end of the lessons, students will demonstrate their understanding of at least two of the three dimensions of Mississippi CCRS for Science to develop three-dimensional thinking skills.	
Lesson Check	Found in every lesson online, **Lesson Checks** determine how students are building a progression of learning toward the Performance Expectations.	
Module Test	Found at the end of each module online, **Module Tests** evaluate student proficiency against the performance of the module with multiple choice, extended response, constructed response, and performance-task items.	
STEM Module Project Performance-Based Rubrics	With each STEM Module Project students will complete **Performance-Based Rubrics** and answer summative questions to demonstrate how they've applied their knowledge and understanding of the Performance Expectations to their project.	
Vocabulary Check	Through online interactives, students practice and check their understanding of science language. Immediate feedback from the system is provided.	

Adaptive Learning with *SmartBook*®

Each student enters the classroom with different strengths, interests, and abilities. Eliminate guesswork and get to the heart of their learning needs with adaptive, comprehensive differentiation.

PROGRAM FEATURE!

Smartbook is also available offline with the McGraw Hill K–12 Portal App!



The secret is *SmartBook*, the first and only adaptive reading experience designed to change the way students read and learn. As the student progresses, *SmartBook* highlights the most impactful concepts the student needs to learn. When *SmartBook* detects what a student is most likely to forget, that content is presented for review to improve the student's knowledge retention.

Real-Time Reporting Tools

Find efficiencies by managing and tracking individual student progress and the progress of the whole class. Teachers can focus on what students don't understand or still need to learn, rather than what they've already mastered.

See the duration students take to complete the assignment compared to the estimate.

Challenging concepts are revealed as students wrap up assignments, giving teachers the chance to reinforce topics before the next lesson.

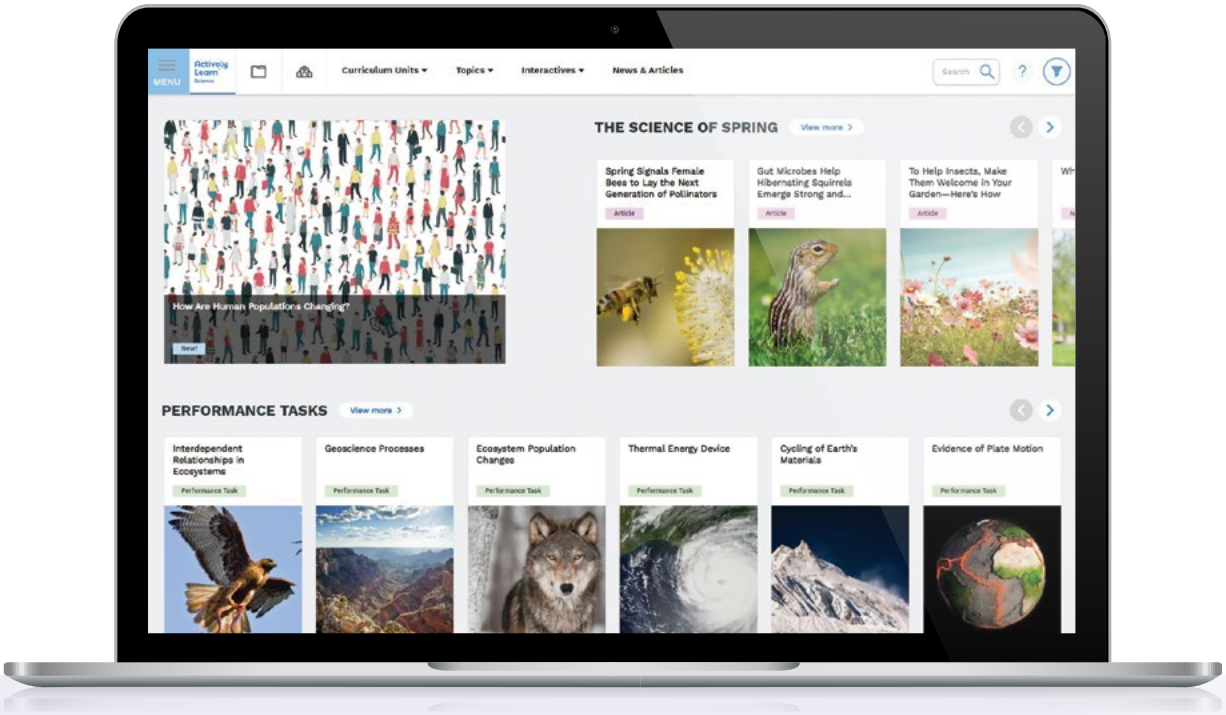
Track progress on the assignment as students work through the questions.

Breakdown reporting to the individual student level.

Drive Deeper Science Learning With *Actively Learn*

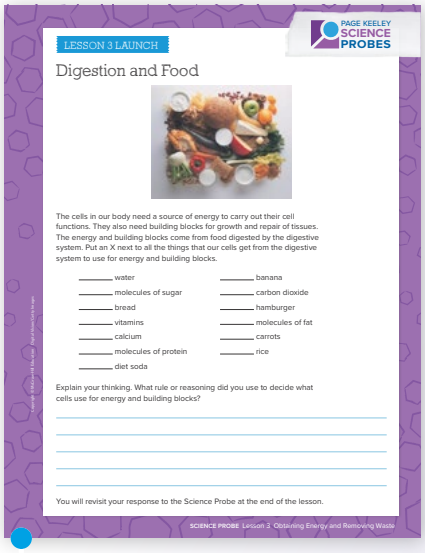
As educators, we know how important it is to keep students engaged.

That's why each *Mississippi Inspire Science* module and lesson is designed to tap into students' natural curiosity about the world around them through the investigation of real-world phenomena. Student engagement is further fueled through an innovative digital experience, and connections to real-world applications with *Actively Learn*.



- **Engaging, relevant, standards-based content** for all learners
- **Science texts, articles, and videos** at each student's level
- **Inquiry-driven science simulations** that bring natural phenomena to life
- **TUVA Data Sets and PhET Simulations** include teacher instructional support
- **Interactive reading and study aids** that promote active collaboration
- **Rich, cross-curricular connections** to other subjects
- **Powerful tools** that let teachers customize content or upload their own
- **Access to student data** to inform instructional decisions

Fuel Student Engagement Using the World Around Them

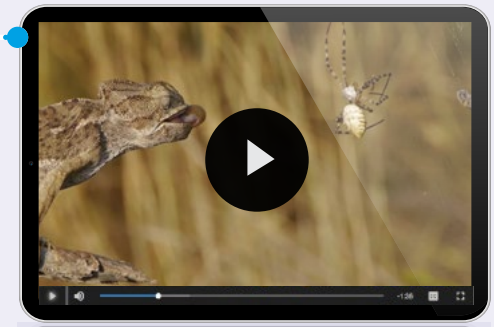


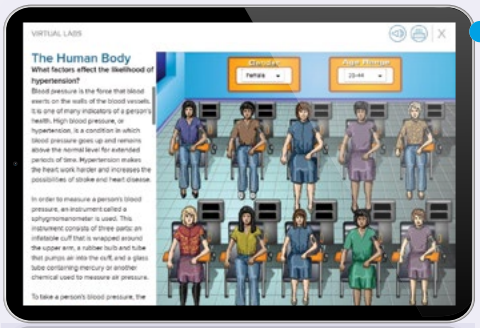
Science Probes

Page Keeley Science Probes are module launch questions centered around relevant phenomena designed to interest and get students talking about their ideas. When students do the talking, it is evidence that they are thinking and provides you an avenue to uncover and resolve commonly-held 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.





Virtual Labs

Extend experiments beyond the classroom setting. With Virtual Lab, students have an engaging, alternative, digital interaction to interact with an experiment.

STEM Module Project

Planning and Completing the Science Challenge

How will you meet this goal? The concepts you will learn throughout this module will help you plan and complete the Science Challenge. Just follow the prompts at the end of each lesson!

STEM Module Projects

Introduce students to real-world STEM Science or Engineering Challenge to get them thinking about questions they have, what plan they can put in place to complete the challenge, and begin experiencing the same engineering-design processes, including research and experimentation, just like science professionals do.

Ongoing Professional Learning

Professional Development

We know it can be a challenge to implement a new science program with new standards. That's why *Mississippi 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.

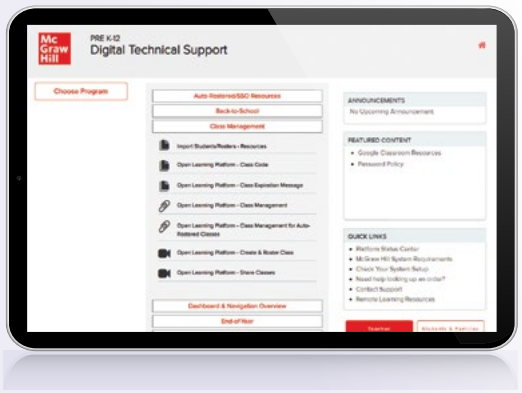
Program Implementation Support

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

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

Digital Platform Support

In the Technical Support Resource Library, you will find step-by-step instructions for each of your digital tools to help you feel confident planning, teaching, and assessing in the digital experience.



Ongoing Pedagogy Support

Access a wide range of resources on key instructional and pedagogical topics, including videos from program authors and consultants.

Seamless Integration Services

We are proud to work with schools across Mississippi 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.

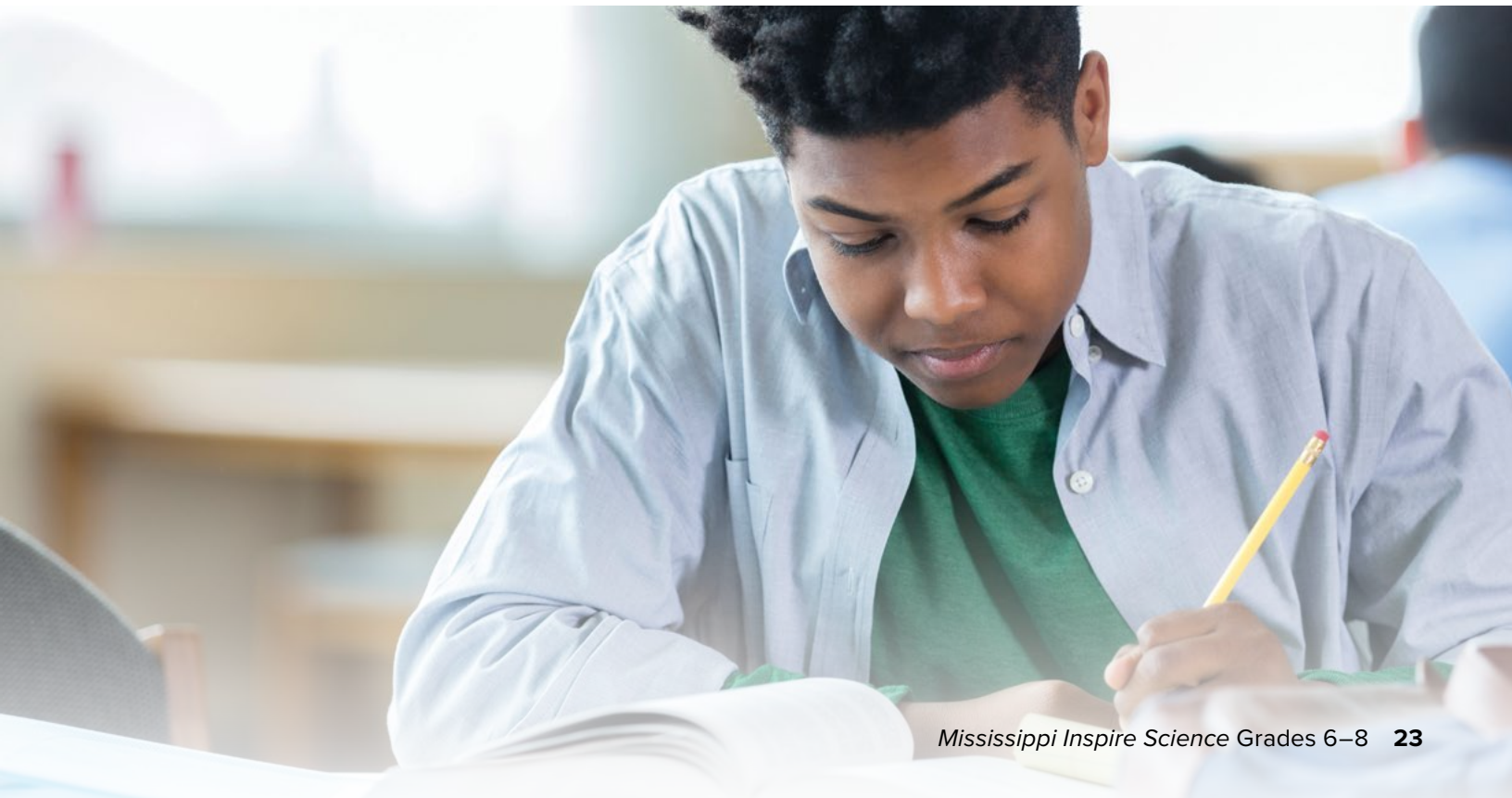
Google Classroom

Clever

CANVAS BY INSTRUCTURE

PowerSchool

schoology



Mississippi Inspire Science

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