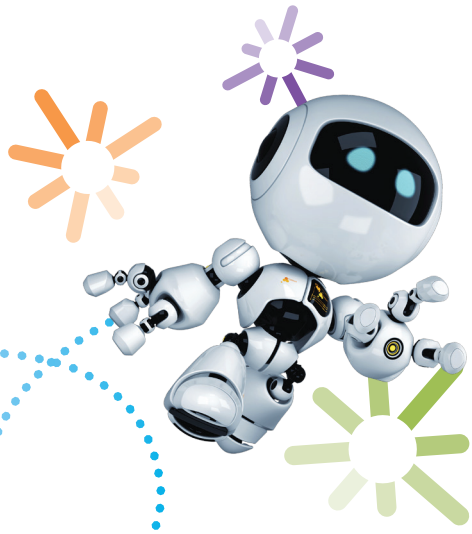
Mc Graw Hill Education

mheducation.com/prek12Tennessee



TENNESSEE

Inspire Science

User-Friendly • Connected • Inspiring

Digital Tour Guide

Welcome to the *Tennessee Inspire Science* Digital Experience

Thank you for taking the time to review Tennessee Inspire Science. This step-by-step Digital Tour Guide will help you find your way through the many engaging interactives that support Tennessee Inspire Science print resources.

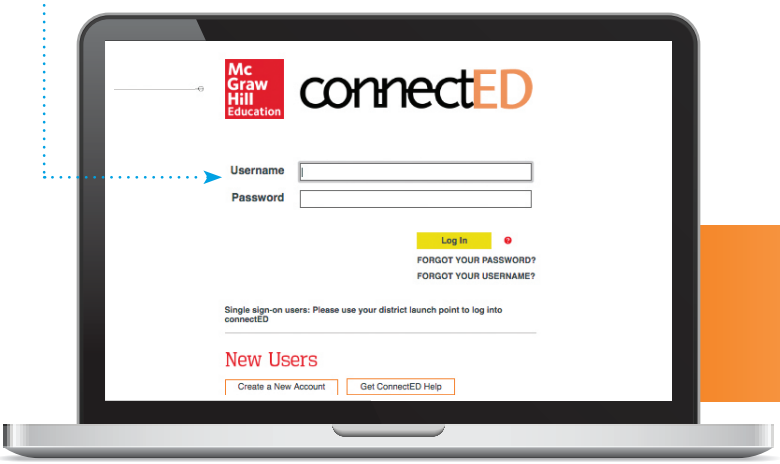
HALEY
Astronomer

Ready to Start **Your Digital Tour?**

Visit **connected.mcgraw-hill.com**

Log In

To get started, go to **connected.mcgraw-hill.com,** enter your username and password, received from registration at mheonline.com/tennessee and select the yellow Log In button.

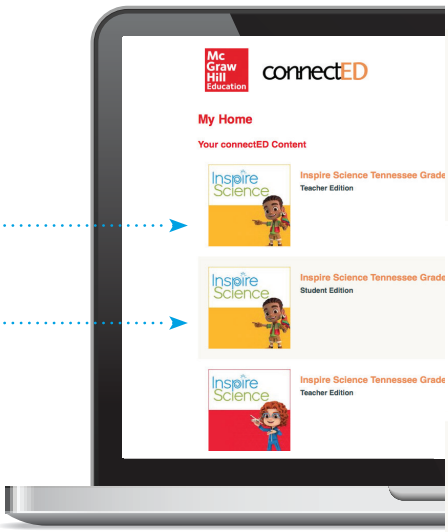


Learn how to access **Tennessee Correlations** and the **Reviewer's Guide** on page 3.

My Home

The *Tennessee Inspire Science* Digital Book Bag

Once you log in, the first screen you will see is "My Home"—also known as the ConnectED Book Bag. This view provides access to your student and teacher courses.



Access the Digital **Teacher Center**

Access the Digital **Student Center**

NOAH
Nurse

Start Here!
Click any course to start.


Inspire Science Tennessee Grade K
Teacher Edition


Inspire Science Tennessee Grade K
Student Edition

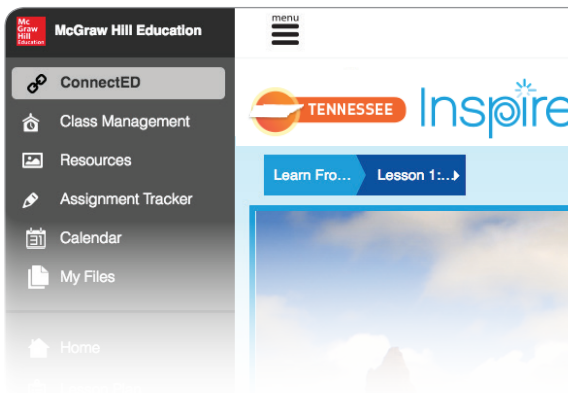

Inspire Science Tennessee Grade 1
Teacher Edition


Inspire Science Tennessee Grade 1
Student Edition


Inspire Science Tennessee Grade 2
Teacher Edition

Need to Return to My Home?

To get back to your book bag, just select "ConnectED" from the main menu.



Teacher Center Home Page

The Tennessee Inspire Science Teacher Center home page provides quick access to your Lesson Presentations, the Student Lesson view, the STEM Career Kid Videos, and Assignments. Just select the module and lesson you need from the Module and Lesson Menu, and the key tools for that lesson will appear in the Lesson Resources carousel.

Main Menu

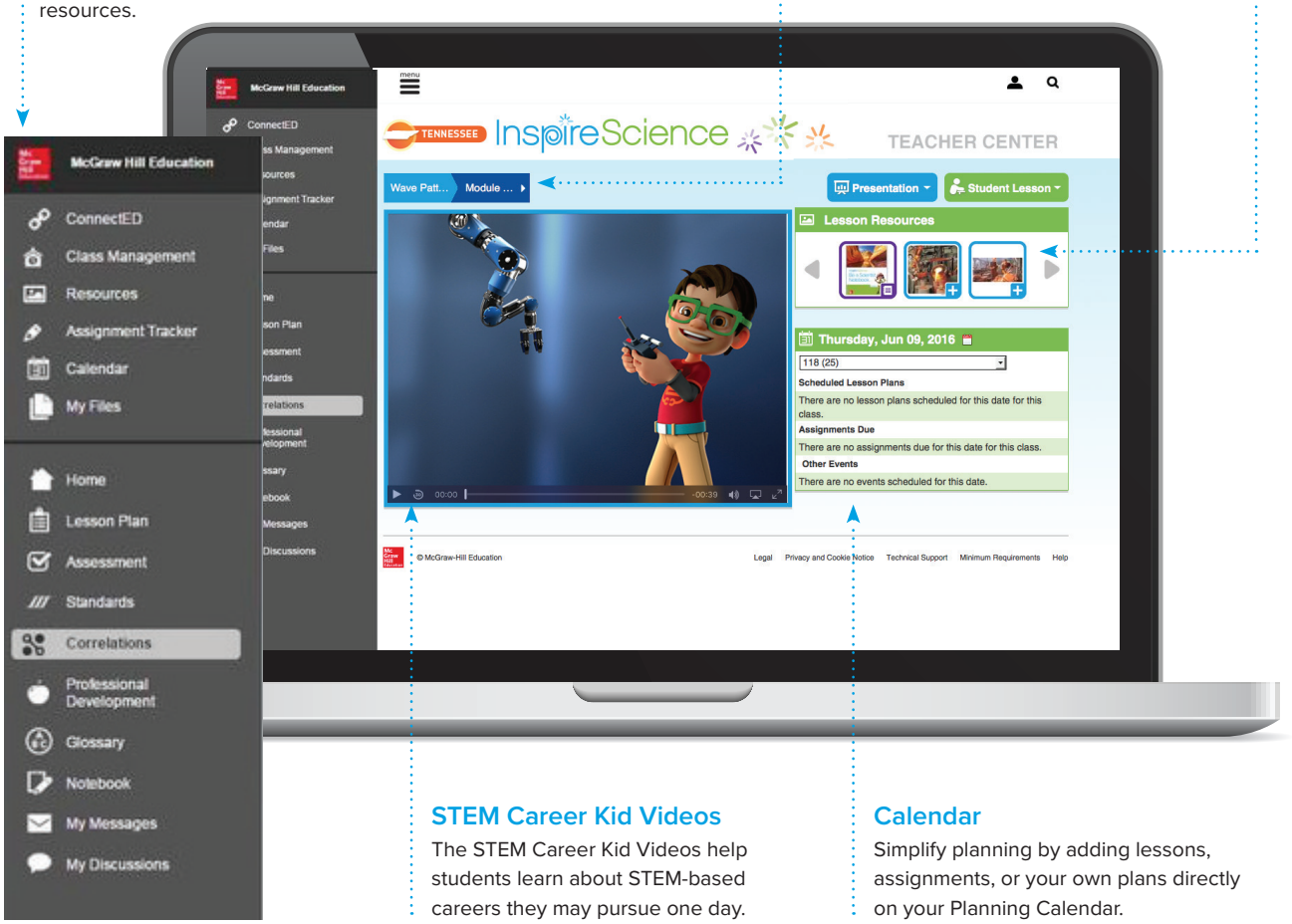
Open the Main Menu to access the key links, including your Digital Lesson Plans and Professional Development resources.

Module and Lesson Menu

Access digital resources by choosing the module and lesson from the drop-down menu.

Lesson Resources Carousel

This is one of the many ways to access digital resources that accompany each lesson.



STEM Career Kid Videos

The STEM Career Kid Videos help students learn about STEM-based careers they may pursue one day.

Calendar

Simplify planning by adding lessons, assignments, or your own plans directly on your Planning Calendar.

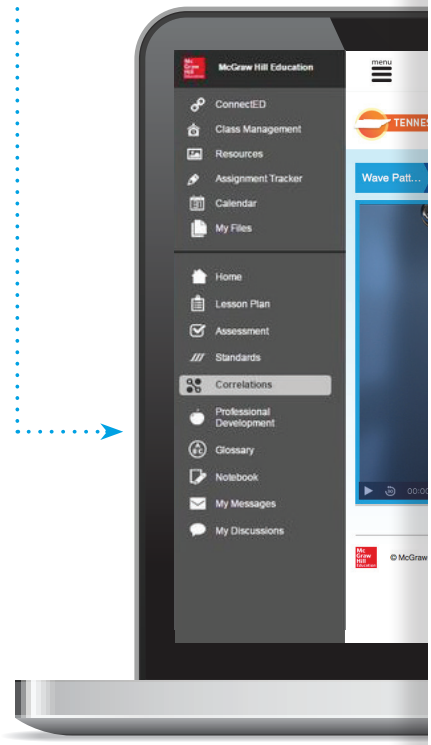
Access Correlations and Review's Guide

We know reviewing a new curriculum program in a digital experience can be a challenge. That's why we've provided a number of resources to help make your review as easy as possible, including an interactive correlations tool where you can link directly from a correlations table to the digital content that meets the standard.

First, select the Main Menu by clicking menu

To access the Reviewer's Guide, select Correlations from the Main Menu:

Just click on "Correlations" in the Main Menu and you will see the tools you need to get familiar with the overall program design and the alignment to Tennessee Academic Standards for Science.



1 Welcome & Orientation

The Welcome & Orientation provides a brief introductory look at the Tennessee Inspire Science program.

2 Tennessee Science Correlation

The Tennessee Science Correlation provides you with direct links to the resources that meet each of your science standards.

3 Digital Tour Guide

The Digital Tour Guide provides you with a step-by-step guide for reviewing the Tennessee Inspire Science digital Teacher Center and Student Center in the ConnectED teaching and learning environment.

4 Program Overview

The Program Overview allows you to learn more about the Tennessee Inspire Science instructional model, lesson format, program components, and engaging resources.

Lesson Presentation

The Tennessee Inspire Science Lesson Presentations provide a step-by-step guide through each lesson. The presentations are completely aligned to the lesson content, fully customizable, and embedded with multimedia assets.

Customize Presentations

Quickly and easily customize each presentation by adjusting existing slide order or uploading your own resources to the presentation in the slide sorter view.

To access this slide sorter view, select the waffle icon in the bottom left-hand corner of your lesson presentation view.

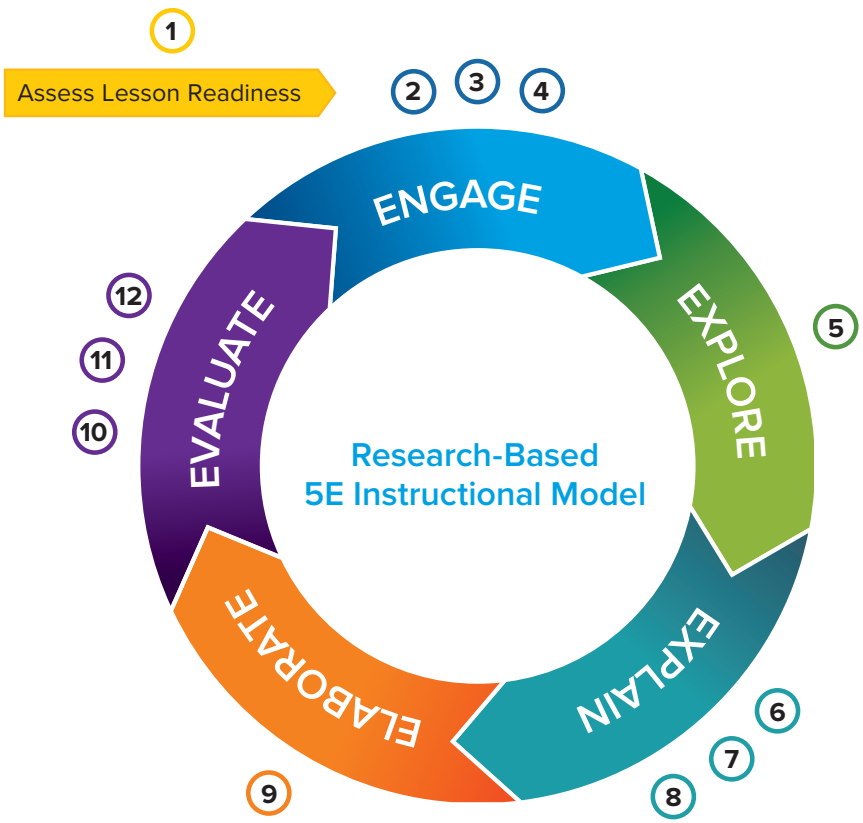
Launch Digital Resources

You can launch digital resources right when you need them directly from the presentation slides.

MAYA
Geologist

The Tennessee Inspire Science Lesson Anatomy

Inspire Science lessons are designed with the familiar and proven 5E instructional model, and the McGraw-Hill Education Key Steps to Three-Dimensional Instruction. Each lesson begins with a phenomenon to explore through the lens of the science and engineering practices. This exploration presents new questions and problems to solve, which creates a motivational circumstance for learning the content knowledge of the Disciplinary Core Ideas.



Key Steps to Three Dimensional Instruction

1. Page Keeley Science Probes
2. Science in Our World
3. Essential Question
4. Science and Engineering Practices
5. Inquiry Activity
6. Obtain and Communicate Information
7. Reflect and Refine
8. Science and Engineering Practices
9. Research, Investigate, and Communicate
10. Performance Task
11. Essential Question
12. Science and Engineering Practices

Approximate Pacing

(based on 45-minute teaching blocks)

Module = 1 month of instruction

Lesson = 8-10 days of instruction

Fast Track = 4-6 days of instruction

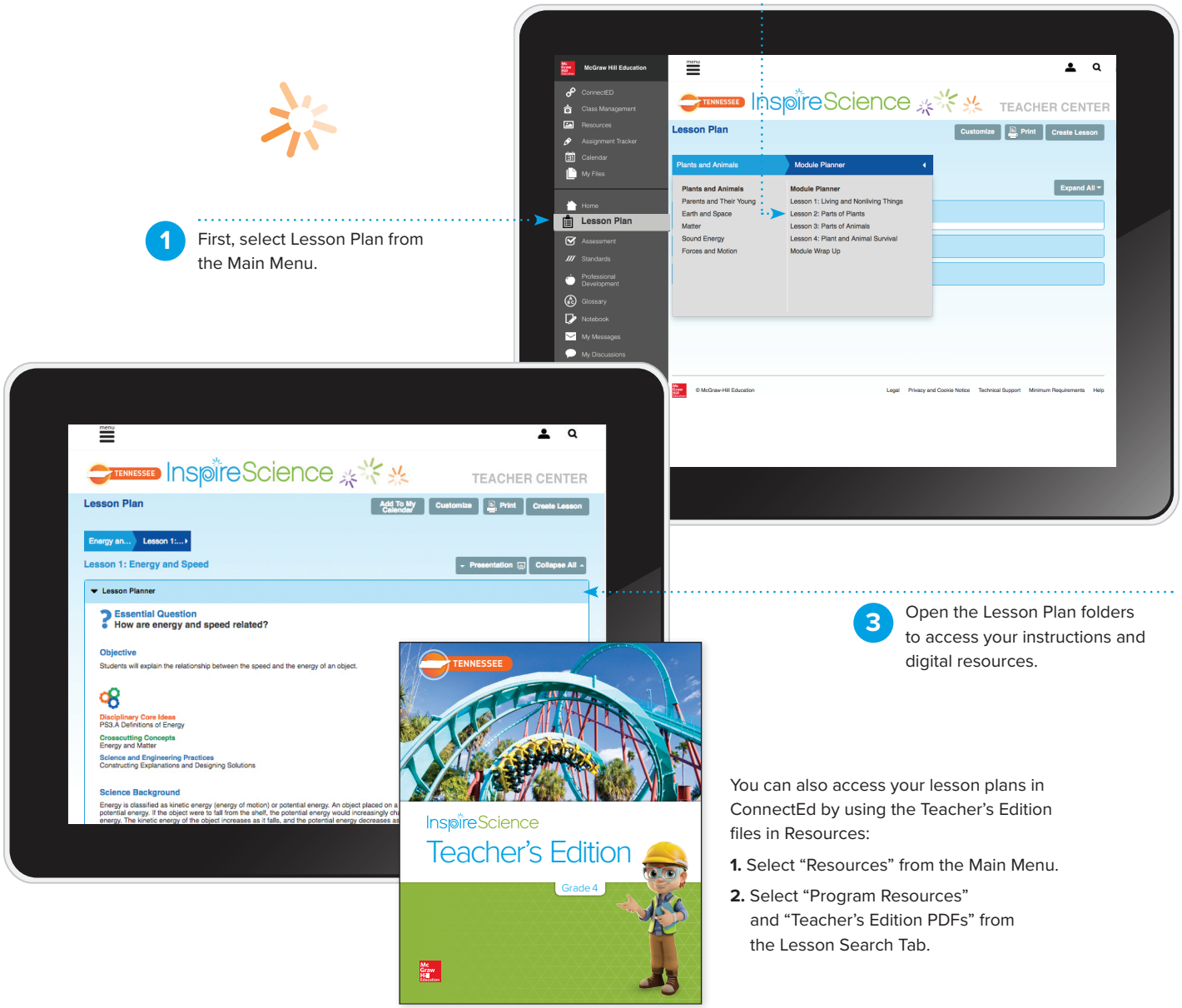
Lesson Plans

The Tennessee Inspire Science Lesson Plans are easy to use and fully customizable, giving you complete control of how you craft your lessons. All the resources you need are conveniently located in one place with access to a myriad of robust materials for every lesson.

To access the Tennessee Inspire Science digital lesson plans, select Lesson Plan from the Main Menu :

1 First, select Lesson Plan from the Main Menu.

2 Choose the module and lesson you need from the Module and Lesson Menu.



3 Open the Lesson Plan folders to access your instructions and digital resources.

You can also access your lesson plans in ConnectEd by using the Teacher's Edition files in Resources:

1. Select "Resources" from the Main Menu.
2. Select "Program Resources" and "Teacher's Edition PDFs" from the Lesson Search Tab.

▼ Module at a Glance

Module at a Glance

Each Module at a Glance includes a module overview, lesson summaries, and easy-to-use pacing guides. Be prepared with the Plan Ahead section that includes detailed materials lists for each hands-on activity.

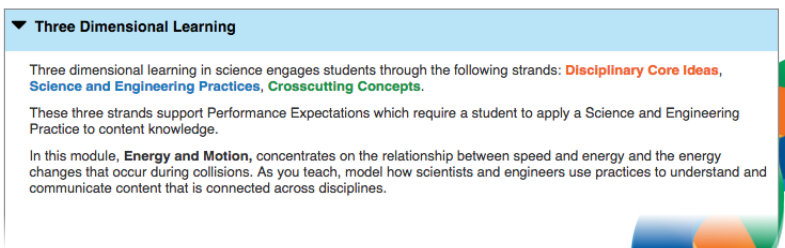
CJ
Statistician

To help you prepare ahead of time, the hands-on activities and the materials you will need are listed in the Module at a Glance folder.

▼ Three Dimensional Learning

Three Dimensional Learning

Explore the Three Dimensional Learning folder and see how the three strands support Performance Expectations, as well as the ELA/Literacy and Mathematic cross-curricular connections. Three-dimensional learning in science engages students in an approach that continually extends, refines, and revises knowledge.



Prior Knowledge

WHAT STUDENTS SHOULD KNOW GOING INTO THIS MODULE

Disciplinary Core Ideas

THE CONTENT IN FOCUS

(for example, "The Universe and Its Stars")

Science and Engineering Practices

THE SKILLS

(for example, "Developing and Using Models")

Crosscutting Concepts

THE COMMON THEMES

(for example, "System and System Models")

Tennessee Academic Standards for Science

STUDENTS APPLY AND DEMONSTRATE THEIR UNDERSTANDING

Students apply and demonstrate their understanding by using the Disciplinary Core Ideas, the Science and Engineering Practices and the Crosscutting Concepts together.

(for example, "Use observations of the sun, moon, and stars to describe patterns that can be predicted.")

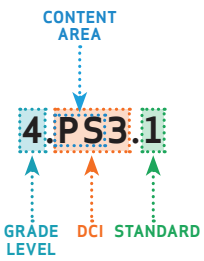
Cross-Curricular Connections

LITERACY MATH

ALL GREAT SCIENTISTS AND ENGINEERS NEED STRONG LITERACY AND MATH SKILLS.

The Tennessee Inspire Science lesson include cross-curricular connections with quick and easy references to the specific literacy and math skills being reinforced through the science investigations.

Decoding the Tennessee Academic Standards for Science



Inspiring All Students

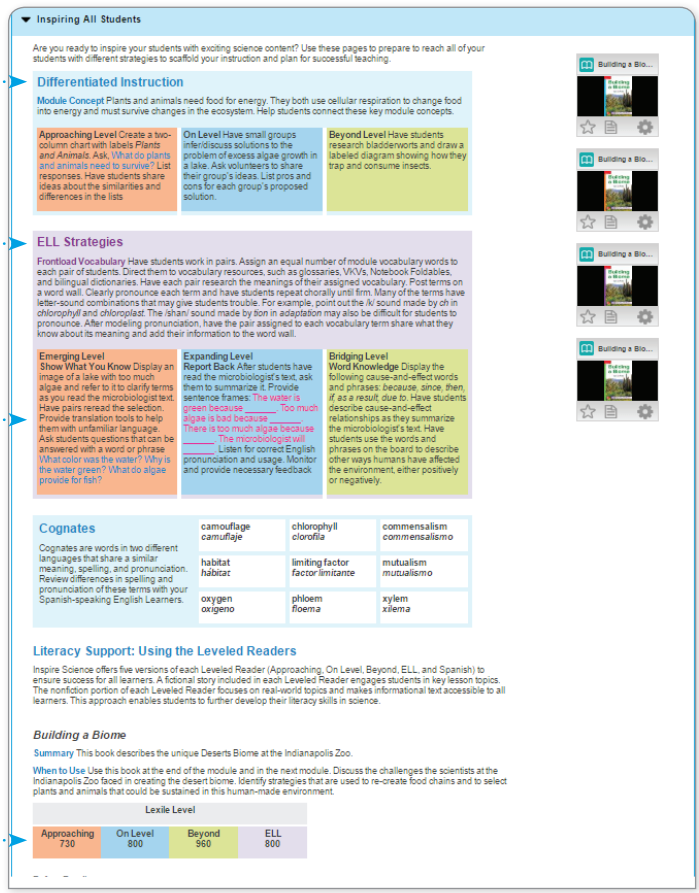
Use differentiated instruction, ELL strategies, and leveled readers to inspire all your students to learn exciting science concepts.

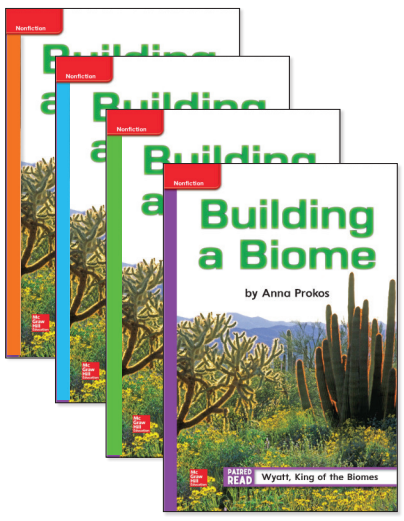
Provide meaningful content interaction by scaffolding differentiated strategies.

Facilitate learning by frontloading important content vocabulary.

Integrate literacy skills and science content together to build language and expand science knowledge simultaneously.

Use Lexile levels to easily determine the correct book for each of your students.





Tennessee Inspire Science offers two leveled reader titles per module with five versions of each (Approaching, On Level, Beyond, ELL, and On-Level Spanish) to ensure success for all learners. Each leveled reader is available in digital and print.

- Approaching
- On Level (available in Spanish)
- Beyond
- ELL

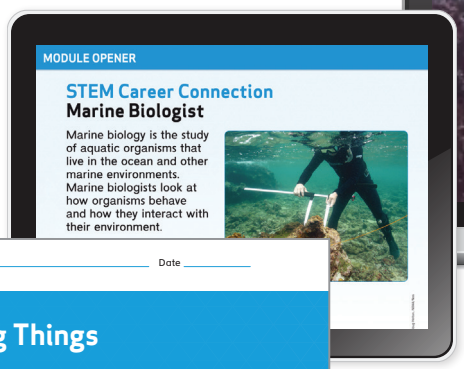
Module Opener

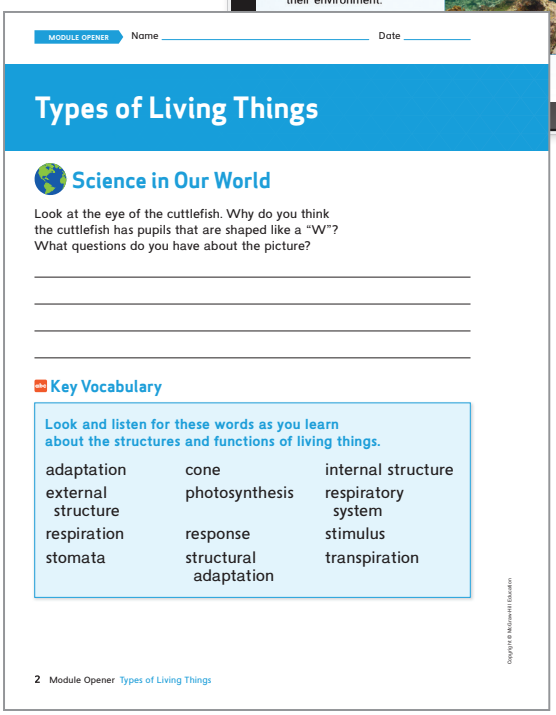
Module Opener and Science Phenomenon

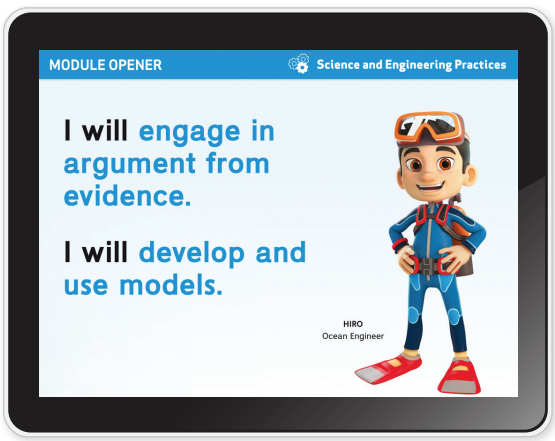
The Module Opener kicks off the module by exploring an exciting science phenomenon with STEM career connections.

Every module begins with a video or picture of a science phenomenon and a phenomenon question that will spark students' curiosity and start an engaging conversation that promotes deeper thinking.

Make STEM career connections.







"I will . . . " statements reference a science and engineering practice and provide students with an overview of what they will be learning.

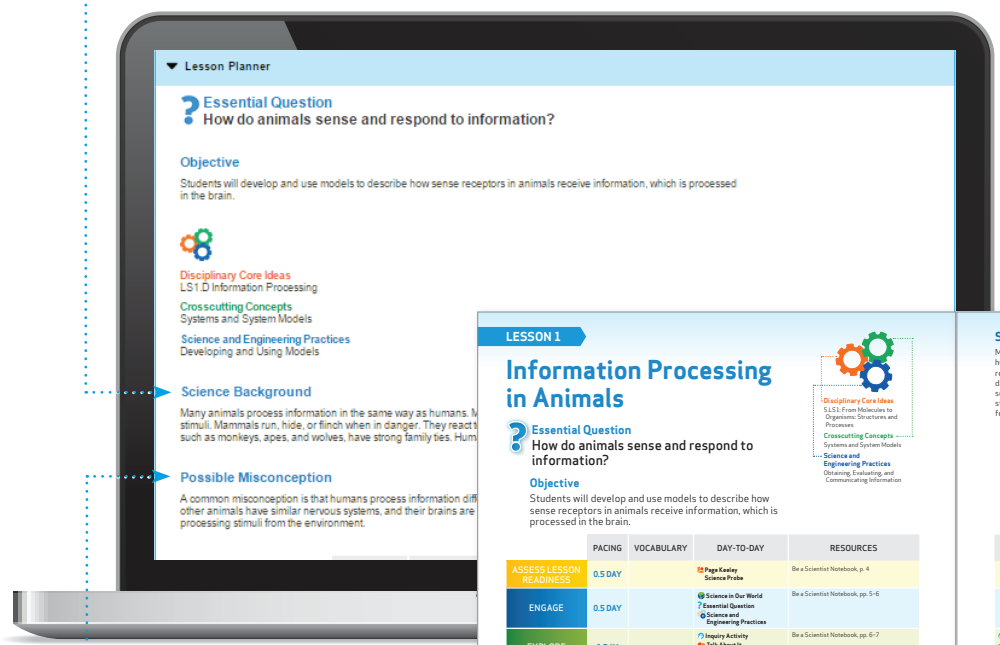
Lesson Planner

Lesson Planner

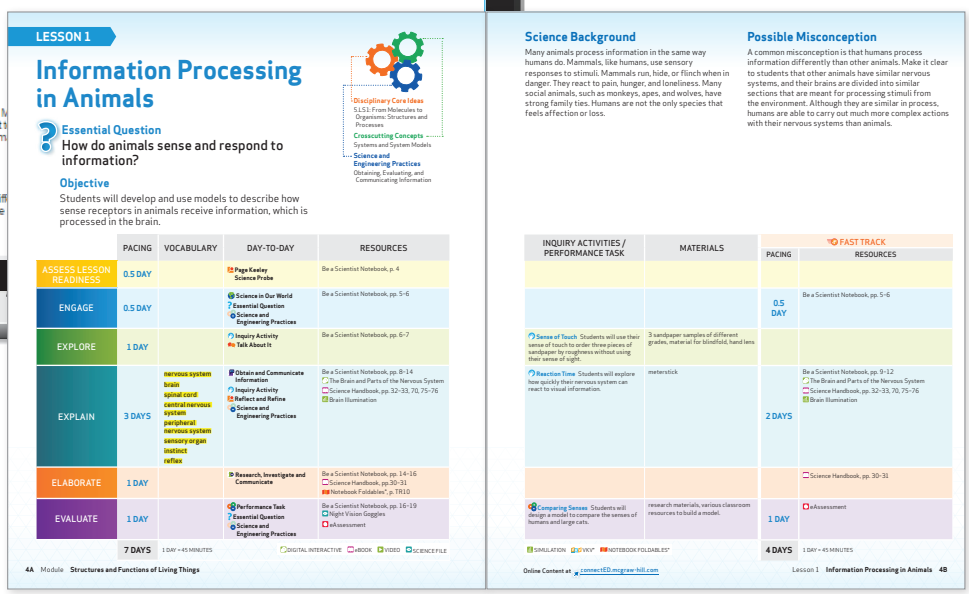
Within each lesson, the lesson plan introduces you to the essential question, lesson objectives, and a detailed pacing guide. Feel supported with thorough science content background information and common misconceptions.

JORDAN
Animal Trainer

Each lesson has detailed science background information to help you feel like a science guru.



Possible misconceptions are provided so you are prepared to address student misunderstandings.



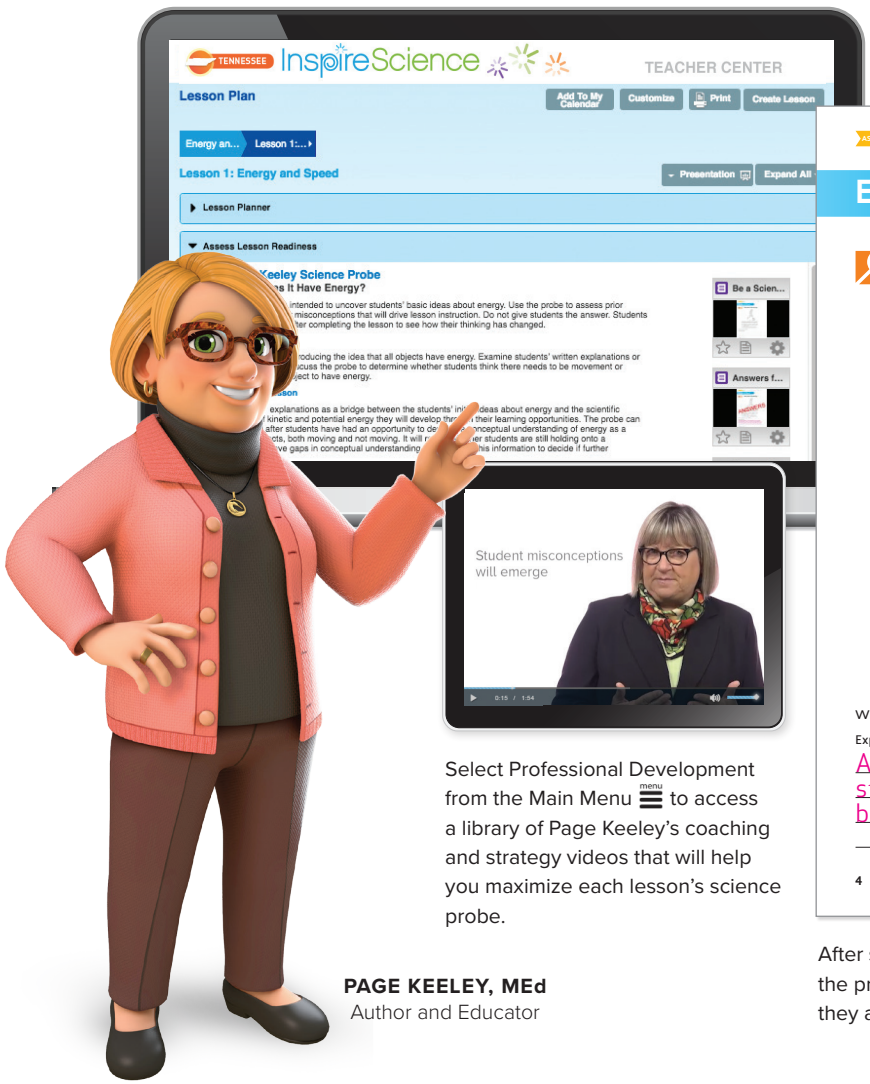
The lesson pacing guide breaks down the day-to-day instruction, the resources you will use, hands-on activities, and the necessary materials.

Fast track pacing is also available when time is of the essence.

Assess Lesson Readiness

Assess Lesson Readiness with Page Keeley's Science Probes

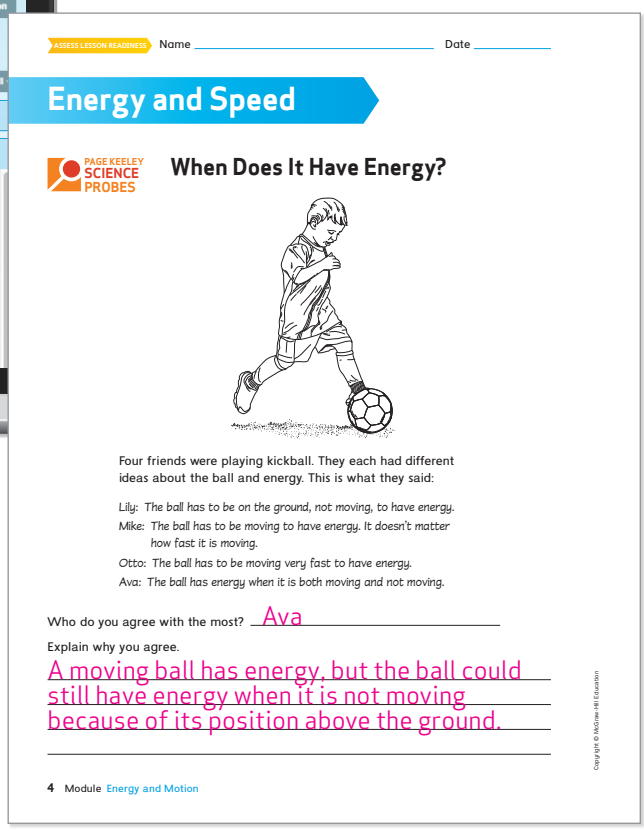
You will be able to assess student readiness with a Page Keeley Science Probe in every lesson. Each Page Keeley Probe includes teaching and learning implications, how to use the probe, common misconceptions, and a teacher explanation.



Select Professional Development from the Main Menu ☰ to access a library of Page Keeley's coaching and strategy videos that will help you maximize each lesson's science probe.

PAGE KEELEY, MEd
Author and Educator

Page Keeley's Science Probes are included in every lesson. The science probes are intended to uncover students' initial ideas.



ASSESS LESSON READINESS Name _____ Date _____

Energy and Speed

PAGE KEELEY SCIENCE PROBES

When Does It Have Energy?

Four friends were playing kickball. They each had different ideas about the ball and energy. This is what they said:

Lily: The ball has to be on the ground, not moving, to have energy.
Mike: The ball has to be moving to have energy. It doesn't matter how fast it is moving.
Otto: The ball has to be moving very fast to have energy.
Ava: The ball has energy when it is both moving and not moving.

Who do you agree with the most? Ava

Explain why you agree.

A moving ball has energy, but the ball could still have energy when it is not moving because of its position above the ground.

4 Module Energy and Motion

After students record their answers to questions about the probe independently in their Be a Scientist Notebooks, they are encouraged to discuss and display their ideas.

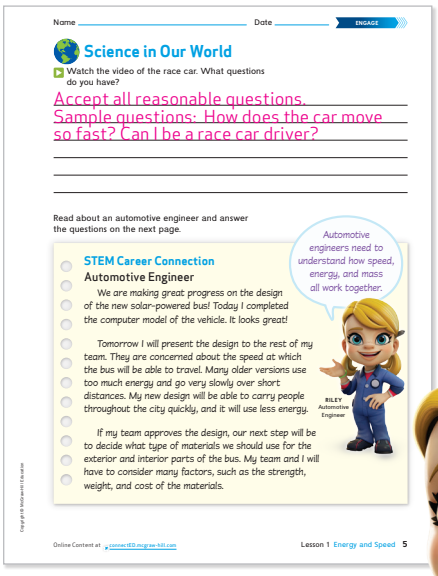
Engage

The Engage phase inspires curiosity with science phenomenon demonstrations, videos, or photos. You'll be able to discover science phenomena through the same lens as scientists and engineers, as well as participate in group discussions that explore core concepts the lesson will reveal. You can then further the conversation and create student interest by introducing the STEM Career Connections.

Spark students' curiosity with the lesson phenomenon and start a conversation.

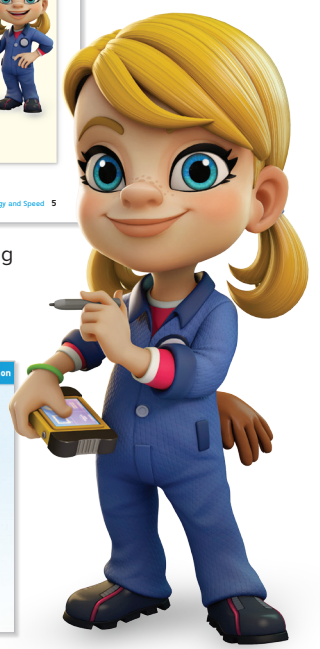
Learn about an exciting STEM Career that connects with the lesson.

Collect evidence throughout the lesson to engage in Science and Engineering Practices.



Help students improve critical learning skills as they turn their observations into questions.

Build upon learning as students use prior knowledge and observations to attempt to answer the Essential Question.

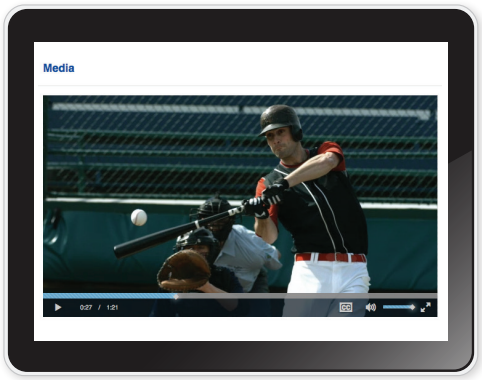


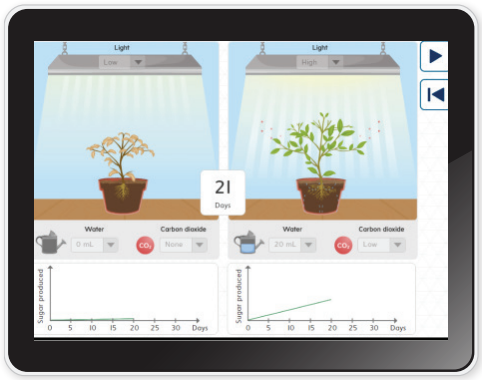
RILEY
Automotive Engineer

Explore

Explore

In the Explore phase of the lesson, students will use hands-on activities, simulations, videos, demonstrations, and more to carry out investigations, collect and interpret data, and get more involved in the lesson concepts to start building understanding.

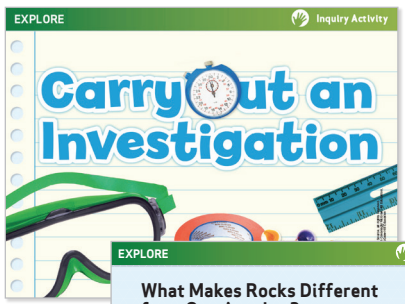


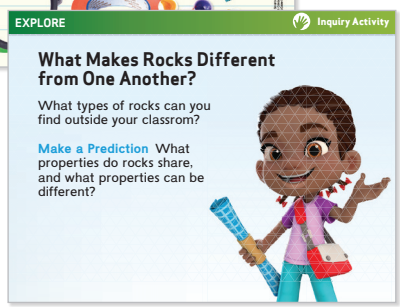


Students will get excited about their learning when they participate in inquiry activities using simulations and videos.

JIN
Paleontologist

Use hands-on activities and teacher-led demonstrations to make predictions, carry out investigations, record and analyze data, communicate findings, and construct explanations.



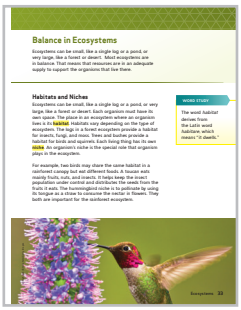


Use interactive tools to communicate findings and make connections.

Explain

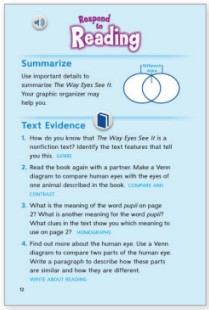
Explain

Connect literacy and science through inquiry by providing students with an array of print and interactive resources to conduct research and explain their understanding. Students develop research and reading skills while deepening their understanding of core science topics, and learn to connect this learning back to prior experiences and the essential question.

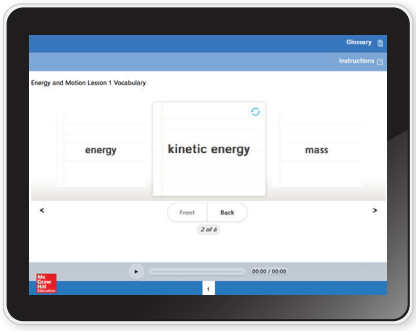


Integrate literacy with science instruction to help your students build literacy skills while they are learning science.

Make fictional and informational text connections with Science Paired Read Aloud books.



Build summary and text evidence skills with leveled readers.



Vocabulary interactives reinforce important terminology and key concepts in a fun and engaging way.

FilamentGames

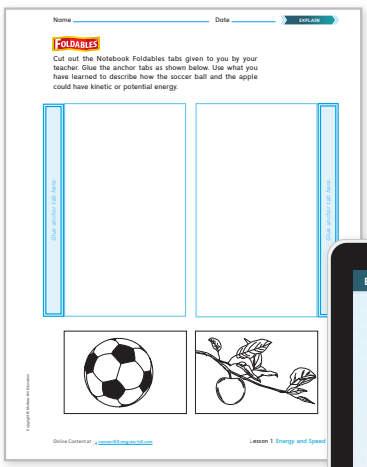
The Tennessee Inspire Science digital learning games (developed by Filament Games) teach and reinforce deeper conceptual science understanding by immersing students in experimental learning through play.

ERIK
Video Game Designer

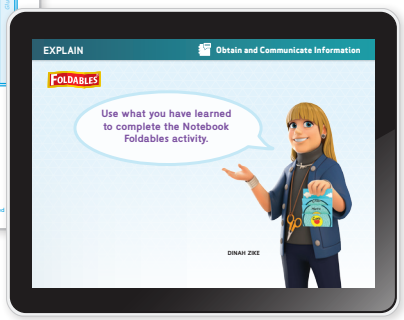
Explain

Further the Explanation with Dinah Zike's Foldables and VKVs

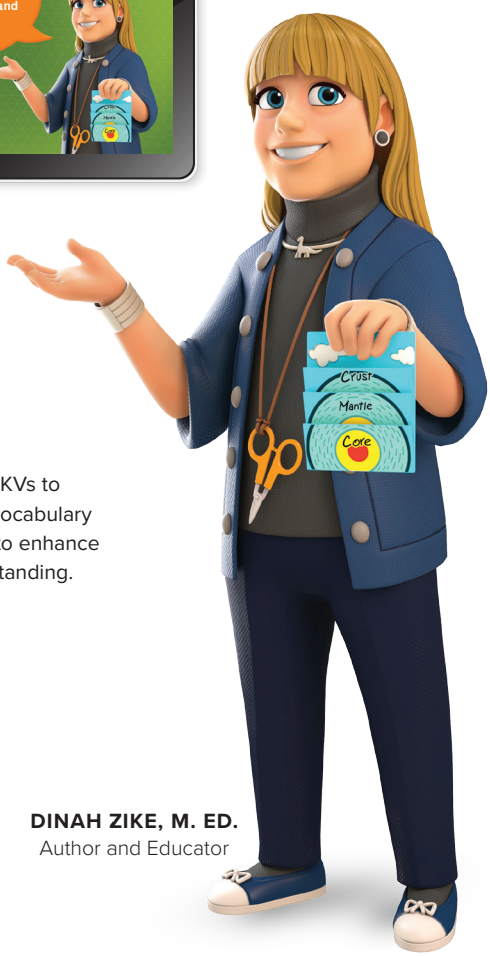
Use Dinah Zike's Notebook Foldables® as a tool to organize important lesson information and Visual Kinesthetic Vocabulary Foldables® to construct meaning and master lesson vocabulary.

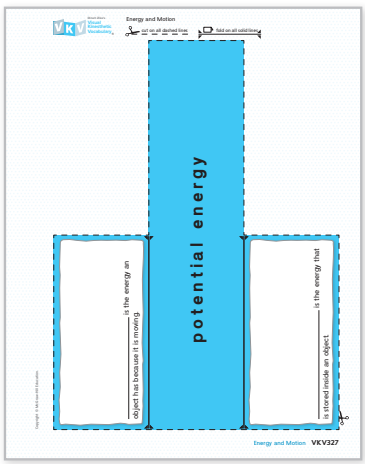


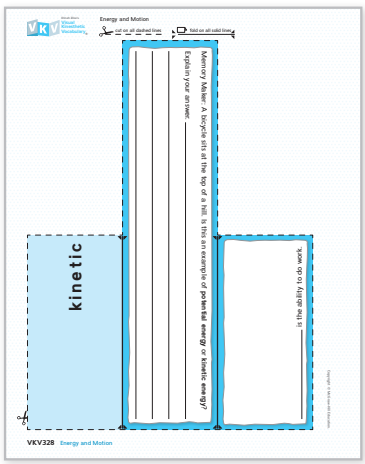
Use Dinah Zike's Notebook Foldables® to organize important lesson information, expand learning, and discuss findings.



Use the Talk About It question to assess students' understanding.





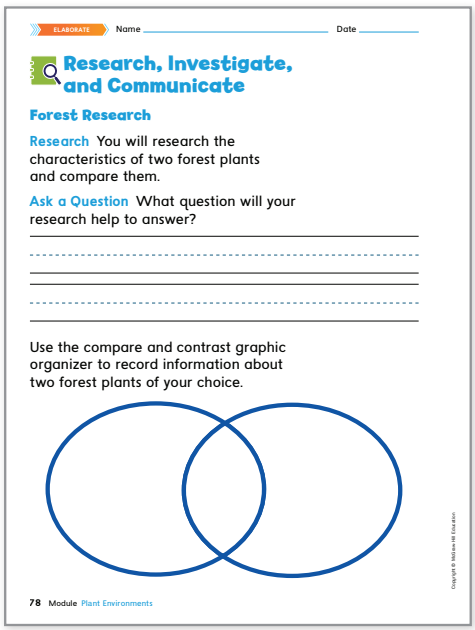


Use Dinah Zike's VKVs to reinforce content vocabulary and key concepts to enhance conceptual understanding.

DINAH ZIKE, M. ED.
Author and Educator

Elaborate

Help your students revise their thinking by reflecting on past answers to see how their judgment has evolved. They will explore new options for further refinement of their understanding through investigations, modeling, research, and communicating with data and evidence.



ELABORATE Name _____ Date _____

Research, Investigate, and Communicate

Forest Research

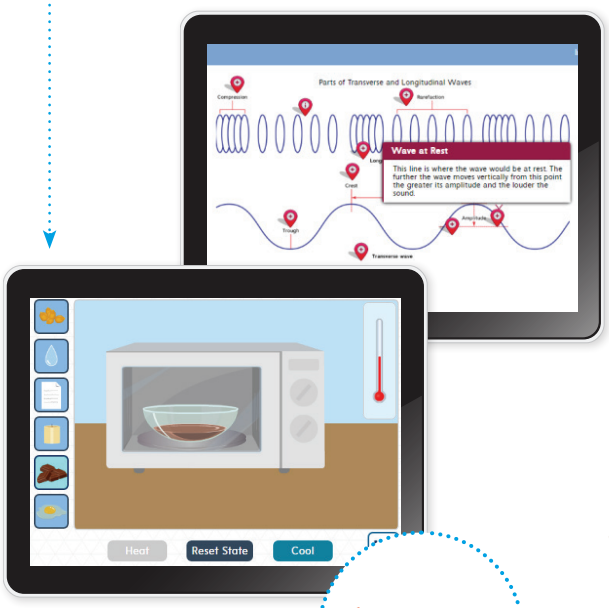
Research You will research the characteristics of two forest plants and compare them.

Ask a Question What question will your research help to answer?

Use the compare and contrast graphic organizer to record information about two forest plants of your choice.

78 Module Plant Environments

Students will conduct research and participate in inquiry activities, simulations, interactives, and more to further their understanding and communicate their findings.



In the Elaborate phase, students expand on what they've learned and advance their communication and writing skills. As well as apply reasoning skills and engage in argument from evidence.

EMILY
Aerospace Engineer

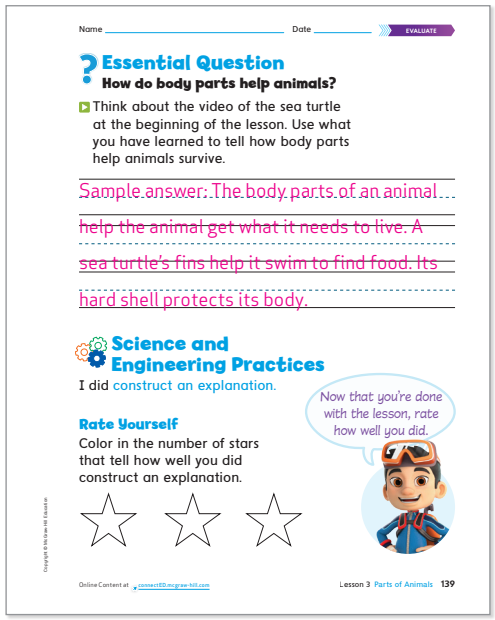
We have partnered with The Concord Consortium to create simulations that provide interactive models that would be difficult to replicate in a classroom.

Evaluate

Evaluate

Guide students to demonstrate their understanding of the Essential Question and phenomenon by completing a final performance task, e-Assessment questions, and the "I Did" statements.

Students reflect on the lesson, then rate themselves on their level of content understanding and their proficiency of the Science and Engineering Practices that were targeted in this lesson.



Name _____ Date _____ EVALUATE

Essential Question

How do body parts help animals?

Think about the video of the sea turtle at the beginning of the lesson. Use what you have learned to tell how body parts help animals survive.

Sample answer: The body parts of an animal help the animal get what it needs to live. A sea turtle's fins help it swim to find food. Its hard shell protects its body.

Science and Engineering Practices

I did construct an explanation.

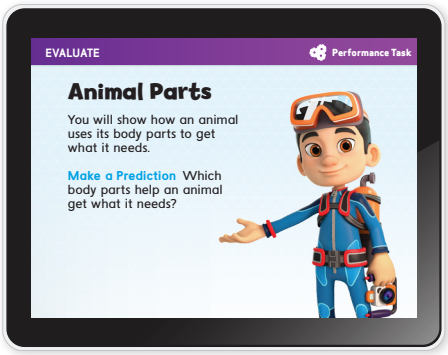
Rate Yourself

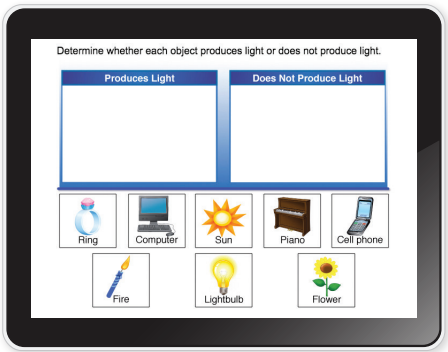
Color in the number of stars that tell how well you did construct an explanation.

Now that you're done with the lesson, rate how well you did.

Online Content at connectED.mcgraw-hill.com

Lesson 3 Parts of Animals 139





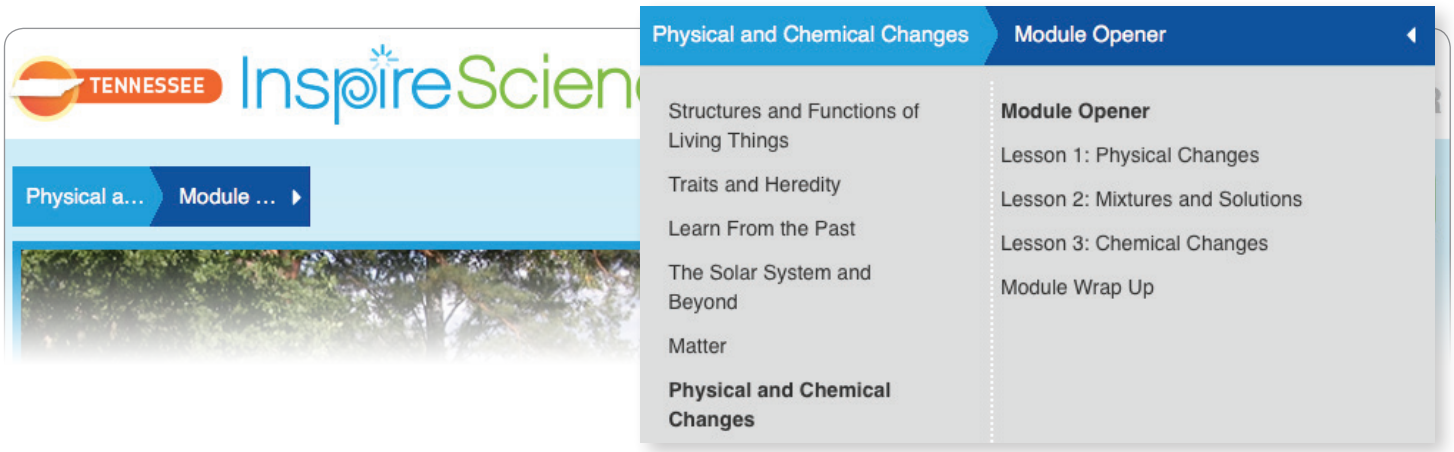
You can assign ready-made lesson tests, or customize a test to your liking.

HIRO
Ocean Engineer

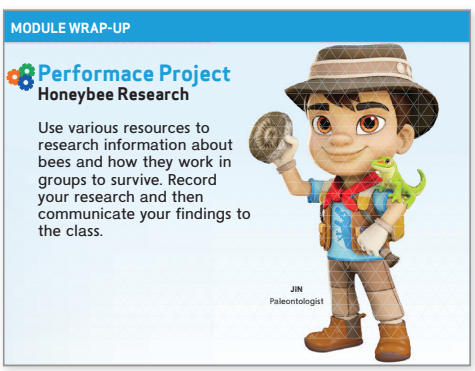
Revisit essential questions to see how student knowledge and thinking has changed, and complete the learning progression with the "I Did" statement.

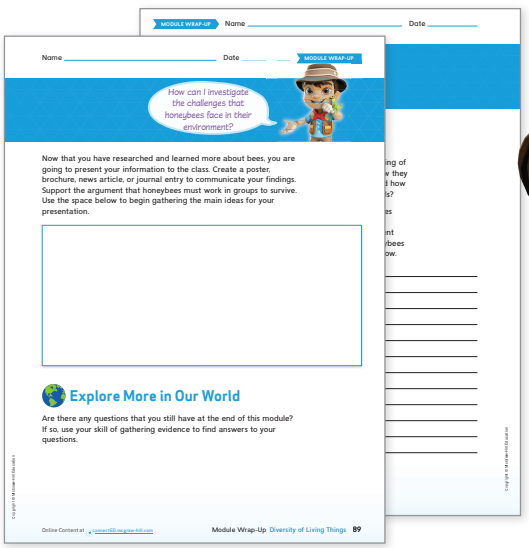
Module Wrap Up

Each module closes with a Performance Project that gives students the opportunity to engage in a design challenge that aligns with the module's performance expectation.



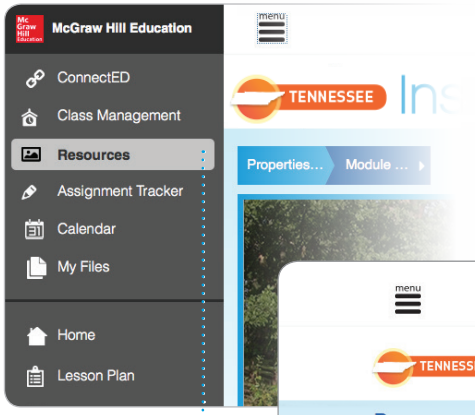
Students will define a problem and complete a performance task where they develop, test and manipulate variables to create a design a solution.





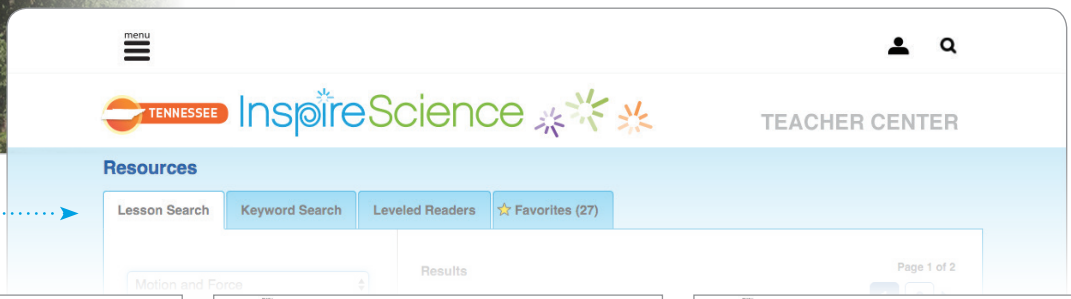
Students will demonstrate their proficiency of the performance expectation by communicating their design solution.

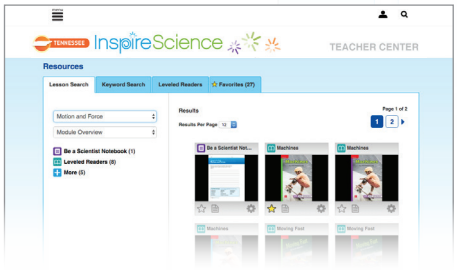
JIN
Paleontologist



Resource Library

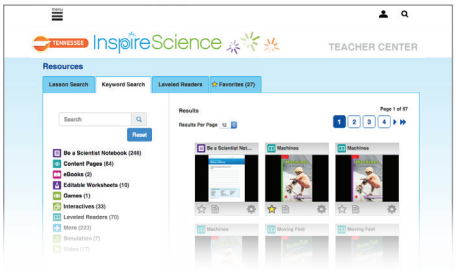
In addition to accessing your resources from the lesson resources carousel or the digital lesson plans, you can also search, preview, and access all of the module and lesson resources in the resource library.





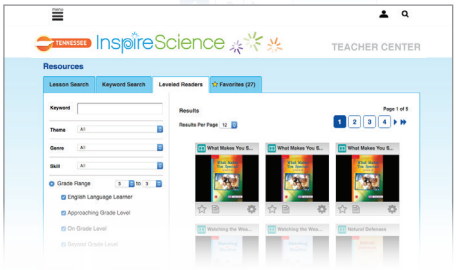
Lesson Search

Access program resources including the Be A Scientist Notebook, Science Handbook (Grades 3-5, in English and Spanish), and Teacher's Edition PDFs by module and lesson.



Keyword Search

Refine resource searches with a simple keyword search or by selecting a resource type.

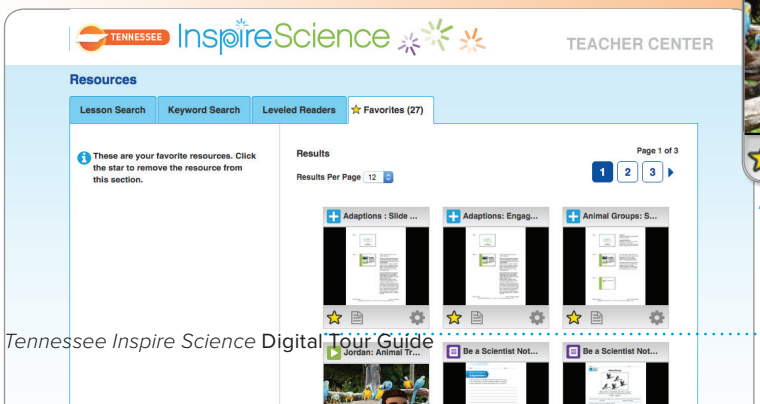


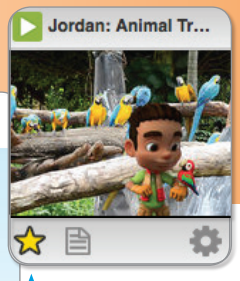
Leveled Reader Search

Search the science Leveled Reader library by keyword, theme, grade range and level or Lexile.

Favorites

You can easily make any resource a "favorite" from anywhere in the digital experience and access it from the favorites tab within the resource library.

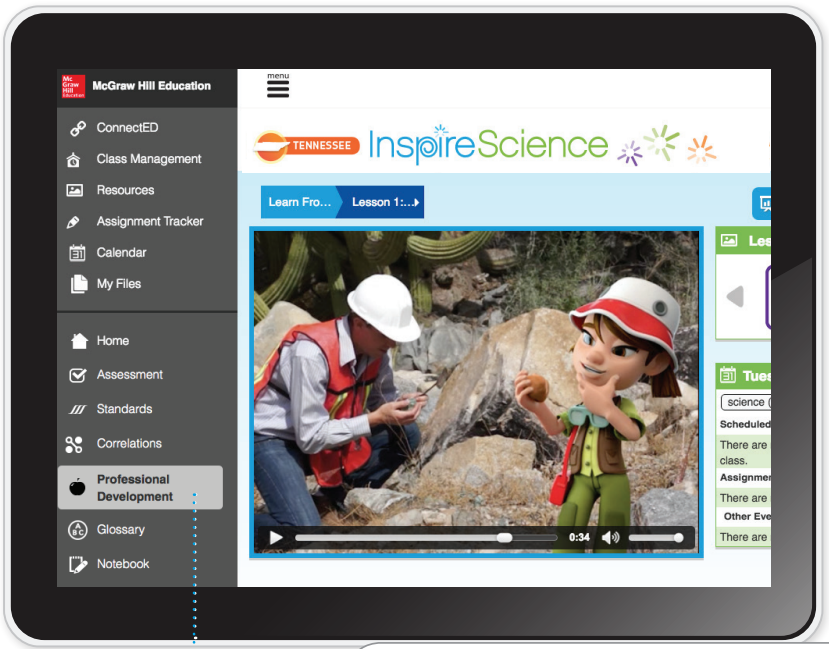


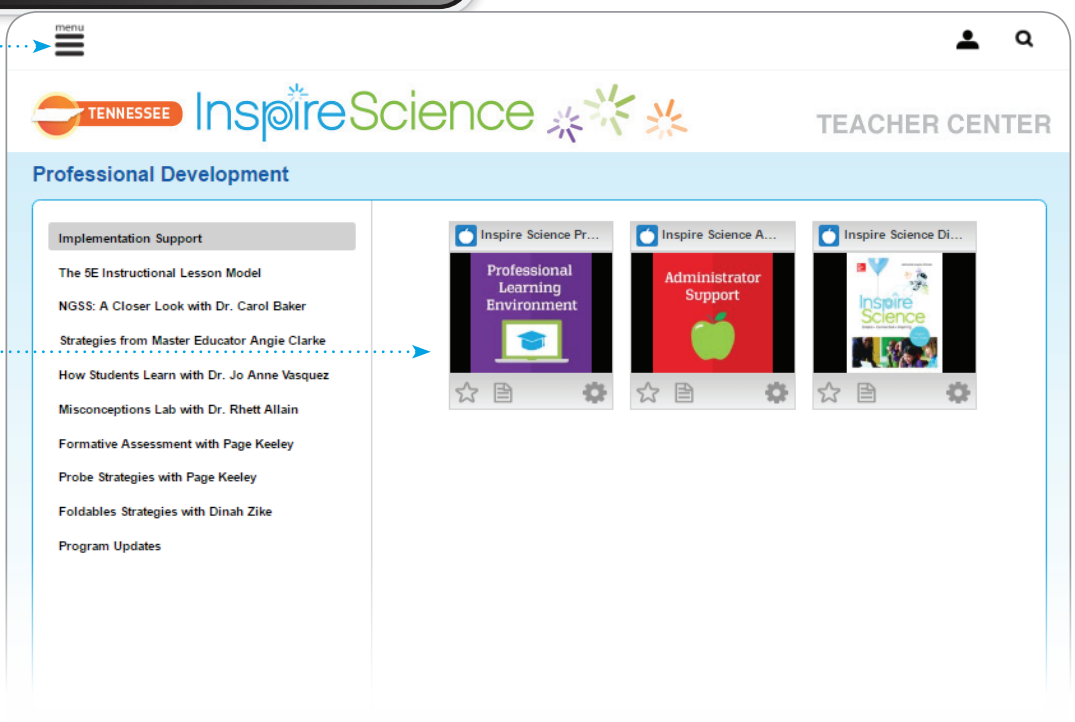


MALIK
Photonics Engineer

Professional Development Support

Tennessee Inspire Science comes with extensive support and professional development to ensure that you are able to teach every one of our science lessons with great success—and feel like a real science guru, too!





Tennessee Inspire Science offers digital professional development courses accessible through the Professional Development menu option on the Main Menu menu. These short videos help you navigate through each facet of the program.

Page Keeley Video Library

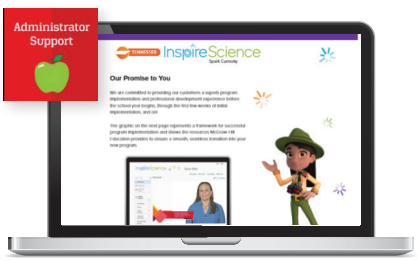
You'll love the techniques Page Keeley, M.Ed shares in these videos for how to get the most out of your science probes.

Dinah Zike Video Library

Dinah Zike, M.Ed demonstrates how to effectively incorporate the use of her VKVs® and Foldables®, designed to provide visual and kinesthetic vocabulary support to challenging science content.

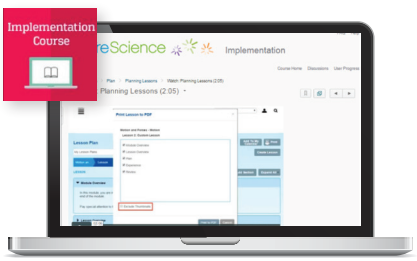
Quick Start Courses

This series of quick videos will help with startup, digital content knowledge, setting up your class, planning lessons, accessing program resources, and building assessments.



Administrator Support

The Administrator Support courses provide detailed step-by-step implementation training to help the administration team support classroom implementation.



Implementation Support

The Implementation Support courses provide detailed step-by-step implementation training videos and documents to help teachers with preparing, planning, teaching, assigning, and assessment.

Professional Development

Go Online at connectED.mcgraw-hill.com to access our library of professional development resources and to learn more about the 5E instructional model and access other supportive coaching and strategy videos.

Be sure to view Tennessee Inspire Science's robust library of professional development videos that include strategies, coaching, and training from educational experts like Dr. Carol Baker, Dr. Jo Anne Vasquez, and Dr. Rhett Allain.

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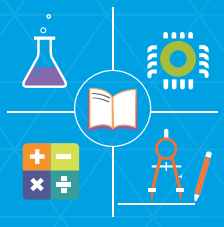

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