Mc Graw Hill

Program Overview
High School Series

Inspire Science

Biology • Chemistry • Physics
Earth • Physical

Explore Our Phenomenal World

inspire-science.com/6-12

A New Phenomenon for Your Classroom

The *Inspire Science High School* series empowers students to explore and learn from our world's amazing natural phenomena in exciting, hands-on ways.

The *Inspire Science High School* series brings science off of the page and beyond the four walls of the classroom — into the exciting world in which we live with a wealth of online and offline resources. It goes much further as it dives deep into the incredible natural phenomena all around us to spark students' imagination and inspire success.

By fostering student's innate **curiosity,** you elevate their critical thinking.

By facilitating hands-on **investigation,** you deepen their understanding.

By encouraging creative problem-solving, you inspire their **innovation.**

A New Level of Innovation

Let's Embrace Change, Together.

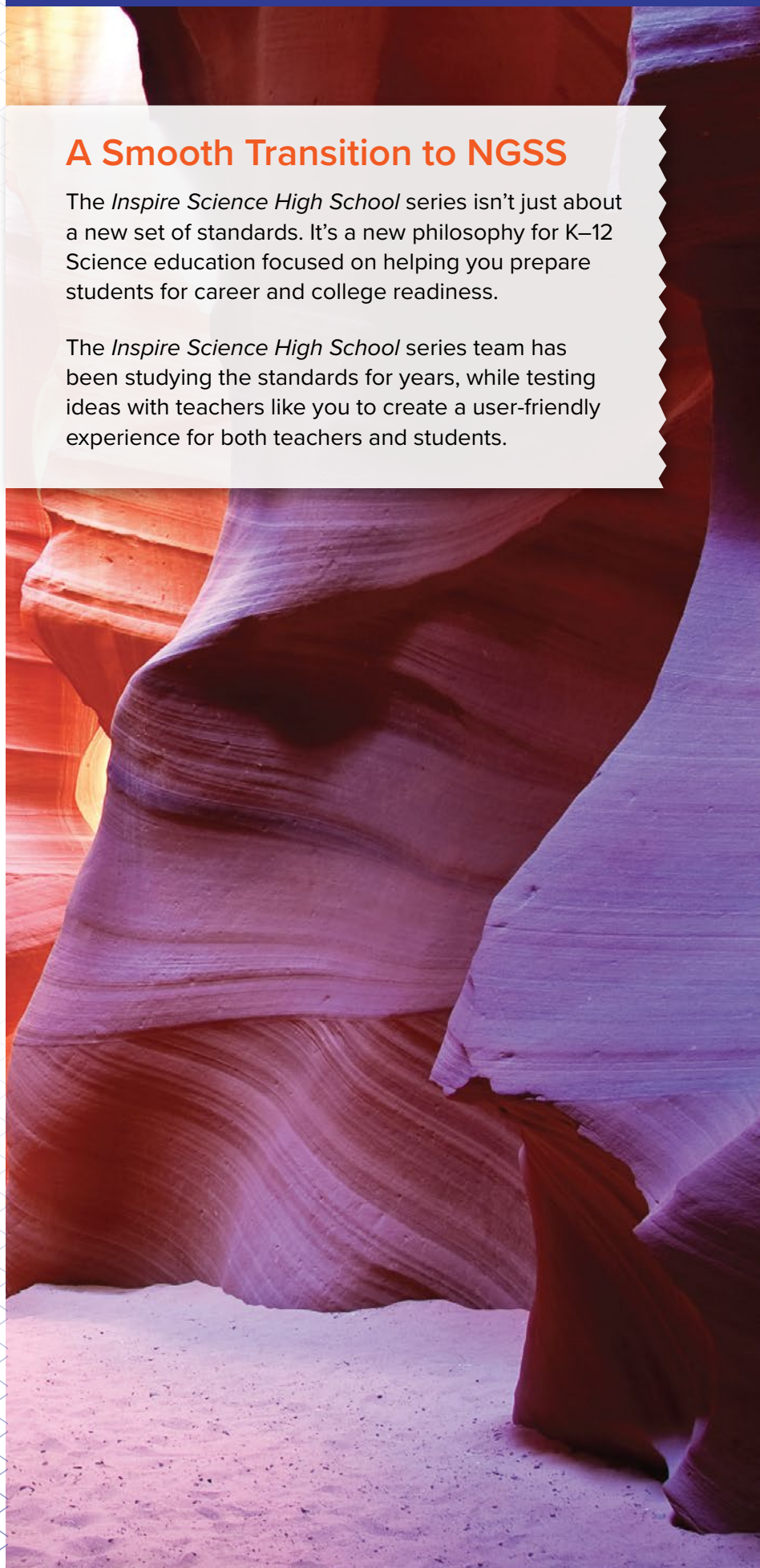
Change is on the horizon — as schools transition to new standards, a number of questions will no doubt be at the forefront of every science educator's mind...

- **How can I easily transition?**
- **How do I make sure my students are engaged with this new approach?**
- **How will I manage the increase in inquiry and hands-on activities with everything else I have to do?**
- **How can I ensure all my students have the same chance for success?**
- **How can I meet all my classroom needs?**
- **How might my students impact our world someday?**

A Smooth Transition to NGSS

The *Inspire Science High School* series isn't just about a new set of standards. It's a new philosophy for K–12 Science education focused on helping you prepare students for career and college readiness.

The *Inspire Science High School* series team has been studying the standards for years, while testing ideas with teachers like you to create a user-friendly experience for both teachers and students.



Instructional Model

Each *Inspire Science High School* series's unit phenomenon sets the stage for the STEM Unit Project. Each module within the unit supports the STEM Unit Project with phenomena-driven 5E lessons to support a variety of learning pathways.

UNIT OPENER

Encounter the Phenomenon

STEM Unit Project Launch

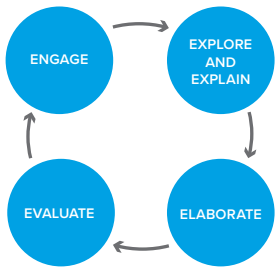
Formative Assessment Science Probe

MODULE OPENER

Encounter the Phenomenon

CER Claim, Evidence, Reasoning

LESSON



MODULE CLOSE

Revisit the Phenomenon

Three-Dimensional Assessment

CER Claim, Evidence, Reasoning

Labs/Projects

Revisit STEM Unit Project

Module Test

Vocabulary Review

UNIT CLOSE

Go Online

Complete STEM Unit Project

Support for New Standards

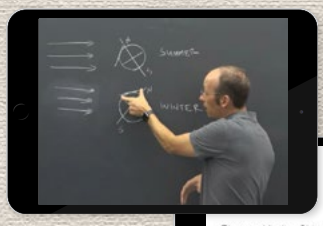
The transition to new standards requires a few shifts in science instruction and learning, and the *Inspire Science High School* series supports you through each one.

- Progressive, Three-Dimensional Learning
- Depth Over Breadth
- Phenomena-Driven, Inquiry-Based, Hands-On Learning
- Performance-Based Testing
- Integrated Engineering

For more information on the *Inspire Science* High School series Instructional Model see the Program Guide

Professional Learning When You Need It

The *Inspire Science High School* series includes an expansive library of relevant, self-paced, professional learning courses to support implementation, instructional progression and mastery — all available 24/7.



Dr. Rhett Allain

Page Keeley, M.Ed.

Next Generation Engagement

Ensure Student Engagement

As educators, we understand what happens when students are truly engaged: a classroom full of excitement, increased focus, and deeper conceptual understanding.

The *Inspire Science High School* series places student engagement at the forefront. Each unit, 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 the connections to real-world applications with the STEM Career Connections and STEM Module Projects.

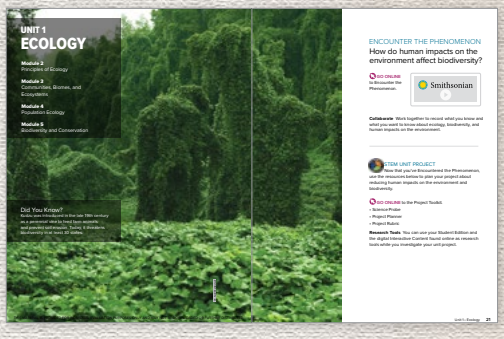
ENCOUNTER THE INSPIRATION

How will the *Inspire Science High School* series Keep My Students Engaged?

Phenomena-Driven Learning

The *Inspire Science High School* series places natural phenomena at center stage within each module and lesson. By introducing an anchoring phenomenon in each module, supported by lesson-level investigative phenomena, students dig deep into key science and engineering concepts.

ENCOUNTER
THE PHENOMENON

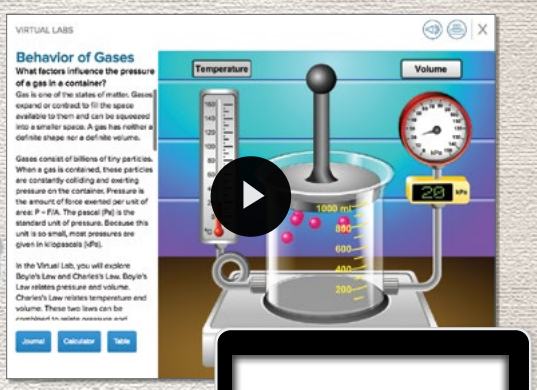


Student-Led, Collaborative Learning

The more involved, the more engaged. With the *Inspire Science High School* series, students take a leadership role in their learning experience and develop teamwork and ideation skills through deep collaboration with their classmates at many points during each module and lesson.

Designed for the Digital Generation

The *Inspire Science High School* series is infused with highly engaging interactive experiences designed for today's digitally-native students. Interactive simulations, 360 videos, 3D models, learning-based games, and immersive science content videos will keep students' attention and inspire them to explore and discover.



Virtual Labs

Smithsonian Videos

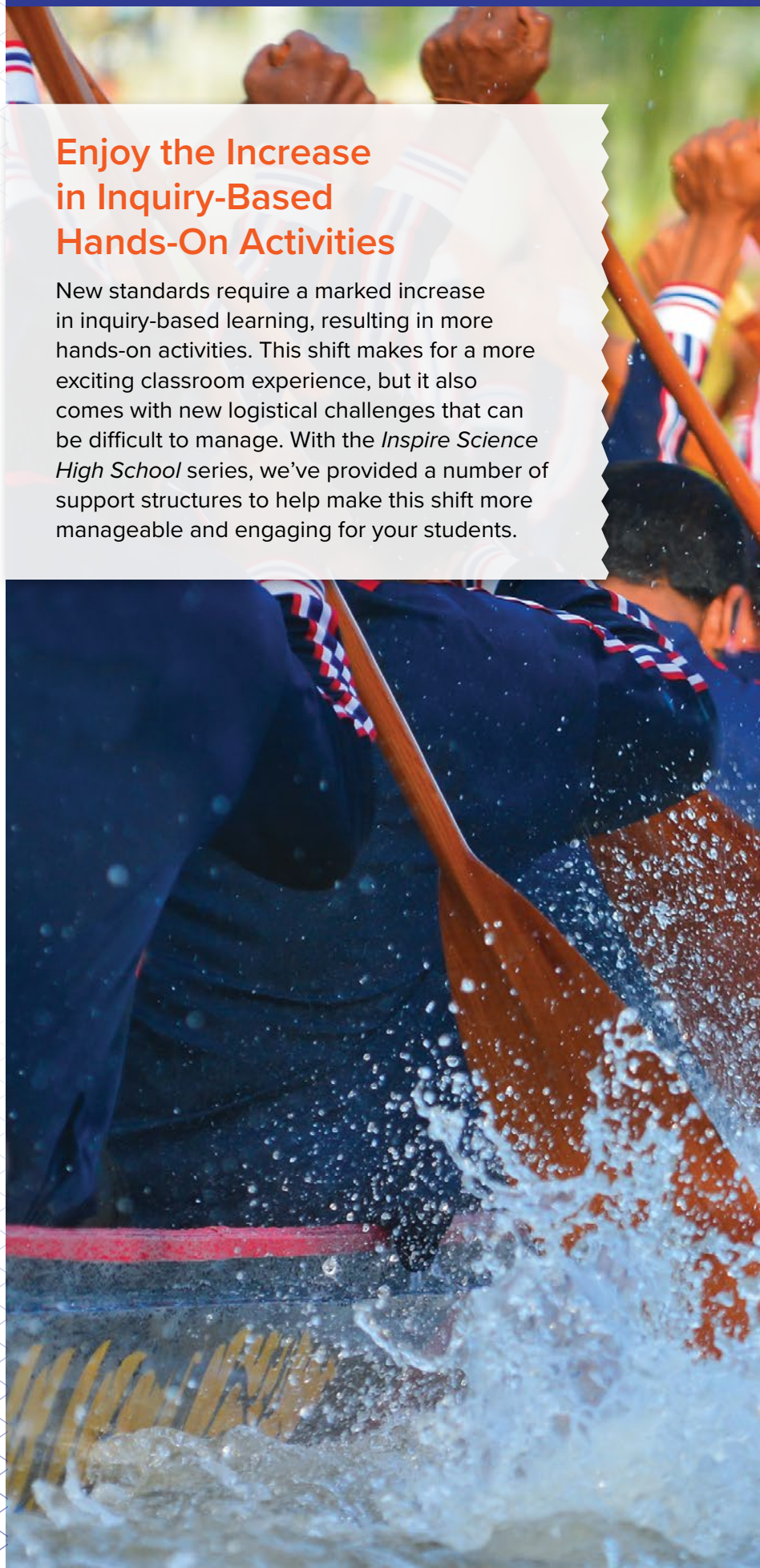
Inquiry-Based Approach

Inquiry-driven learning helps students understand how to ask deeper questions and think critically as they answer science questions and design creative solutions to real-world problems. With the *Inspire Science High School* series, students learn how to become great investigators through a variety of inquiry activities that connect to the Science and Engineering Practices.

ENCOUNTER
THE INSPIRATION

How does the *Inspire Science High School* series Make the Increase in Inquiry-Based Hands-On Activities Easier for Educators?

Hands-On Support



Enjoy the Increase in Inquiry-Based Hands-On Activities

New standards require a marked increase in inquiry-based learning, resulting in more hands-on activities. This shift makes for a more exciting classroom experience, but it also comes with new logistical challenges that can be difficult to manage. With the *Inspire Science High School* series, we've provided a number of support structures to help make this shift more manageable and engaging for your students.

Online Resource Planner

The *Inspire Science High School* series Online Resource Planners make preparing easier than ever — listing out all Module Resources and Suggested Pacing to clearly identify what resources is available in each module and lesson.

Online Resources Planner

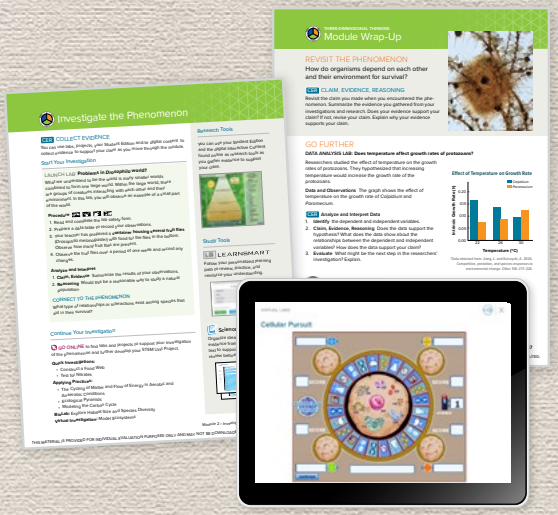
GO ONLINE to curate your presentations, interactive content, additional resources, and media library, and find answer keys, materials lists, rubrics, differentiated instruction, and more.

Module Resources	Module Launch	Lesson 1	Lesson 2	Lesson 3	Module Close
INSTRUCTIONAL RESOURCES					
Student Edition	•	•	•	•	•
Teacher Edition	•	•	•	•	•
Teacher Presentation (PowerPoint)	•	•	•	•	•
Science Notebook	•	•	•	•	
Reading Essentials	•	•	•	•	
LearnSmart		•	•	•	
Math Handbook	•	•	•	•	•
Science & Engineering Practices Handbook	•	•	•	•	•
LABS, INVESTIGATIONS, AND PROJECTS					
Launch Lab	•				
Quick Investigation			•	•	
Labs		•			
PBL/Applying Practices			•	•	
ASSESSMENT					
Module Pre-Test	•				
Lesson Check		•	•	•	
Module Vocabulary Practice					•
Module Test					•
MEDIA & OER					
Virtual Investigation		•			
Personal Tutor				•	
PhET Simulation					
Beyond the Classroom: Google Expedition				•	
SpongeLab	•	•	•	•	•

Suggested Pacing (min)	Module Launch	Lesson 1	Lesson 2	Lesson 3	Module Close
Teacher-Facilitated Pathway	45	100	100	90	45

Engaging Inquiry Activities

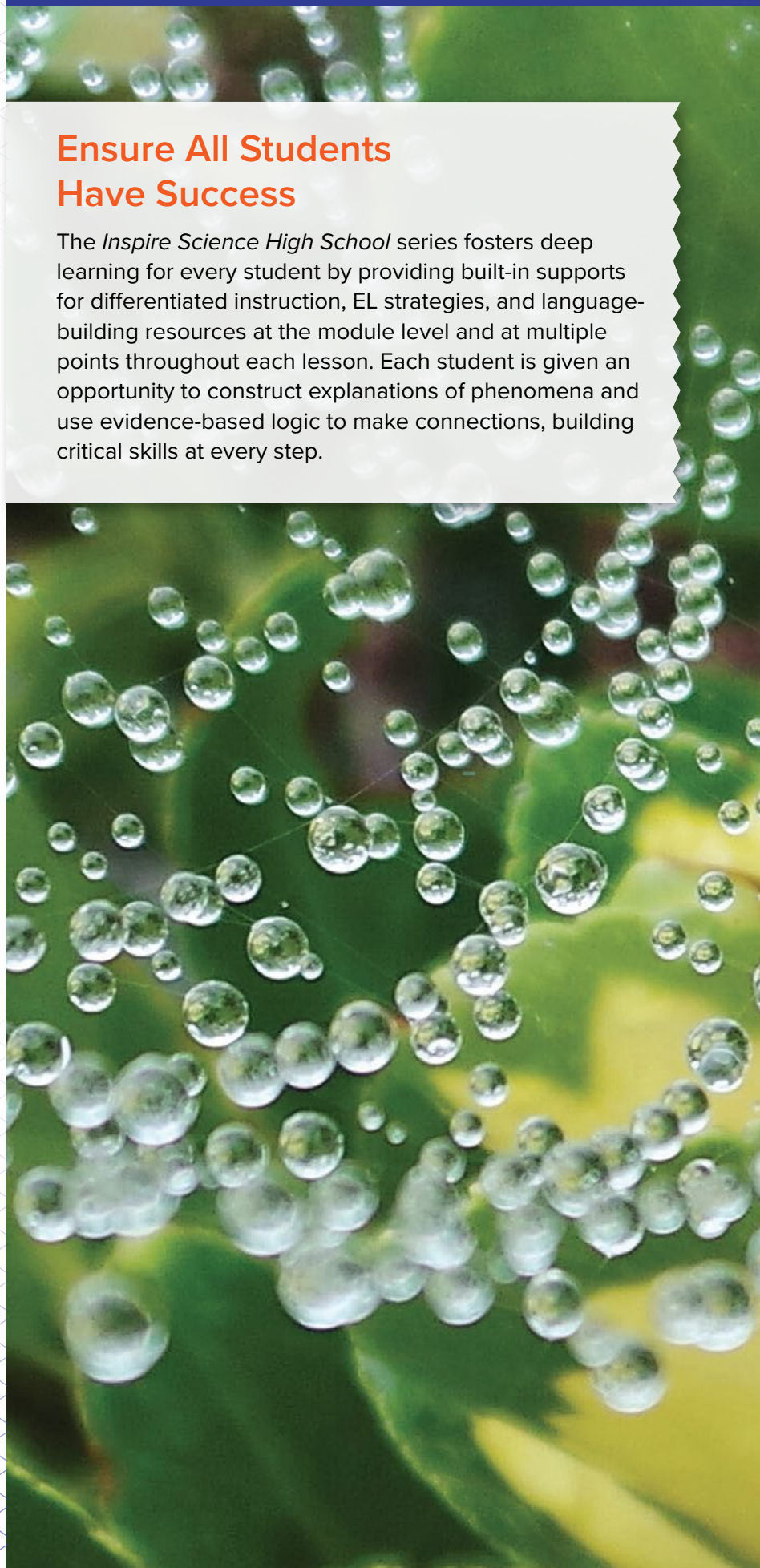
Every lesson in the *Inspire Science High School* series offers multiple inquiry-based activities, along with techniques that scientists and engineers use in the real world. These inquiry activities include differentiation strategies (through the Inquiry Spectrum), and various pacing options ranging from simple investigations to complex lab explorations.



Beyond the Classroom

The *Inspire Science High School* series provides an engaging experience Beyond the Classroom. Beyond the Classroom provides an hands-on approach to learning with before, during, and after expedition activities.

Universal Access



Ensure All Students Have Success

The *Inspire Science High School* series fosters deep learning for every student by providing built-in supports for differentiated instruction, EL strategies, and language-building resources at the module level and at multiple points throughout each lesson. Each student is given an opportunity to construct explanations of phenomena and use evidence-based logic to make connections, building critical skills at every step.

ENCOUNTER THE INSPIRATION

How does the *Inspire Science High School* series Inspire All Students?

LEARNSMART®

LearnSmart® with *SmartBook*® transforms the way students read. A proven, adaptive learning program, LearnSmart individualizes learning to help students study more efficiently and retain more knowledge.

SYNC BLASTS™

SyncBlasts™ provides reading and writing assignments that present science and current event topics relevant to students' lives and their world. Providing a variety of rich multimedia—including Preview Videos, links to Case Studies, Explainer Videos, and *The Point* News Show—*SyncBlasts* are a smart way to engage stu dents.

CER Framework

The Claim, Evidence, Reasoning (CER) framework in the *Inspire Science High School* series — which becomes increasingly sophisticated from K–12 — ensures every student is engaged in rigorous scientific inquiry and argument from evidence.

CER MAKE YOUR CLAIM

Humans are not the only organisms that depend on others for their needs. All living things are interdependent. Their relationships are important to their survival.

English Language Support

Rooted in learning sciences research, the *Inspire Science High School* series applies the best instructional practices for teaching EL students in alignment with the ELD standards. Each module and lesson has 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.

EL Support

Writing ELD PI.9/10.1

Guide students in exchanging information and ideas to discuss what kind of animal is a predator.

EMERGING LEVEL Support students in asking and answering yes-no and wh- questions about what animals are predators. Provide sentence frames such as: What kind of _____ [animal] is a _____ [predator]? Is _____ [a rattlesnake] a predator?

EXPANDING LEVEL Support students in following turn-taking rules and asking relevant questions. Provide sentence frames: What kind of animal _____ [is a predator]? / I think _____ [carnivores are predators]. / Yes, I agree. They _____ [eat other animals].

BRIDGING LEVEL Have students contribute to a group discussion by asking and answering relevant, on-topic questions. EX. What kind of animal is a predator? / Predators are carnivores. For examples, a rattlesnake is a predator. / Why do you think so? / A predator eats other animals and rattlesnakes eat other animals. / That's true.

Lesson 2 • Flow of Energy in an Ecosystem **37**

Next Generation Assessments

Ensuring students are well prepared for the standardized can seem daunting, but with the *Inspire Science High School* series next generation assessment tools, in partnership with Measured Progress (STEM Gauge), you'll know what to expect and how to prepare your students for success with mastery of the Performance Expectations.

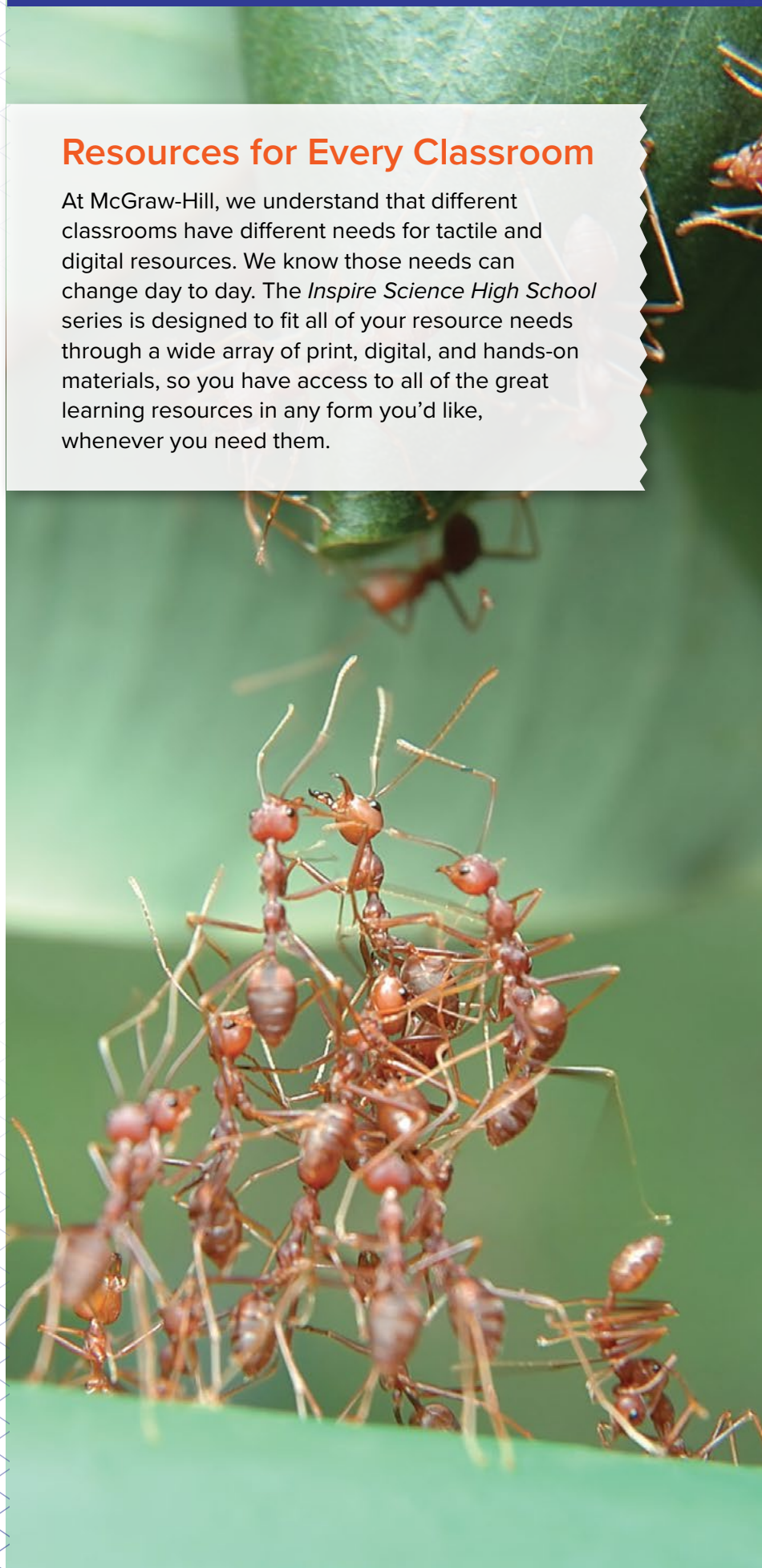
Online Assessment Center

GO ONLINE

Designed to Fitwny Classroom

Resources for Every Classroom

At McGraw-Hill, we understand that different classrooms have different needs for tactile and digital resources. We know those needs can change day to day. The *Inspire Science High School* series is designed to fit all of your resource needs through a wide array of print, digital, and hands-on materials, so you have access to all of the great learning resources in any form you'd like, whenever you need them.



ENCOUNTER THE INSPIRATION

How does the *Inspire Science High School* series Meet All of My Classroom Needs for Print, Digital, Hands-On Resources?

Print Resources

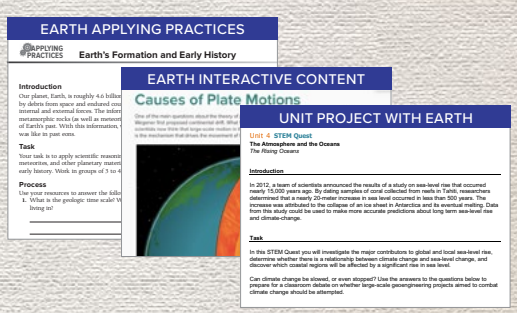
The *Inspire Science High School* series combines online and print resources to support student inquiry into real-world phenomena.

TEACHER'S AND STUDENT EDITION

*Student Editions available in Spanish, online or in print through CREATE™

Three Course Model

Dynamic resources are embedded into each Three-Course program (*Inspire Biology, Inspire Chemistry and Inspire Physics*) to help you and your students meet the challenges of integrating the Earth and Space Sciences (ESS) into each course. You are empowered to teach confidently knowing every unit includes standard-aligned content and emphasizes the Three-Course Model.



Open Educational Resources

The *Inspire Science High School* series offers the opportunity to curate your own content. With our partners such as The Smithsonian, SpongeLab, and PhET you are able to find the resources you need when you need them.

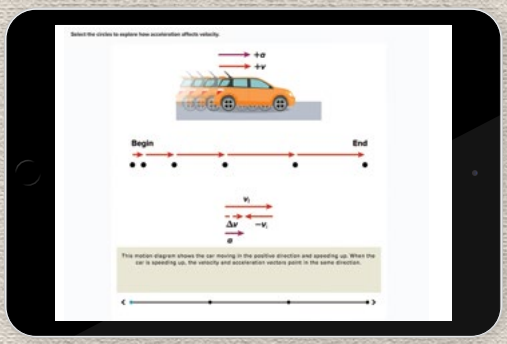
Smithsonian

SPONGELAB
A GLOBAL SCIENCE COMMUNITY

PhET
INTERACTIVE SIMULATIONS
University of Colorado Boulder

Digital Resources

In addition to the digital versions of each print book, the *Inspire Science High School* series provides a digital experience designed with advantages for both you and your students, including innovative interactives, videos, simulations, virtual labs, personal tutors, and more.



See the Digital Experience section of the Program Guide to learn more about these engaging interactives.

A Future Full of Possibilities

Let Them Dream Big

With the emphasis the *Inspire Science High School* series places on curiosity, investigative skills, and innovative thinking, just imagine what the students in your classroom today might dream up to improve our lives someday.

ENCOUNTER THE INSPIRATION

How Might the Future Innovators Impact Our World Someday?

A Future Full of Innovation

With the creative thinking and problem-solving skills your students will build with the *Inspire Science High School* series, they will have so many opportunities to impact the world. What problems will you inspire them to solve in the future?

Innovative Solutions for Global Warming

New solutions to reduce carbon emissions and clean up the carbon from our atmosphere?

Practical fuel cell transportation to power cars from water, emitting only steam?

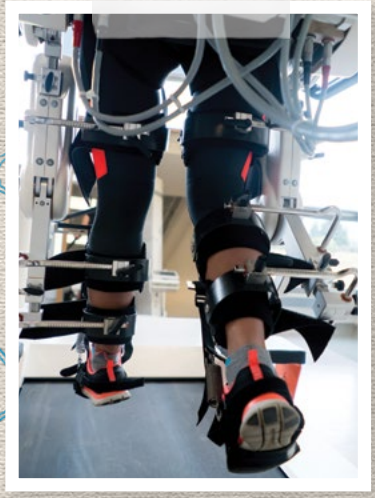
An influential role in global carbon emissions management?

Innovations in Health Care and Disease Management

Advances in cellular immunotherapy treatments to leverage our own immune systems to stop cancer and diseases in their tracks?

Advances in using robotics for healing and repairing the human body?

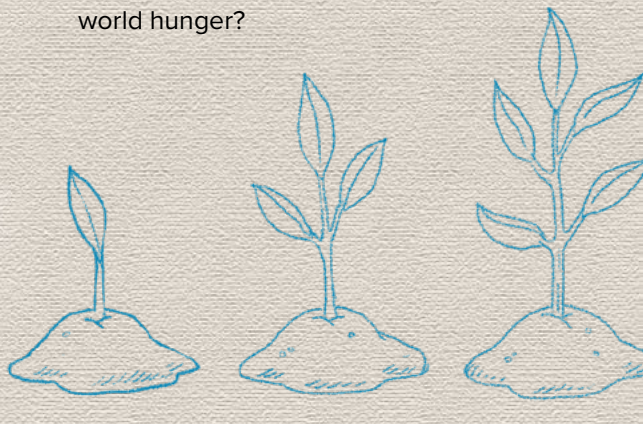
New ideas for identifying and stopping diseases before they happen?



Innovations for Natural Resources

Practical ways to harness energy from the ocean waves?

Creative solutions to food creation and distribution to address world hunger?




Inspire Curiosity
Inspire Investigation
Inspire Innovation
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