



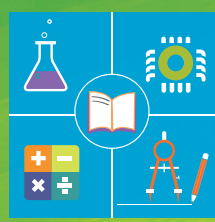
Inspire Science

Simple • Connected • Inspiring



Get Ready to Be Inspired!

Introducing the new modular K-5 science learning experience designed to prepare the next generation of innovators.



GRADES
K-5

WHY IS THE SKY
BLUE?

WHY IS THE EARTH
ROUND?

WHY DOES THE SUN
SHINE?



Inspire Science

Learning begins with curiosity. *Inspire Science* is designed to help you spark that curiosity in your students and inspire the next generation of innovators and inventors to ask more WHYS, think more critically, and become creative problem solvers. It's proof that science education can be more comprehensive and, yes, more fun.

What makes *Inspire Science* so powerful?



It helps you embrace science through a simple, user-friendly teaching experience.



It helps you get more out of science time through built-in literacy and math connections.



It helps you prepare students for a future full of STEM opportunities with hands-on, real-world problem-solving instruction designed for 21st century standards and learners. So they can become an engineer. Or an astronaut. Or something we haven't even discovered yet.



Developed with Teachers for Teachers!

We've consulted with teachers (over 4,000) to develop *Inspire Science*. They spoke. We listened.



Learn More About the WHY? behind *Inspire Science* at mheonline.com/inspire-science



CHLOE
carpenter

✓ Simple

Inspire Science is built to make **the most of your valuable time** and provide the tools you need to inspire and motivate students to become **curious, creative problem solvers**.

An Intuitive Digital Learning Experience with Print Where it Matters Most

Inspire Science's **user-friendly modular format** makes it easy to find time for science. Each module focuses on the core concepts all within the familiar and proven **5E instructional model** and offers resources (digital and print) to cater to diverse learning styles and modalities. While our digital resources provide the advantage of interactive learning, our print resources are focused on where print matters most in reading, journal writing, and problem-solving.


Students **play the role of a scientist** while building and honing their **literacy and math skills!**



Pacing That Fits Your Schedule

Each E: 1–3 days
Each Lesson: 8–10 days
Each Module: 20–25 days
Total Instruction: 160 days

Timing varies based on the number of lessons per module. "Days" assumes a 45 minute teaching block per day.

 **Follow the Fast Track to Save Time!**

A Familiar Lesson Format

Each *Inspire Science* lesson is designed with the familiar and proven 5E instructional model beginning with pre-assessment and the exploration of a phenomenon.

Below are examples of the activities and resources you will find in each stage of the 5E lessons. Each module includes two to seven 5E lessons!

ASSESS LESSON READINESS

Using the Page Keeley Science Probes, uncover students' current understanding to focus instruction and support, and establish a benchmark for learning progression throughout the lesson.

RESOURCES:

- Multimedia Lesson Presentation
- Be a Scientist Notebook**

5. EVALUATE

Guide students to demonstrate their understanding by answering the essential question and phenomenon questions and completing a final performance task, eAssessment questions, and an "I Did" statement.

RESOURCES:

- Performance Rubrics
- Be a Scientist Notebook**
 - Problem Solving Activities
 - Mini Projects
- eAssessment

I Did

4. ELABORATE

Help students reflect and refine their thinking by revisiting past answers to see how their thinking has changed and explore new options for further refinement of their thinking through investigations, modeling, research and communication with arguments from evidence.

RESOURCES:

- Multimedia Lesson Presentation
- Hands-On Activities
- Page Keeley Science Probes
- Simulations
- Content Interactives
- Quick Checks

1. ENGAGE

Phenomenon Exploration

Set the purpose for learning with a phenomenon and essential question to investigate throughout the lesson. Help students set goals for the skills they will develop with the "I will" statement.

RESOURCES:

- Multimedia Lesson Presentation
- Be a Scientist Notebook**

I Will

2. EXPLORE

Use interactive content to help students understand the concepts more deeply and answer the Essential Question.

RESOURCES:

- Multimedia Lesson Presentation
- Science Paired Read Alouds, Fiction (K-2)
- Hands-On Activities
- Content interactives
- Simulations

3. 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 skills while deepening their understanding of core science topics, and learn to connect this learning back to prior experiences and the essential question.

RESOURCES:

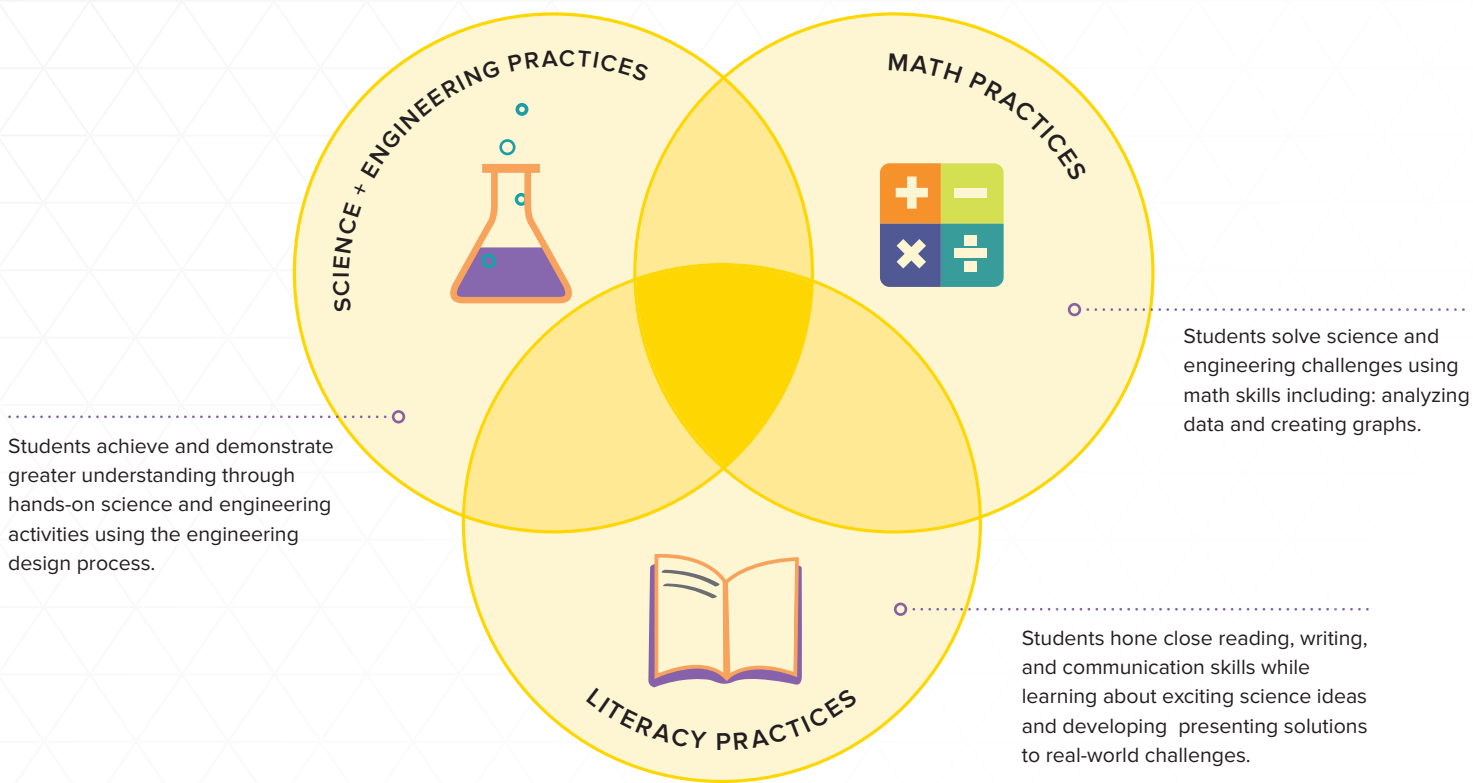
- Multimedia Lesson Presentation
- Dinah Zike VKVs & Foldables
- Leveled Readers
- Science Paired Read Alouds, Non-Fiction (K-2)
- Science Handbook (3-5)
- Be a Scientist Notebook**
- Science Files
- Leveled Articles
- Videos
- Quick Checks
- Page Keeley Science Probes

I Can



New Approaches Made Easy

Inspire Science seamlessly integrates new approaches including science and engineering practices, disciplinary core ideas, and crosscutting concepts with the literacy and mathematics practices you already know. So teaching science feels as natural and intuitive as it should be.



Easy to Fit into Your Day

We realize that your schedule and the demands of other subjects make it difficult to devote the time you want to science. *Inspire Science* makes it easier to make the time to fit science into your day.

Our flexible modules allow you the ability to break down the lessons into manageable pieces, integrate them with materials you already use, and teach what you want and when. And, when you're especially short on time, you can integrate science into your literacy block with our literacy components and **Fast Track** options.

Pacing Guide

Don't have time? Use the **FAST TRACK**

Engage	Explore	Explain	Elaborate	Evaluate
PACING: DAY 1	PACING: DAY 2	PACING: DAYS 3-4	PACING: DAYS 5-7	PACING: DAYS 8-9
<ul style="list-style-type: none"> Video and Discussion: Animal Groups Watch video and discuss essential question 	<ul style="list-style-type: none"> Hands-On Activity: Ant Workers Complete activity to determine how working as a group helps ants gather food faster 	<ul style="list-style-type: none"> Digital Interactive: An Elephant Herd Learn how living in a group helps elephants Content PDF: Animal Groups Learn about animals working in groups or animals working alone. Be a Scientist Notebook pp. 107-108 Research animal groups and the roles each animal plays. 	<p>STUDENT NARRATIVE</p> <ul style="list-style-type: none"> Read student narrative Discuss different animals and whether or not they work in groups Be a Scientist Notebook Read the article on pp. 104-105 titled Animal Scientists and Meerkat Groups <p>TEACHER PRESENTATION</p> <ul style="list-style-type: none"> Lead ePresentation Facilitate classroom discussion Do activity in Be a Scientist Notebook 	<p>STUDENT NARRATIVE</p> <ul style="list-style-type: none"> Read student narrative Be a Scientist Notebook Use pp. 107-108 to complete pp. 109-110 Answer QuickCheck Question about the essential question. Complete eAssessment <p>TEACHER PRESENTATION</p> <ul style="list-style-type: none"> Lead ePresentation Do activity in Be a Scientist Notebook

Engage

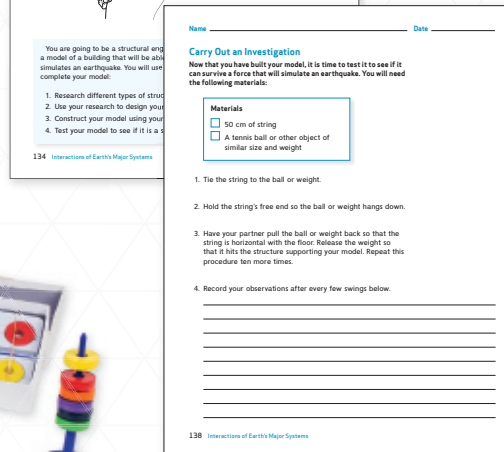
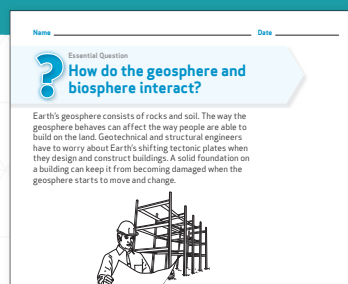
PACING: DAY 1

Video and Discussion: Animal Groups Watch video and discuss essential question

Follow the Fast Track symbols when you're short on time.

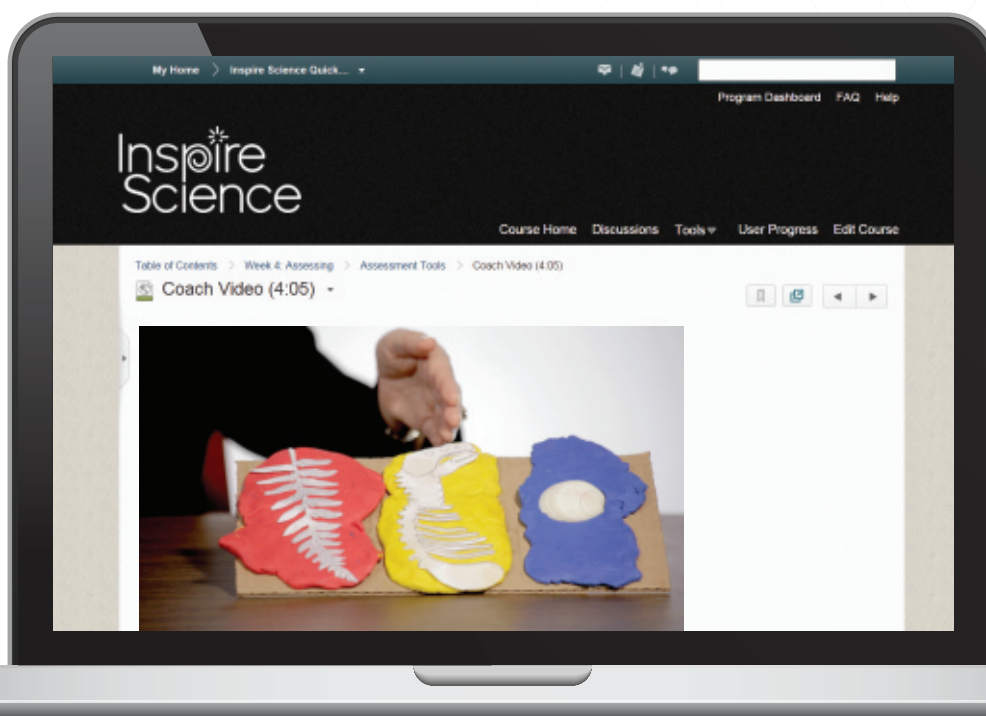
Quick and Easy Labs

Inspire Science's user-friendly kits provide all of the materials needed for each hands-on activity in the lessons, available with options for teacher demo or small group collaboration. The materials within each kit are clearly labeled and correlated to each module, making hands-on time as easy as can be.



Feel Like a Science Guru!

We all love the excitement that comes from discovery! We also realize that science isn't the easiest subject to teach, but it's okay! *Inspire Science* comes with both 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!



Inspire Science Professional Development Support

- Quick Start Course
- Implementation Course
- Coach Videos
- Demo Videos
- Classroom Models
- Administrator Support
- Mastery Online Courses

Address Literacy and Math Standards While Teaching Science!

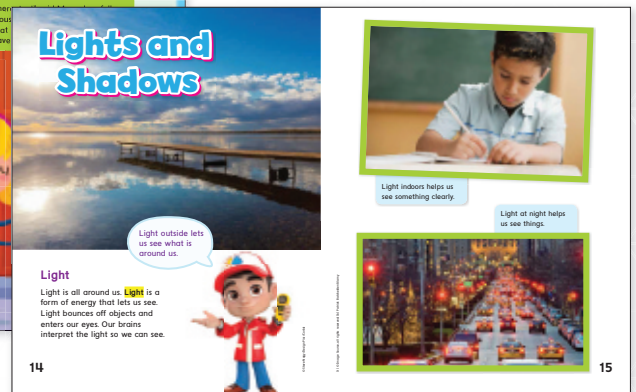
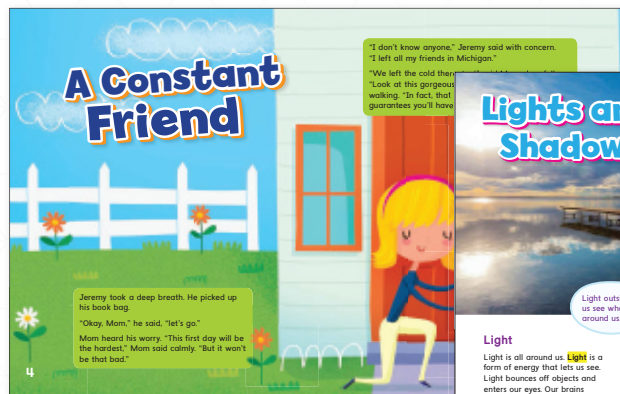
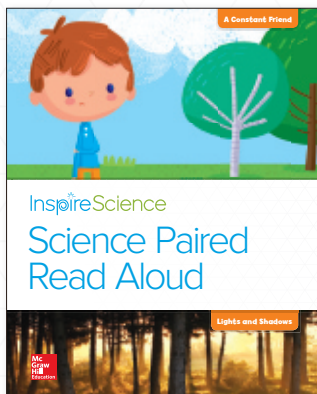
We know you're often asked to emphasize certain subjects to meet evolving educational standards, so we designed *Inspire Science* to incorporate literacy and math in a fun and easy way that makes sense. By integrating science, literacy, and math, you'll be able to **teach science while you prepare students for literacy and math assessments**—and beyond.



Literacy Integration

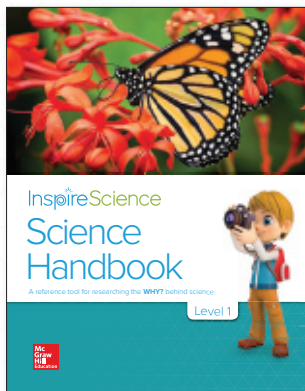
Integrating literacy with your science instruction will help your students build literacy skills while they're learning science. By incorporating our leveled, non-fiction reading content, you will see your students' close reading skills improve with text dependent questions, paired readings, arguments, narratives and explanations practiced in the context of science that's fun!

On top of building reading skills, *Inspire Science* will help strengthen your students' writing skills with on-going journaling and science writing activities.



SCIENCE PAIRED READ ALOUDS (GRADES K-2)

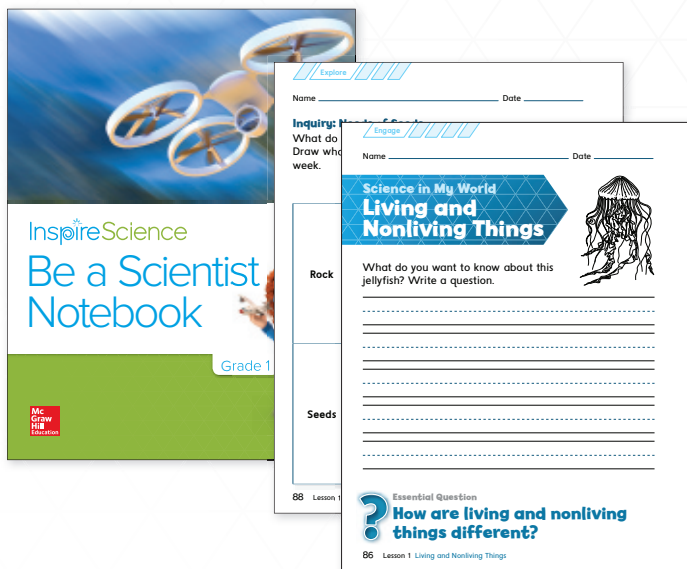
Fiction and non-fiction readings for whole or small group concept introduction.



SCIENCE HANDBOOK (GRADES 3-5)

An easy-to-use reference tool that covers a variety of science topics.





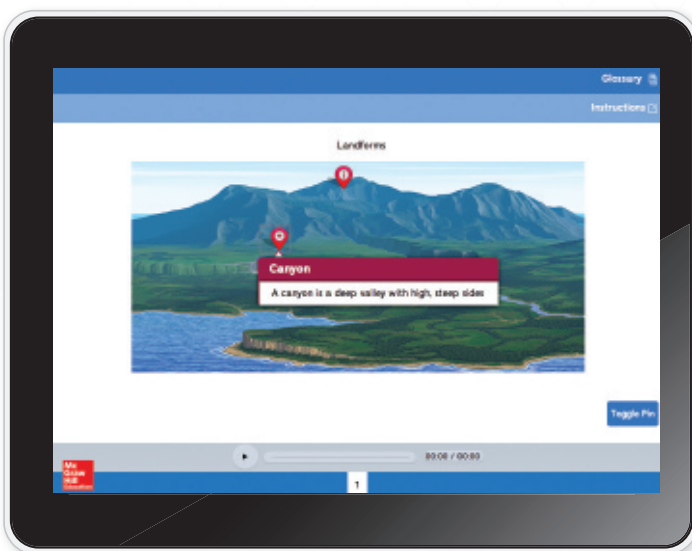
BE A SCIENTIST NOTEBOOK (GRADES K–5)

Problem-solving activity book allows students to practice being scientists and engineers by reflecting on, presenting, and journaling about creative solutions to real-world problems.



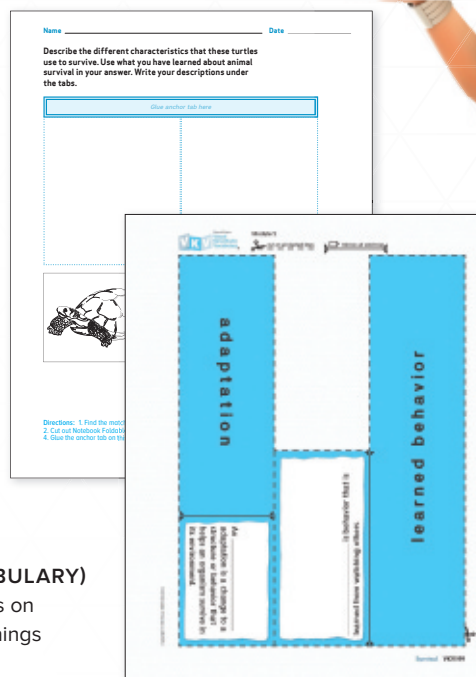
LEVELED READERS Informational text readings connected to the lesson content that include text dependent questions, paired readings, and hands-on activities. There are 12–14 titles per grade level with 4 levels each, available in 1 or 6 copy options.

Lexile® measures aligned to those required by the CCSS. On-Level readers are also available in Spanish.



CONTENT INTERACTIVES Interactive, responsive digital components provide dynamic ways to help teach and to learn science concepts while building literacy skills.

DINAH ZIKE Ms. Zike is an award-winning author, educator, and inventor of the three-dimensional, hands-on manipulatives and graphic organizers that reinforce vocabulary skills. Her *VKV*s and *Foldables* are included with *Inspire Science!*



VKVSM (VISUAL KINESTHETIC VOCABULARY)

“Action flashcards” allow learners to focus on science words, their structures, and meanings kinesthetically.

Math Integration

Inspire Science blends science and math as it is in the real world giving students practice with data collection, graphing, making predictions, and using other math practices while learning science!

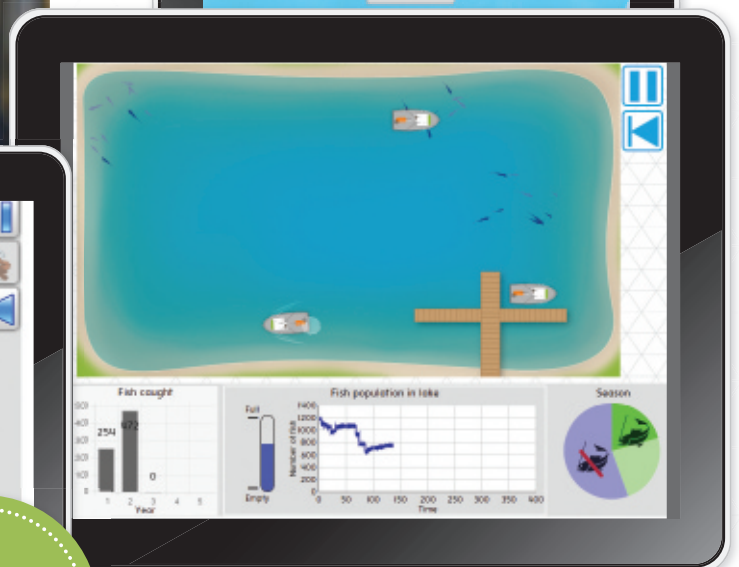


DEVELOPING AND USING MODELS

Inspire Science allows students to develop graphs, use computer simulations, ask questions, and compile data for greater understanding.

ANALYZING AND INTERPRETING DATA

With *Inspire Science* activities and simulations, students will analyze and interpret data by identifying patterns and relationships between variables to support thinking.



SIMULATIONS The *Inspire Science* simulations, created in partnership with the Concord Consortium, allow students to explore cause and effect in ways that scientists and engineers do in real life and enable them to model concepts otherwise not possible to explore in the classroom.



USING MATHEMATICS AND COMPUTATIONAL THINKING


Inspire Science students will have the opportunity to make numerical predictions, organize data, and represent variables and their relationships while comparing design solutions.

Hi, I'm Antonio and I'm one of the **Career Kids!** We'll lead your students through *Inspire Science!*

Engage

Name _____ Date _____

Science in My World
Living and Nonliving Things



What do you want to know about this jellyfish? Write a question.

Essential Question
How are living things different?

86 Lesson 1 Living and Nonliving Things

Explore

Name _____ Date _____

Inquiry: Needs of Seeds
What do seeds need to grow? Use the table. Draw what you see inside the cups each week.

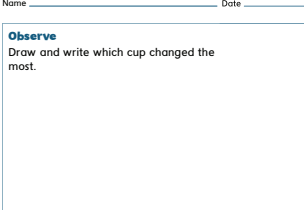
	Week 1	Week 2	Week 3	Week 4
Rock				
Seeds				

88 Lesson 1 Living and Nonliving Things

Explore

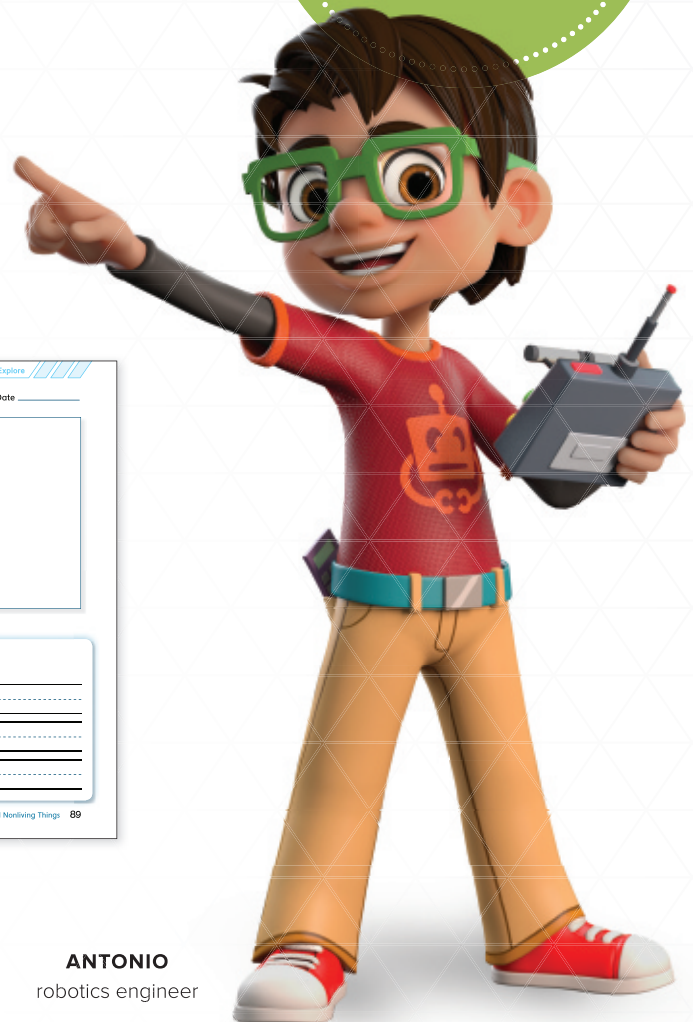
Name _____ Date _____

Observe
Draw and write which cup changed the most.



Connections in Science
Structure and Function Which cup holds a living thing? Explain.

89 Lesson 1 Living and Nonliving Things



ANTONIO
robotics engineer

OBTAINING, EVALUATING, AND COMMUNICATING INFORMATION Our digital experiences, leveled readers, hands-on activities, and *Be a Science Notebooks* allow students to obtain, evaluate, and communicate scientific facts, findings, and technological advances in multiple ways.

Preparing the Next Generation of Innovators

Most states' current science standards were established over 15 years ago. A lot has changed since then—scientists have discovered water on Mars, sequenced the human genome, and invented smart phone technology. We can only imagine the changes that will come in the next ten years.

Today's students need to be curious, develop hypotheses, conduct investigations, take on engineering challenges—and communicate their results and theories clearly and with evidence. In other words, they need to learn to think like scientists.

That's where *Inspire Science* comes in.

Built to the Next Generation Science Standards with a focus on real-world problem solving and STEM careers, *Inspire Science* makes science instruction easy—and fun, while helping prepare your students for whatever they want to be!



Helping Students Think Like Scientists

PAGE KEELEY SCIENCE PROBES Our formative assessment probes designed by Page Keeley help access your students' commonly held science ideas and beliefs. Extensive teacher support provides suggestions on using these probes and altering your instruction to address any misconceptions.












PAGE KEELEY Ms. Keeley is the Senior Science Program Director at the Maine Mathematics and Science Alliance, an educator, an author, and a professional development specialist and consultant.

Name _____ Date _____

PAGE KEELEY SCIENCE PROBES

Is It a Simple Machine?

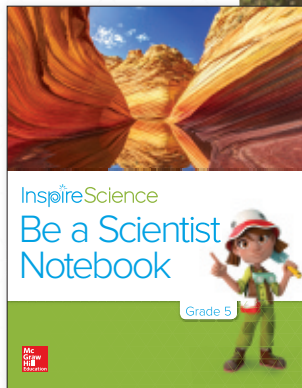
People use different kinds of simple machines every day. Put an X in the boxes that are examples of using a simple machine.

 Playing on a <u>see-saw</u>	 Using a motor to make a boat go fast	 Pushing a box up a ramp
 Taking the cap off a bottle with a bottle opener	 Stirring soup with a spoon	 Lifting a bucket from a well with a pulley
 Pulling a suitcase that has wheels	 Cutting paper with scissors	 Baking cookies in an oven

Explain your thinking. How did you decide if something is a simple machine?

Page Keeley Science Probe 21

BE A SCIENTIST NOTEBOOK This problem-solving activity book allows students to practice being scientists by presenting and journaling about creative solutions to real-world problems.



CHLOE
carpenter



HANDS-ON ACTIVITIES Touching is believing *and* important while learning science! That's why each *Inspire Science* lesson offers simple hands-on activities to reinforce science concepts and to connect to real-world science and engineering.

Through our leveled readers' activities, simulations, and other hands-on and digital activities, students can manipulate their environment to show cause and effect relationships—and make science come to life!



GAMES The immersive games included with *Inspire Science*, developed in partnership with Filament Games, enable students to “play” with the lesson concepts to deepen and reinforce conceptual understanding.

CAREER KIDS From an entomologist to an aerospace engineer, the *Inspire Science* STEM Career Kids help student imagine what they could do when they grow up!



Not using Next Generation Science Standards*? *Inspire Science* is still for you.

Inspire Science is built for Next Generation Science Standards, with the added bonus of literacy and math integration. Whether your state has adopted the Next Generation Science Standards or not, science standards everywhere are shifting to include more hands-on, problem-solving lessons, greater integration with other disciplines, and a higher demand for new, innovative science education programs everywhere. That's where *Inspire Science* can help.

*Next Generation Science Standards is a registered trademark of Achieve. Neither Achieve nor the lead states and partners that developed the Next Generation Science Standards were involved in the production of or endorse this product.

Components Overview

A Modular, Digital Learning Experience with Print Where It Matters Most

DIGITAL

Interactive
Whiteboard
and Mobile
Friendly



ONLINE TEACHER GUIDE/ SUPPORT

One-stop shopping to help you plan and teach science and evaluate the concepts and practices.



READY-TO-GO LESSON SLIDES

Customizable lesson presentations with embedded multi-media assets make it easy to prepare for each lesson.



5E STUDENT LESSON NARRATIVE

Online instruction to guide each student through the 5E model and the use of the interactive resources.

Available in Spanish



VIDEOS

Real-world science videos help your class stay engaged, even with complex science concepts.



RECORDING SHEETS*

Digital and customizable recording sheets enable students to document observations and data for analyzing, interpreting, and communicating information.

CAREER KIDS

Characters that will help students along their learning paths.



GAMES

Immersive games that teach while they're playing. (in partnership with Filament Games)



SCIENCE SONGS

Fun songs about science to get them moving and excited.



INTERACTIVES

Interactive and responsive digital reading experiences provide an engaging way to learn science content.



SIMULATIONS

Interactive models allow students to explore cause and effect in ways that scientists and engineers do in real life! (in partnership with Concord Consortium)



ASSESSMENTS

Customizable diagnostic, formative, and summative assessment tools and rubrics help you prepare differentiation strategies and assess student understanding of key concepts and practices.



GRACE

computer programmer

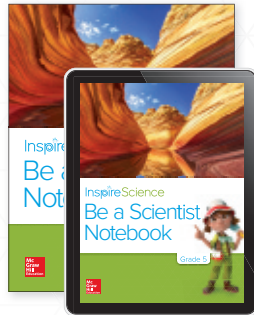
See samples today!
mheonline.com/inspire-science

DIGITAL AND PHYSICAL



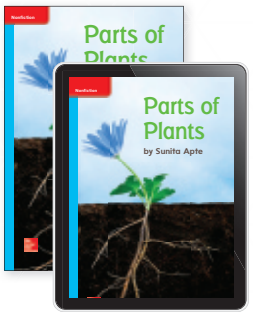
SCIENCE PAIRED READ ALOUDS
 (Grades K–2)
 Fiction and non-fiction readings for whole or small group concept introduction. The digital versions are great for whole class projection!

Available in Spanish



BE A SCIENTIST NOTEBOOK
 Problem-solving activity book that lets students practice being real scientists and engineers by presenting creative solutions to real-world problems.

Available in Spanish



LEVELED READERS
 Informational text readings that include text dependent questions, paired readings, and hands-on activities. Two titles per module with four levels each!
 Interactive versions of the leveled readers provide students with fun features like audio (including word-by-word highlighting), note taking tools, and point-of-use vocabulary support.

Available in Spanish



SCIENCE HANDBOOK
 (Grades 3-5)
 An easy-to-use research and reference tool covering all core science topics. Order print versions on demand through Create, your custom publishing system. Learn more at create.mheducation.com

Available in Spanish

PRINT on DEMAND

PHYSICAL

LAB KITS
 User-friendly kits that provide materials needed for each hands-on activity in the lessons, available with options for teacher demo or small group collaboration.

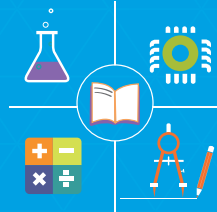


OFFLINE TEACHER SUPPORT
 A great resource for when you need to plan offline! Included for each module are module and lesson planning guides, lesson pacing guides, important background information, differentiation and EL strategies, vocabulary, and suggested offline activities.



InspireScience

SIMPLE • CONNECTED • INSPIRING



See samples online at mheonline.com/inspire-science