

Get Ready to Be Inspired!

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

Program Overview



WHY IS THE SKY BLUE?

WHY IS THE EARTH ROUND?



GEORGIA

InspireScience

Get Ready to Be Inspired!

Learning begins with curiosity. *Georgia Inspire Science* is designed to help you spark students' interest and empower them to ask more questions, think more critically, and maximize their ability to creatively solve problems. *Georgia Inspire Science's* instructional model will prove that science education can be comprehensive and offer fun learning experiences that are sure to pique the interest of the bright minds in your classroom. Let us help you cultivate curiosity and inspire the next generation of innovators, visionaries, and inventors.



See a video of Chloe and the other STEM Career Kids at Inspire-Science.com/career_kids

CHLOE Carpenter

InspireScience

User-Friendly Lesson Structure

Georgia Inspire Science lessons are designed with the familiar and proven 5E instructional model. Each lesson also comes with an easy-to-follow process so you know exactly what comes next.

Each Georgia Inspire Science lesson begins with a Page Keeley formative assessment probe

PAGE KEELEY, M.ED.

Key Steps to **Three-Dimensional Instruction**

Learning Progression

😤 I Will ENGAGE **ASSESS LESSON READINESS**

EXPLORE

Page Keeley Science Probe

- Science in Our World (2)
- 3 ? Essential Question
- Science and Engineering (4) Practices

🤭 Inquiry Activity (5)

d User-Friendly



User-Friendly Inquiries and Investigations

Georgia Inspire Science offers multiple inquiry activities and investigations at the module and lesson levels. Hands-on activities and performance tasks provide students the opportunity to expand content knowledge and demonstrate skills in science and engineering. Deeper conceptual understanding of science and engineering is also supported through digital simulations and game-based learning.



HANDS-ON LEARNING

Performance Task Making Mixtures	Materials			Mixture	Mass or Volume
You will make a variety of mixtures to show that mass is conserved when different types of matter are mixed.	goggles 8 small,			5 g Baking Soda + 20 mL Water	
Then, you will try to identify the type of mixture that is made.	wax paper			5 g Baking Soda + 5 g Baking Powder	
or more materials are mixed?	spoon 10 g baking			5 g Cornstarch + 20 mL Water	
	pan balance			5 g Salt + 20 mL Vinegar	
	60 mL water graduated cvlinder			5 g Cornstarch + 5 g Salt	
Carry Out an Investigation	stirrers			20 mL Water + 20 mL Vinegar	
BE CAREFUL Wear safety goggles. Use caution to avoid spills.	powder			-	
Record Data Measure 5 g of baking soda on a wax paper square and 20 milliliters (mL) of water. Using a stirrer, mit them is one of the sume source measure the more. Record	60 mL vinegar				
the mass in the data table.	10 g				
What type of mixture did you make? Record it in the table.	cornstarch				
Repeat steps 1 and 2 with 5 grams (g) of baking soda and 5 g of baking powder.	🔲 10 g salt				
Repeat steps 1 and 2 with 5 g of baking powder and 20 mL vinegar.					
Repeat steps 1 and 2 with 5 g of constarch and 20 mL of water.					
Repeat steps 1 and 2 with 5 g of salt and 20 mL of vinegar.					
Repeat steps 1 and 2 with 5 g of cornstarch and 5 g of salt.					
Repeat steps 1 and 2 with 20 mL of water and 20 mL of vinegar.		T THE MEN O M Date AND I	spillet 0 Million all D		
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GAME-BASED LEARNING Filament Games creates digital learning games and interactives designed to foster 21st-century skills through experiential learning. *Georgia Inspire Science* has partnered with Filament Games to create game-based learning that enables students to "play" with the lesson concepts to deepen conceptual understanding.



Type of Mixtur

SIMULATIONS The Georgia 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.

IUser-Friendly

User-Friendly Support

Georgia 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!



3D Learning

Georgia Inspire Science integrates Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts with literacy and mathematics standards so teaching science feels as natural and intuitive as it should be.

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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")

Connected

Georgia Standards of Excellence

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.

Cross-Curricular Connections

LITERACY MATH

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

The *Georgia Inspire Science* lessons include crosscurricular connections with quick and easy references to the specific literacy and math skills being reinforced through the science investigations.



Built to the Georgia Standards of Excellence

Georgia Inspire Science is built for the Georgia Standards of Excellence, with the added bonus of literacy and math integration. Georgia's Standards of Excellence for Science require more hands-on, problem-solving lessons, greater integration with other disciplines, and a higher demand for new, innovative science education programs. That's where *Georgia Inspire Science* can help.

InspireScience

Cross-Curricular Connections

Georgia Inspire Science connects the science you teach to the core subjects your students study. By integrating science, literature, and math, students master key concepts that impact science and beyond.



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Science + Engineering Practices

Students achieve and demonstrate greater understanding through hands-on science and engineering activities using the engineering design process.

- Asking Questions and Defining Problems
- Developing and Using Models
- Planning and Carrying Out Investigations
- Analyzing and Interpreting Data
- Using Mathematics and Computational Thinking
- Constructing Explanations and
 Designing Solutions
- Engaging in Argument from Evidence
- Obtaining, Evaluating, and
 Communicating Information



Performance Task Energy Transfer Machine

PERFORMANCE TASK

Math Practices

Students solve science and engineering challenges using math skills including:

- Analyzing and Interpreting Data
- Using Mathematics and Computational Thinking
- Developing and Using Models
- Obtaining, Evaluating, and Communicating Information





SIMULATIONS

Connected



Literacy Practices

Students hone close reading, writing, and communication skills, develop solutions to real-world challenges while learning about exciting science content.

MATH PRACTICES

Build Literacy Skills and Science Knowledge with Content-Rich Text

LITERACY PRACTICES

- Obtain, Evaluate, and Communicate Findings Effectively in Response to Tasks
- Engage in Arguments From Evidence and Apply Reasoning Skills
- Develop Research and Close-Reading Skills
- Advance Communication and Writing Skills with Text-Dependent Questions
- Develop Summary and Text-Evidence Skills
- Make Fiction and Informational Text Connections



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

ANTONIO Robotics Engineer

The Way

105

Reading

What is the meaning of the word *pupil* on page 27 What is another meaning for the word *pupil*? What clues in the text show you which meaning to use on page 27 HOLOGOMMS Find out more about the human eye. Use a Venn diagram to compare two parts of the human eye Write a paragraph to describe how these parts are similar and how they are different.

Way Eyes See It is a

n eyes with the eyes of

Summarize Use important details to summarize The Way Ey Your graphic organizer

How do you know that The nonfiction text? Identify the

Read the book again with a part diagram to compare human eye

help you. Text Evidence

LEVELED READERS Approaching, On, Beyond, ELL, & On-Level Spanish (Grades K-5)

Preparing the Next Generation of Innovators

The pace of change is accelerating. The challenges your students will face in their careers will likely be ones that don't even exist yet. Their future will require problemsolving skills that go beyond the status quo. *Georgia Inspire Science* is designed to help today's students prepare for any future they may face through an emphasis on problem-based and career-based learning. With *Georgia Inspire Science*, your students will learn to think like scientists and engineers, and develop the skills they need to create solutions to everyday challenges.



Problem-Based Learning

Empower students to develop critical-thinking through *Georgia Inspire Science's* problem-based learning components.

MODULE WEAP-UP Name Date	Name Date MODULE W&AP-UP
Electric and Magnetic Forces	Use what you learned about magnetism and electricity to design a solution!
Performance Project Solve a Simple Design Problem	Design a sketch of the solution to the gate problem using magnets. Label the sketch.
The farmer needs your help! Create a design solution that will keep the gate around his garden shut. Make a list of ways you could solve the problem. Sample answer: I could use a magnet on each	Students should show where magnets will be used to keep the gate closed.
side of the gate. I could use string to tie the gate closed.	How does the design solve the gate problem? Sample answer: The magnets were attracted to each other, so the gate
Do any of your solutions use magnets? If not, how could you incorporate magnets? Sample answer: I am using magnets in one of my solutions, placing opposite poles on	stayed shut. How could you improve the solution? Accept reasonable answers. Sample answer: I could use bigger and stronger magnets.
each side.	Did you learn the answers to all of your questions from the beginning of the module? If not, how could you design an experiment or conduct research to help answer them?
PERFORMANCE PROJECT	MODULE WRAP-UP Performance Project Solve a Simple Design Problem The farmer needs your help. Design a solution that will keep the gate in the fence around his garden shut.
K	Welder



LA Inspiring

Career-Based Learning



Notebook

Mc Graw Hill Education Watch STEM Career Kid Videos at Inspire-Science.com/ career_kids

HIRO Ocean Engineer

Future Career

Ocean Engineer Have you ever wondered what lies on the ocean floor? An ocean engineer studies this mysterious part of Earth. They develop vehicles that explore parts of the ocean floor that are dangerous for humans to go to. Ocean engineers identify the effect of the ocean on the shore and restore beaches that have worn away. They also examine coastal ecosystems for changes. These engineers are looking for safe ways to drill for oil and natural gas on the ocean floor.



INSPIRE CURIOSITY WITH THE STEM CAREER KIDS







GEORGIA InspireScience

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

Interactive Whiteboard and Mobile Friendly

DIGITAL







DIGITAL













SCIENCE SONGS





VIDEOS











Components Overview



DIGITAL AND PRINT

TEACHER'S EDITION

(Grades K-5)



SCIENCE PAIRED READ ALOUDS





BE A SCIENTIST NOTEBOOK

(Grades K–5)



SCIENCE HANDBOOK (Grades K–5)



LEVELED READERS



Digital versions of the student books include dynamic search tools, text highlighting, and more.

GRACE Computer Programmer

InspireScience

USER-FRIENDLY • CONNECTED • INSPIRING



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