NATIONAL GEOGRAPHIC LEARNING | CENGAGE Learning®

Grades K–5

NORTH CAROLINA Science

Focus on Essential Standards and Clarifying Objectives

Review North Carolina Science digitally at our Adoption Review site: *myngconnect.com*.

Click "For Educators" and enter:
Adoption.review@ncarolina.com
Password: Learning

NORTH CAROLINA

Science

Focus on Essential Standards and Clarifying Objectives

The Exploration Begins At Home

NATIONAL GEOGRAPHIC LEARNING BRINGS SCIENCE HOME TO NORTH CAROLINA

- Connect students to standards with familiar images and local content
- Focus on the Essential Standards and Clarifying Objectives
- Reach all learners through engaging content, inquiry, and literacy

MEET 100% OF NORTH CAROLINA K–5 SCIENCE STANDARDS WITH TWO PACKAGE OPTIONS:

Pages 8–9

Science Literacy Package

Build science success through literacy

- Enhance science comprehension and literacy skills through content reading
- Engage all students through differentiation at 3 reading levels

Pages 10–13

Science Package

Immerse students in the nature of science and inquiry

- Improve science understanding through project-based inquiry activities
- Increase engagement with online videos and simulations

DESIGNED TO TAKE STUDENTS BEYOND

In both North Carolina Science package options, students join leading National Geographic Explorers and Scientists in the field at various points throughout the program. These valuable interactions provide students with career connections and deliver real-life models of how scientists conduct studies and gain scientific knowledge.

Address STEM with National Geographic Explorers

Constance Adams
National Geographic Emerging Explorer, Space Architect

Stephon Alexander, Ph.D.
National Geographic Emerging Explorer, Theoretical Physicist

Thomas Taha Rassam Culhane
National Geographic Emerging Explorer, Urban Planner

Luke Dollar, Ph.D
National Geographic Emerging Explorer, Conservation Scientist

Marianne Dyson
Science Writer and Former NASA Flight Controller

Maria Fadiman, Ph.D.
National Geographic Emerging Explorer, Ethnobotanist

Beverly Goodman, Ph.D.
National Geographic Emerging Explorer, Geo-Archaeologist

Madhulika Guhathakurta, Ph.D
NASA Astrophysicist

Albert Yu-Min Lin, Ph.D.
National Geographic Grantee, Archaeologist

Greg Marshall
National Geographic Filmaker, Marine Biologist, Conservationist, Inventor

Mireya Mayor, Ph.D.
National Geographic Emerging Explorer, Primatologist, Conservationist

Anissa Ramirez, Ph.D.
Physicist

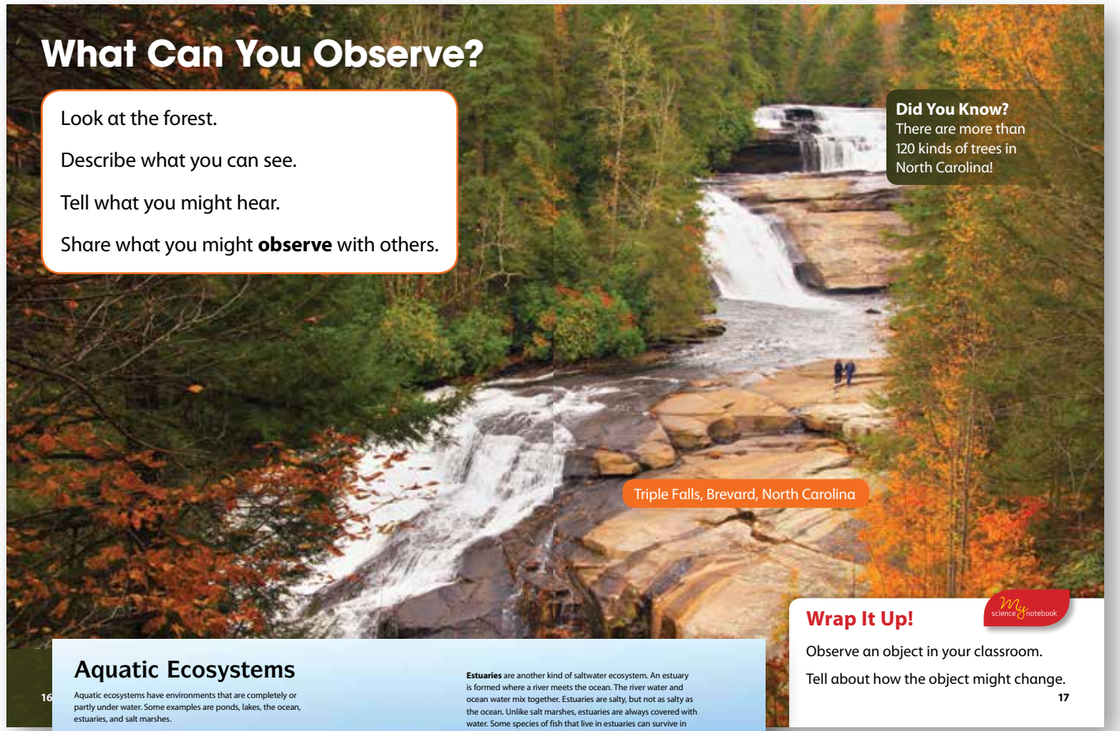
Tim Samaras
National Geographic Emerging Explorer, Severe-Storms Researcher

Tierney Thys, Ph.D.
National Geographic Emerging Explorer, Marine Biologist, Filmaker

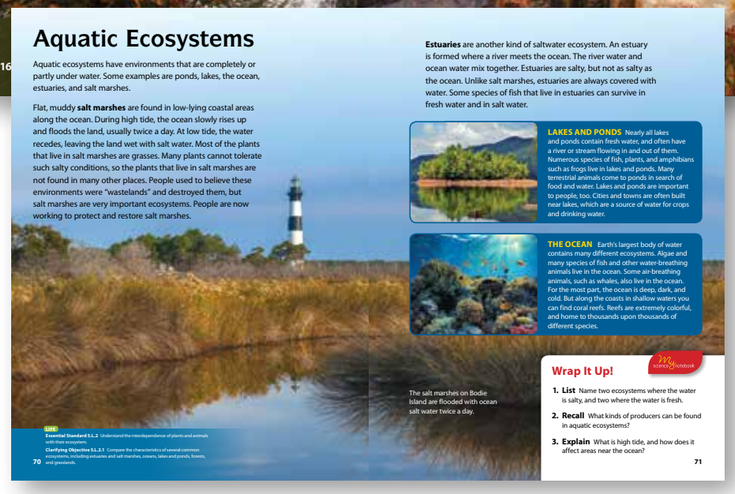
Katey Walter, Ph.D.
National Geographic Emerging Explorer, Aquatic Ecologist, Biogeochemist

Make Global Connections!

CONNECT STUDENTS TO STANDARDS WITH FAMILIAR IMAGES AND LOCAL CONTENT



Grade K, Triple Falls in Brevard, NC is shown during an observation lesson



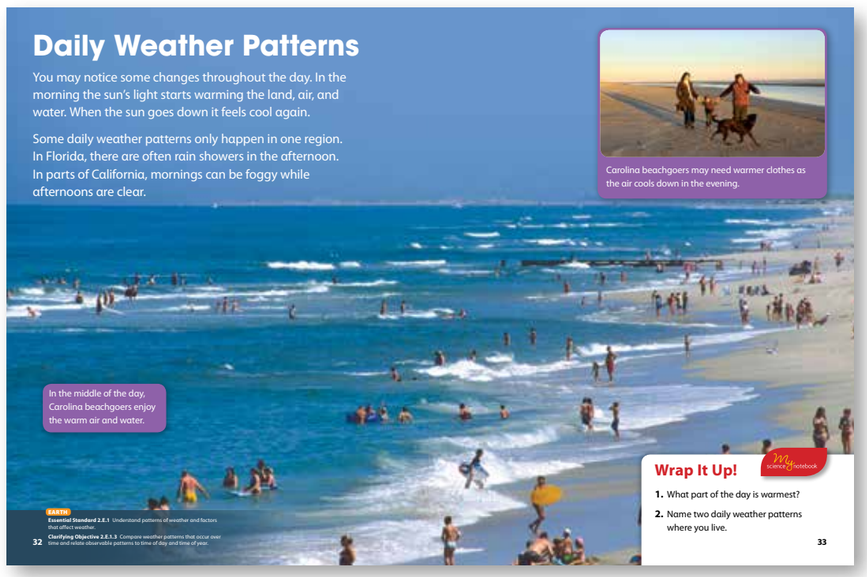
Grade 5, Bodie Island shows salt marsh and estuary ecosystems

FOCUS ON NORTH CAROLINA ESSENTIAL STANDARDS AND CLARIFYING OBJECTIVES

Both North Carolina Science package options master 100% of the Essential Standards for grades K–5.

Essential Standard 1.L.1
Clarifying Objective 1.L.1.2

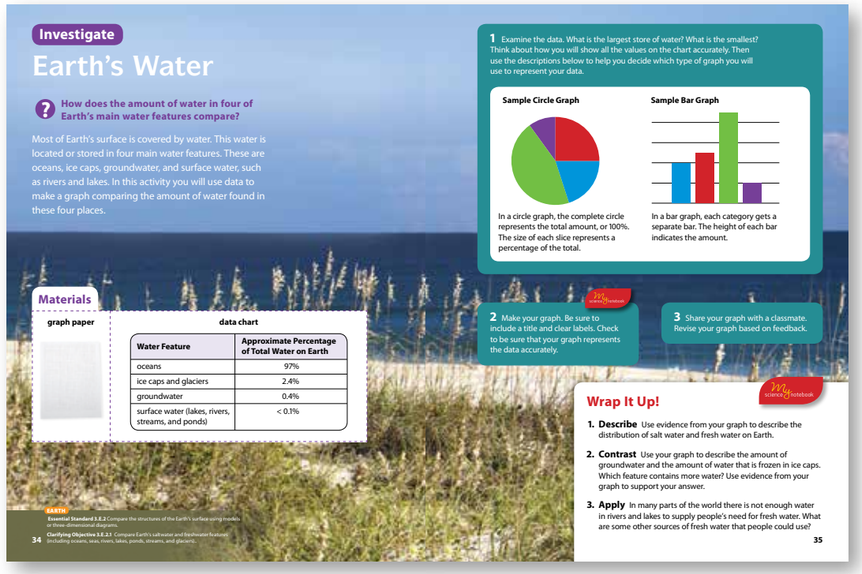
Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.



Essential Standard 2.E.1
Clarifying Objective 2.E.1.3

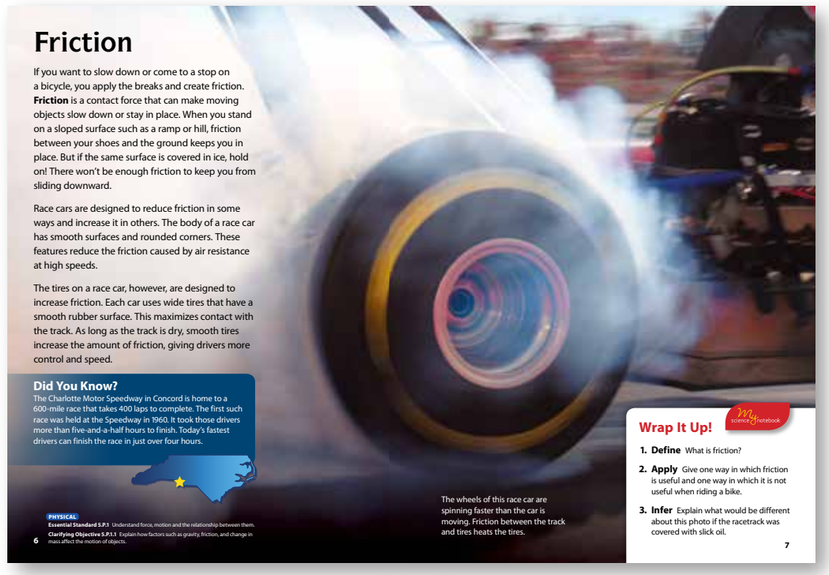
Compare weather patterns that occur over time and relate observable patterns to time of day and time of year.

Integrate Math and Science with project-based Investigations



Data and math Inquiry activity for Essential Standard 3.E.2
Clarifying Objective 3.E.2.1

Compare Earth's saltwater and freshwater features (including oceans, seas, rivers, lakes, ponds, streams, and glaciers).



Charlotte Motor Speedway used as an example of friction in Clarifying Objective 5.P.1.1

Explain how factors such as gravity, friction, and change in mass affect the motion of objects.

Two Package Options: Components Overview Comparison

OPTION 1:

North Carolina Science Literacy Package includes:

- Science Content Books
- Write About Big Books
- Teacher Resources

Plus:

- Leveled Science Readers

OPTION 2:

North Carolina Science Package includes:

- Science Content Books
- Write About Big Books
- Teacher Resources

Plus:

- Inquiry Books
- myNGconnect Digital Access (6-year license)
- Science Methods and Process Skills Big Books

Grade K	OPTION 1 North Carolina Science Literacy Package	OPTION 2 North Carolina Science Package
North Carolina Science Student Book	●	●
North Carolina Science Teacher's Guide	●	●
Big Ideas Big Books (Life, Earth, Physical)	●	●
Write About Big Books	●	●
Science Inquiry Big Books		●
Become An Expert Books	●	
Explore On Your Own Books	●	
Teacher's Editions	●	●
Big Ideas & Vocabulary Cards		●
Learning Masters		●
Assessment Handbook		●
Science Methods and Process Skills Big Book and Teacher's Guide		●
myNGconnect Digital Access (6-year license)		●

Grades 1–2	OPTION 1 North Carolina Science Literacy Package	OPTION 2 North Carolina Science Package
North Carolina Science Student Book	●	●
North Carolina Science Teacher's Guide	●	●
Big Ideas Big Books (Life, Earth, Physical)	●	●
Write About Big Books	●	●
Big Ideas Student Books (Life, Earth, Physical)		●
Science Inquiry Student Books		●
Become An Expert Books	●	
Explore On Your Own Books	●	
Teacher's Editions	●	●
Big Ideas & Vocabulary Cards		●
Learning Masters		●
Assessment Handbook		●
ExamView CD-ROM		●
Science Methods and Process Skills Big Book and Teacher's Guide		●
myNGconnect Digital Access (6-year license)		●

Grades 3–5	OPTION 1 North Carolina Science Literacy Package	OPTION 2 North Carolina Science Package
North Carolina Science Student Book	●	●
North Carolina Science Teacher's Guide	●	●
Big Ideas Student Book Life Science		●
Big Ideas Student Book Earth Science		●
Big Ideas Student Book Physical Science		●
Science Inquiry & Writing Book		●
National Geographic Ladders Science	●	
National Geographic Ladders Readers	●	
National Geographic Ladders Readers Teacher's Guide	●	
Teacher's Editions		●
Learning Masters		●
Assessment Handbook		●
ExamView CD-ROM		●
Science Methods and Process Skills Big Book and Teacher's Guide		●
myNGconnect Digital Access (6-year license)		●

NORTH CAROLINA SCIENCE LITERACY PACKAGE

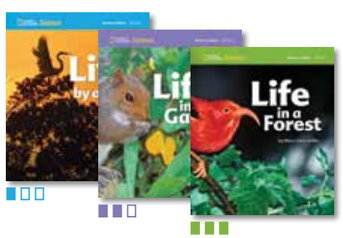
The Science Literacy Package offers a unique combination of science content for North Carolina standards and leveled science readers to improve reading and writing skills.

- Differentiate science content with three levels of readers
- Engage students with hands-on science investigations
- Enhance reading comprehension and expository writing skills
- Balance science and reading classroom time with informational texts

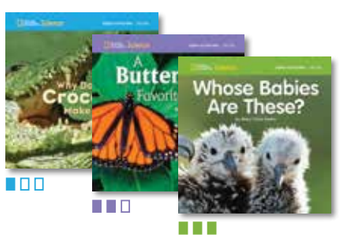
Grades K–2 Science Literacy

Content texts are supported by leveled science readers and science writing books for each grade.

North Carolina Science Grade 1



Become An Expert books for grades K–2 tie directly to the unit's Big Ideas and are presented at three reading levels, enabling teachers to effectively differentiate instruction.

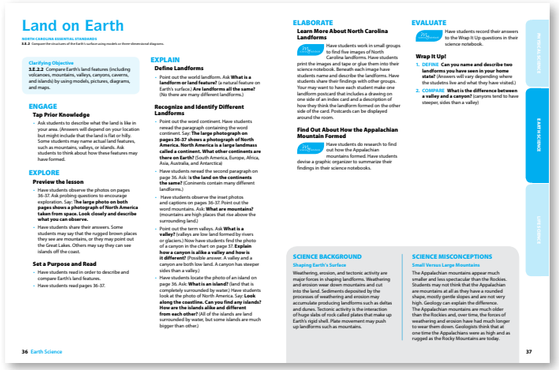


Leveled Explore On Your Own books carry forward the topical exploration at grades K–2, offering the flexibility to either extend learning in Science, or to provide connected nonfiction reading in your Language Arts block.

Write About Big Books are models for scientific writing to four different nonfiction genres.

Teachers Support

Teacher's Guides for each grade provide the support needed to implement and assess the standards. Lessons focus on science content knowledge with additional emphasis on reading comprehension and extending writing skills in various genres.



Grades 3–5 Science Literacy

Content texts are supported by leveled science readers with three levels per reader for each grade.

North Carolina Science Grade 4

National Geographic Ladders Science readers contain high interest content that explore life science, earth science, physical science, and STEM topics at three reading levels. The STEM titles inspire students through stories of National Geographic Explorers.

NORTH CAROLINA SCIENCE PACKAGE

The Science Package includes standards-based science content along with integrated hands-on inquiry and enhanced myNGconnect technology focused on science investigation and exploration.

- Provide background and in-depth focus on the North Carolina Essential Standards
- Multiple levels of hands-on inquiry and active science investigations
- Increase engagement though our CODiE award winning digital platform, myNGconnect

Built for Your Classroom

Modular Life, Earth, and Physical Science units at the primary grades allow you to engage K–2 students in a wealth of active discovery and shared exploration through the use of Big Books and little books in English and Spanish. The program then grows with your students by transitioning to grade-level sets of Life, Earth, and Physical Science Student Books at grades 3–5. At every grade, myNGconnect gives students and teachers online access to the books and digital program resources.

Modular unit-based Classroom Sets at Grades K–2

Complete and Flexible

Integrated Print and Technology with Hands-On Inquiry

Life, Earth, and Physical Science Student Books at each Grade 3–5

Address STEM Through Problem-Based, Hands-On Inquiry

North Carolina Science provides students with abundant and relevant hands-on practices to facilitate a thorough understanding of key science concepts. The four gradual release levels of inquiry in the program are designed to help students build confidence and competence in scientific thought and inquiry.

Explore Activity

The *Explore Activity* builds background for the unit and actively **engages** students as they **explore.**

Directed Inquiry

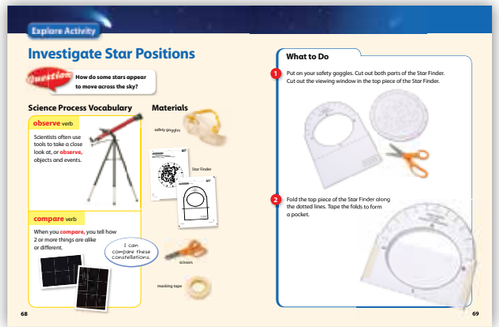
In *Directed Inquiry*, the teacher gives direct instruction throughout the activity. Students are given opportunities to **explain** what they have done, **elaborate** by asking further questions, and **evaluate** by answering questions and using a self-reflection rubric.

Guided Inquiry

In *Guided Inquiry*, students become independent learners with guidance from the teacher. Students may manipulate variables, provide **explanations**, **elaborate** by asking further questions, and **evaluate** by answering questions and using a self-reflection rubric.

Open Inquiry

In *Open Inquiry*, students choose their own questions, design and carry out their own plans, collect and record their own data, look for patterns, and communicate that data. Students **explain** their results, **elaborate** by asking further questions, and **evaluate** by answering questions and using a self-reflection rubric.



Explore Activity: Investigate Star Positions

Guided Inquiry: Investigate Erosion

Directed Inquiry: Investigate How Desert Plants Survive

Open Inquiry: Do Your Own Investigation

NORTH CAROLINA SCIENCE PACKAGE

Integrated Technology

myNGconnect for Students

The Student Home Page provides easy access to an array of technology tools designed to support and enhance the student's learning.

Spanish components available as eBooks

Student eEditions

- **Big Ideas, Student Inquiry Books, Become an Expert,** and **Explore On Your Own** books available online
- Highlighting, note-taking and search tools built-in, along with Read-to-Me audio support

Videos, Simulations, and Digital Library

- Videos featuring National Geographic Explorers and scientists introduce each unit
- Simulations allow student to manipulate variables for different results
- Searchable library of supporting video clips and images

Vocabulary Games

- Highly-interactive student games with rewards to teach vocabulary from units at K–2 and chapters at 3–5

Enrichment Activities

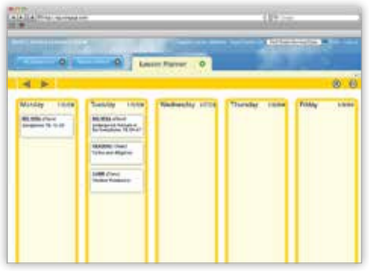
- Interactive resources to expand science concepts presented in the units

Teacher's Guides

Teacher's Guides for each grade provide the support needed to implement and assess the standards. Master the Essential Standards and Clarifying Objectives with lessons that are based on the 5E model of Engage, Explore, Explain, Elaborate, and Evaluate.

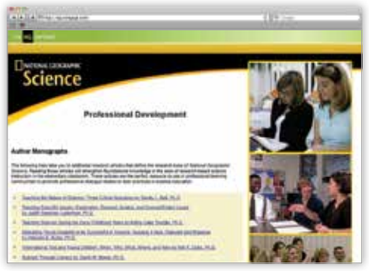
myNGconnect for Teachers

The Teacher Home Page provides the ability to easily find and manage program technology resources and provides online access to the full array of student and teacher materials.



Online Lesson Planner

- Tailor instruction to the amount of time you have each day
- Plan group and independent work
- Print plans at-a-glance or in detail



Online Professional Development

- Resources to enhance lesson delivery and encourage best practices

Teacher eEdition

- Online edition with embedded links to Unit Launch Videos, Assessment Handbook, and Learning Masters

Classroom Presentation Tool

- Allows teachers to project all print materials and visuals for a lesson

NORTH CAROLINA E-PROCUREMENT SEARCH:
NATIONAL GEOGRAPHIC LEARNING OR
TAX-ID # 59-2124491

NORTH CAROLINA Science

Focus on Essential Standards and Clarifying Objectives

TWO PACKAGE OPTIONS FOR GRADES K–5:

North Carolina Science Literacy Package

Build science success through literacy

North Carolina Science Package

Immerse students in the nature of science and inquiry

Review North Carolina Science digitally at our Adoption Review site.

myngconnect.com

Click "**For Educators**" and use the following login information:

School-Issued Email Address:
Adoption.review@ncarolina.com

Password:
Learning

Contact your sales consultant for more information:

Kate Norton
kate.norton@cengage.com
704-241-3119

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ISBN-13: 978-13058-55366
ISBN-10: 13058-55361
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