Mc Graw Hill

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Alabama Environmental Science

Principles of Environmental Science, High School Edition

1st Edition ©2023 | *Cunningham*

A Current and Applied Approach, Aligned for Alabama Success

Crafted specifically for a high school environmental science course, Alabama *Principles of Environmental Science: Inquiry & Application* is true to its title with an up-to-date, introductory view of the essential themes of the course and numerous opportunities for students to practice scientific thinking and active learning. Accessible pedagogical tools lead students to apply science and engineering practices, work with real-world data, and better understand environmental science and all of its complexities.

Presented in a single-column format for optimal readability and organized into four units with scientific and engineering practice integration, this feature-rich program was designed to support student success.

- Unit Projects, Case Studies, Data Analysis Labs, and Use the Practice activities apply science and engineering practices to real-world issues related to the field of study.
- Chapter Case Studies and Claim, Evidence, Reasoning boxes prompt students to develop and research their own claim to enhance investigation and reasoning skills.
- Math Connection provides opportunities to practice quantitative and computational thinking skills.
- Realistic, three-dimensional, instructional figures provide depth and orientation to complex structures and processes.
- The Teacher Manual, available in print and online, includes teaching strategies, pacing, activities with differentiated instruction, and EL and visual-literacy support.

Putting Scientific Thinking Into Practice

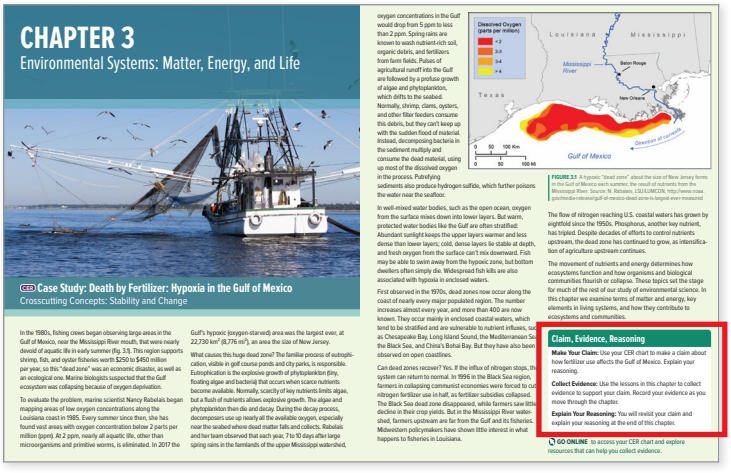
Unit Projects are an opportunity for students to apply the science and engineering practices to real-life problems related to environmental science to understand the impacts on their own lives and how scientists study complex problems.

Environmental Career Focus

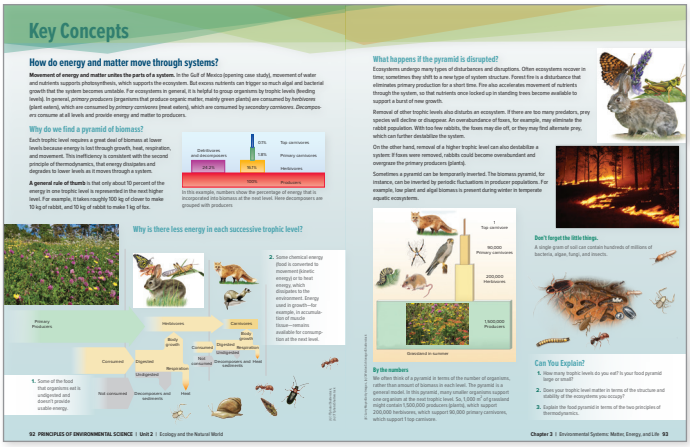
Career Focus features invite students to explore career options related to environmental science. Online focus activities allow students to explore career options in more depth.

Enhanced Pedagogy and Student Support

Each chapter begins with a **Case Study**. This allows students to encounter a phenomenon related to the chapter at hand, links to an online Claim, Evidence, Reasoning chart, and is revisited as part of the Chapter Review. As part of the Case Study, students are asked to make a claim, collect evidence, and explain their reasoning.



See page 8 for a
DIGITAL REVIEW GUIDE

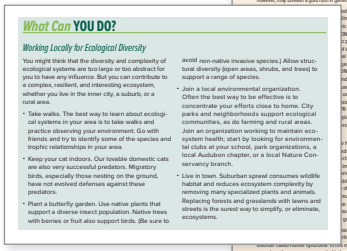


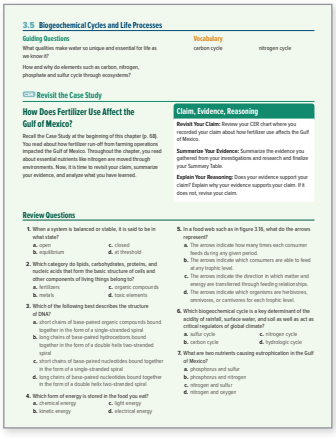
Engaging Visuals

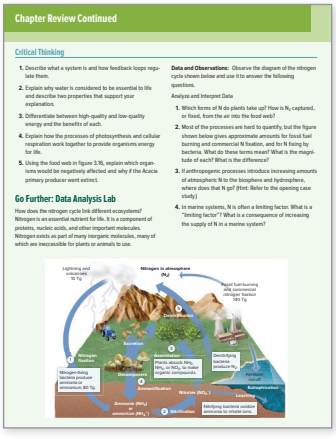
Key Concepts are beautifully displayed, two-page features which guide students through an often-complex network of issues. These features highlight the takeaway ideas from the chapter in a visually appealing way.

Real-World Connections

Boxed features make science accessible through the presentation of how and why data is collected, examples of technology and methods, and additional information that demystifies central principles and gives students realistic steps for applying their knowledge.

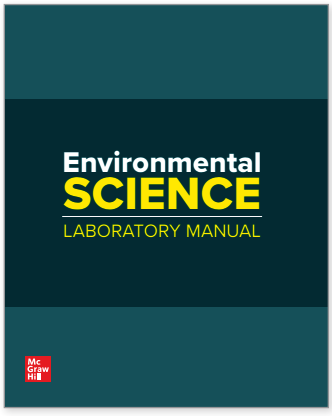






The **end-of-chapter assessments** help students master the content and practices included in each chapter. Multiple-choice and free-response questions ask students to recall and synthesize information covered in the course. The **Data Analysis Lab** allows students to apply what they've learned to real-world scenarios using current scientific data.

The **Lab Manual**, available in print and included with the digital resources, brings environmental science to life through hands-on activities and inquiry-based labs. The Teacher Manual provides hints and strategies to help with lab execution.



Robust, Adaptive, and Dynamic Digital Resources

Our digital solutions are enriched with multimedia content including videos, animations, and simulations that enhance the teaching and learning experience inside and outside of the classroom.

Authored by the world's leading subject matter experts and organized at the chapter level, the resources provide students with multiple opportunities to apply their understanding and master course content. Teachers can save time, customize lessons, monitor student progress, and make data-driven decisions in the classroom with flexible, easy-to-navigate instructional tools.

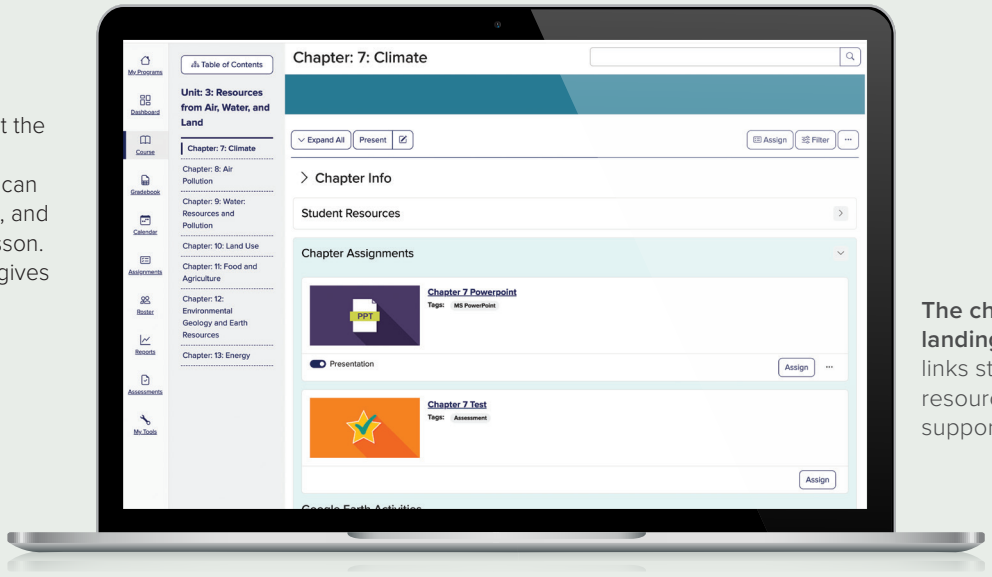
Robust Digital Resources

- An interactive eBook tagged to the Alabama standards and adaptive *SmartBook*® assignments.
- Google Earth, graphing, and mapping activities.
- Customizable, auto-graded test banks.
- Dozens of virtual labs.

Intuitive Design

Resources are organized at the chapter level. To enhance the core content, teachers can add assignments, activities, and instructional aids to any lesson. The chapter landing page gives students access to:

- Adaptive *SmartBook*® assignments.
- Lab activities.
- Assignment calendar.
- An interactive eBook.



The chapter landing page links students to resources that support success.

Access to the Online Student Edition includes access to the eBook, SmartBook adaptive eBook, virtual labs and additional digital learning resources. Teacher resources include the eBook, SmartBook, Teacher Manual, PowerPoint presentations, assignable resources, Gradebook, Pacing Guides, and more.

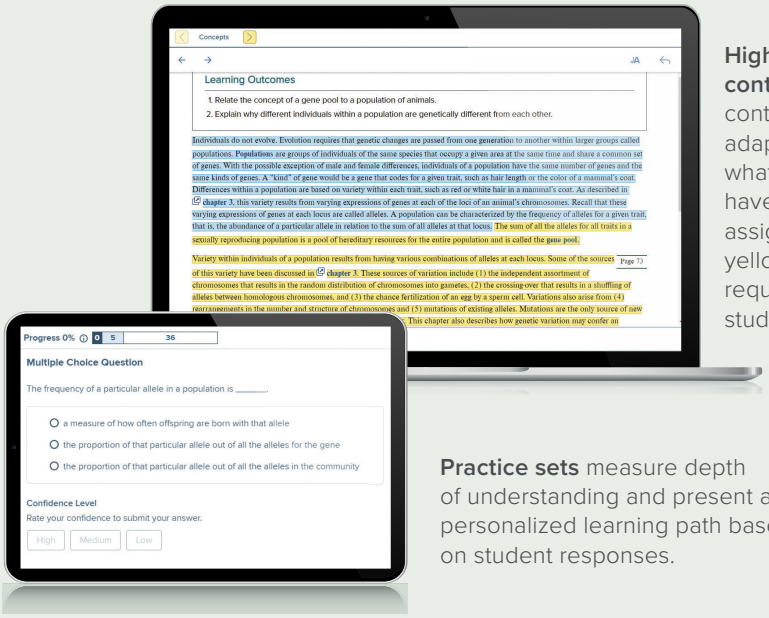
Mobile Ready

With the McGraw Hill K–12 Portal App, students can access their content any time on any device, with or without Internet access.

Adaptive Study Tools

SmartBook® is the online adaptive study tool. Its interactive features engage students and personalize the learning experience with self-guided tools that:

- Assess a student's proficiency and knowledge.
- Track which topics have been mastered.
- Identify areas that need more study.
- Improve reading comprehension by highlighting key content that needs additional study.
- Present focused content specific to the student's individual needs.



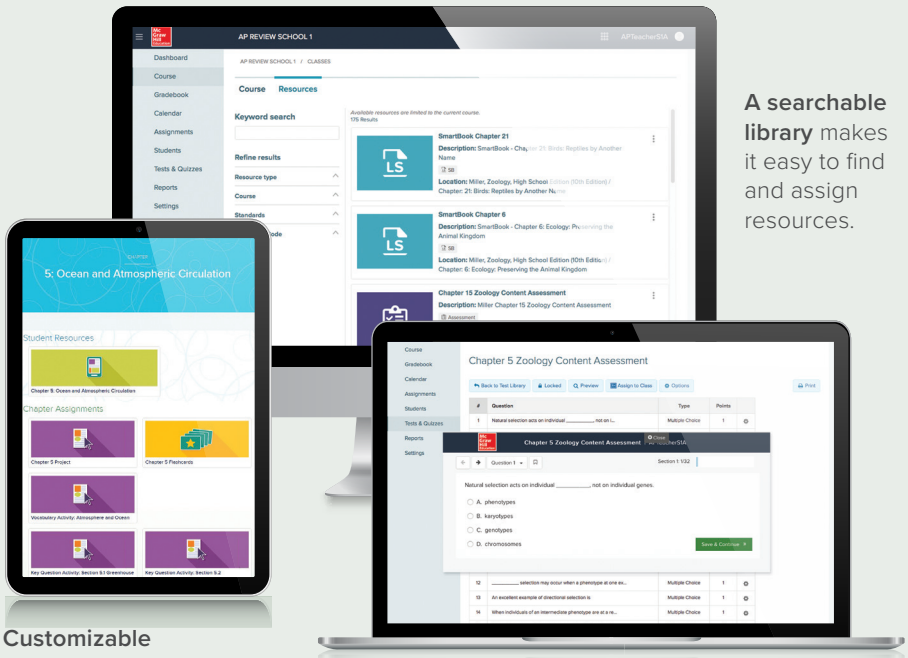
Highlighted content continuously adapts to show what students have been assigned in yellow and what requires further study in blue.

Practice sets measure depth of understanding and present a personalized learning path based on student responses.

Teacher Resources

Teachers have access to *SmartBook*®—an interactive, adaptive eBook—plus a wealth of customizable chapter resources and powerful gradebook tools. Resources include:

- An online Teacher Manual with chapter outlines, teaching suggestions, reading strategies, and pacing guides.
- Student performance reports to help teachers identify gaps, make data-driven decisions, and adjust instruction.
- Customizable PowerPoint presentations.
- Labeled diagrams, visual aids, animations, and additional ideas.



A searchable library makes it easy to find and assign resources.

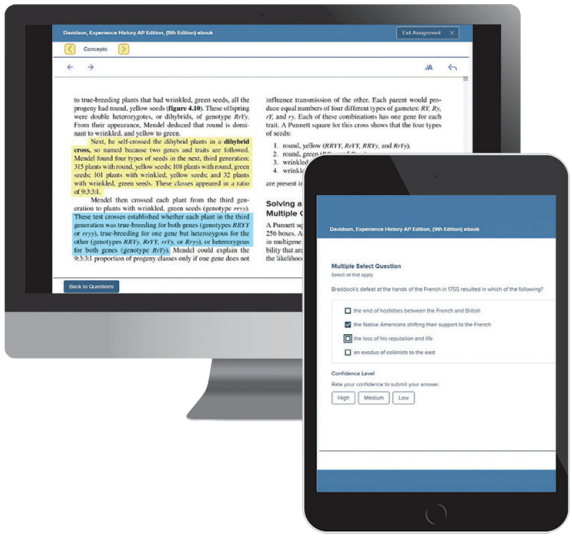
Customizable assignments and quiz banks provide automated grading that populates easy-to-read reports.

Harness technology to unlock success. Visit ***my.mheducation.com***

The Learning Is Always Personalized

SmartBook®

All core programs include *SmartBook* within the digital course. *SmartBook* delivers personalized, adaptive learning tailored to each student's individual needs by pinpointing knowledge gaps and focusing instruction on the concepts that require additional study. Teachers can assign a specific chapter, topic, or concept and access advanced reporting features with actionable insights to inform in-class instruction.



FOR STUDENTS

More Personalized. More Productive.

As students move through the material, multiple data points are captured to sequence and pace individual instruction.

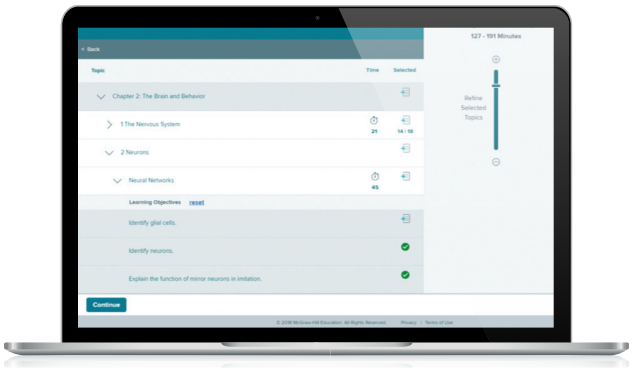
- **Focused Instruction:** Yellow highlights help students easily identify their assigned learning concepts.
- **Targeted Remediation:** Blue highlights bring focus to the contents and concepts that require additional study.
- **Meaningful Practice:** Practice sets with instant feedback allow students to ask for guidance and rate their confidence level.
- **Recharged Learning:** Students can access previously completed assignments with personalized recommendations.
- **Mobile Ready:** Assignments are accessible both online and offline with the McGraw Hill K–12 Portal app.

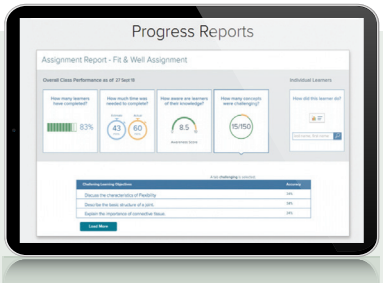
FOR TEACHERS

More Control. More Prepared. More Actionable.

Teachers can organize assignments to suit their students' needs and align to their course outcomes while easily tracking student progress.

- **Flexible Assignments:** Assign homework down to the subtopic level and time-on-task.
- **Manageable Content:** Assign content across multiple chapters to make connections between chapters, topics, and concepts.
- **Results-Based Support:** Provide personalized review assignments that target each student's areas of weakness.
- **Actionable Reports:** Advanced reporting features track individual and class progress with data-driven insights.





"Using *SmartBook* has been a game changer! It is like having a co-teacher! I can see how much they read. I can see how much they comprehended! I can see, specifically, what challenging concepts exist. Students can see their progress. Students can see that they are being held accountable in a much more realistic and targeted manner. Students are much more engaged in the class and better prepared to interact with a deeper level of academic conversation."

–Marion Chase
Instructional Coach and AP Teacher

The Lab Is Always Open

Virtual Labs

Virtual Labs empower students outside the classroom and outside the laboratory with 24/7 access. The labs are compatible with screen readers and keyboard navigation to ensure an accessible experience for all learners. The easy-to-follow on-screen instructions guide students through each part of their lab journey and their progress is automatically saved and always visible to help them take ownership of their learning.

Available 24/7 –even if the lab space isn't

Built with accessibility in mind

Easy-to-follow on-screen instructions

Student progress is automatically saved

Visible progress bar

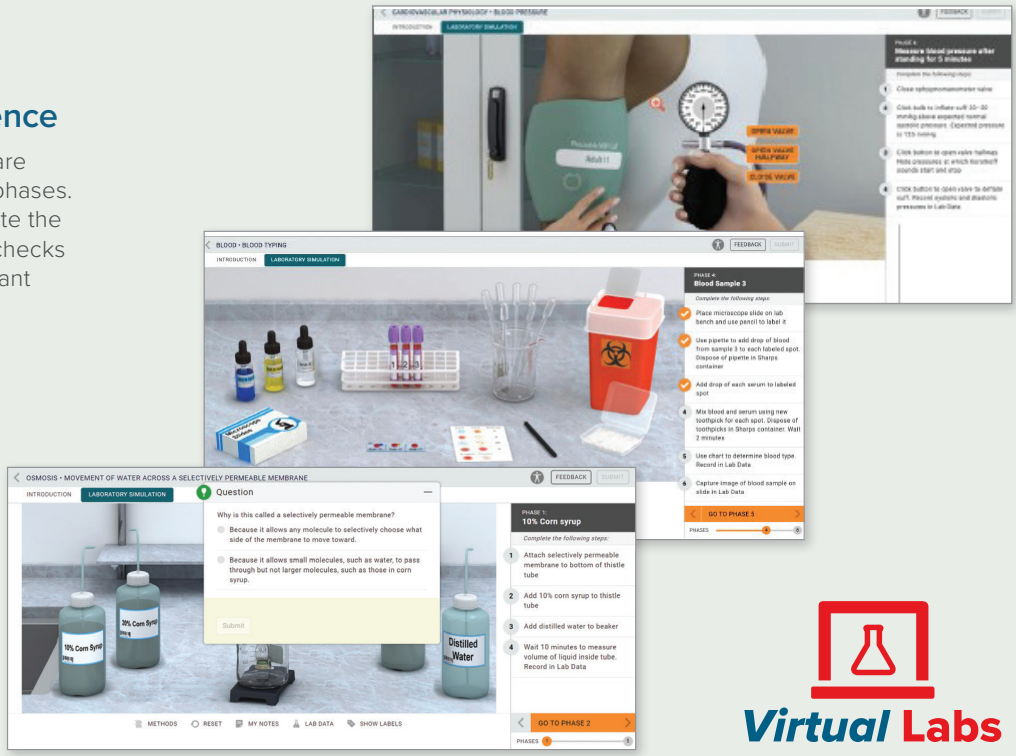
Virtual Labs, included in select courses,* deliver a realistic, simulated lab experience that better prepares students with the fundamental skills for hands-on lab work. If needed, these labs can even supplant hands-on lab work.

These simulations help students learn practical and conceptual skills; they check for understanding, and provide feedback. With adaptive pre-lab and post-lab assessments available, teachers can customize each assignment.

The Virtual Lab Experience

In each lab experience, students are guided through the step-by-step phases. They use their mouse to manipulate the materials and are prompted with checks for understanding that deliver instant and guided feedback.

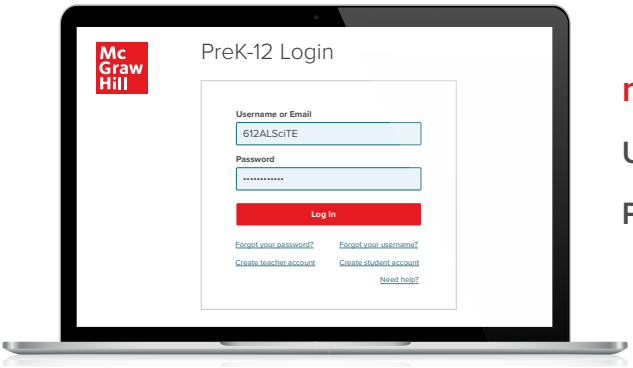
Students also have access to tools for notetaking, resetting the lab, labeling, and reviewing the list of methods at point of use. Once complete, the lab is automatically submitted to the teacher and students can save their work, print, or download a PDF for their records.



Virtual Labs

Take a Tour and Explore

Use this guide to help you get familiar with a variety of digital tools, resources, and support to meet the needs of your classroom and students.



my.mheducation.com

User Name: 612ALSciTE

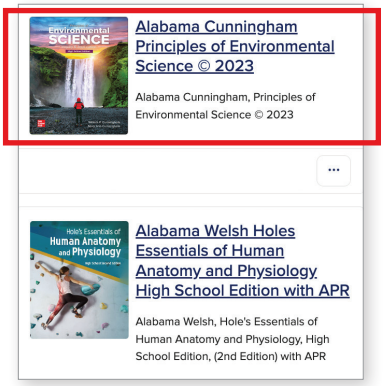
Password: Camellia1

LOG IN TO THE DIGITAL EXPERIENCE

Log in to **my.mheducation.com** using the credentials above.

Locate and click on the course you wish to review.

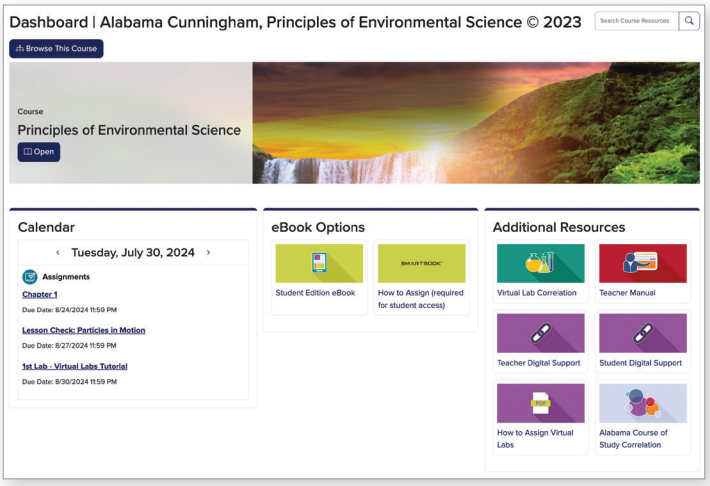
Note: All courses function similarly. You can explore any title within the demo account.



VIEW YOUR COURSE DASHBOARD

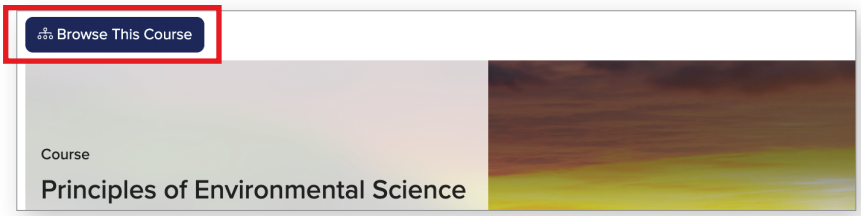
This is the **Digital Dashboard**. It's your home base for resources, such as:

- Full Teacher Manual
- Quick eBook Access
- Virtual Labs
- Correlations
- Digital Teacher Support
- Digital Student Support



BROWSE YOUR COURSE

Click **Browse This Course** to expand the menu and explore units, chapters, assignments, activities, assessments, and more.

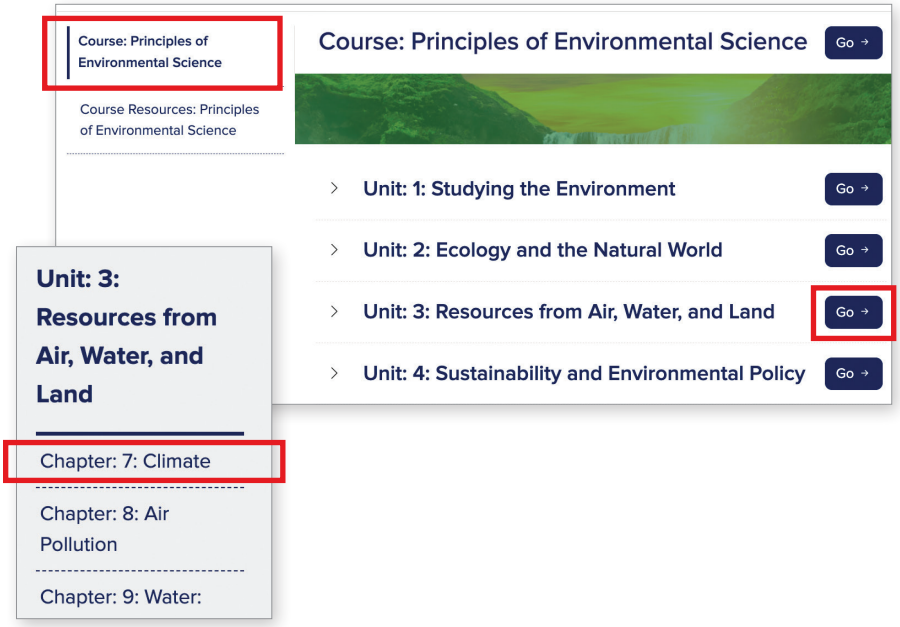


BROWSE UNITS AND CHAPTERS

Select **Course: Principles of Environmental Science**.

Navigate to a unit and click the **Go** button to drill down to the unit's chapters.

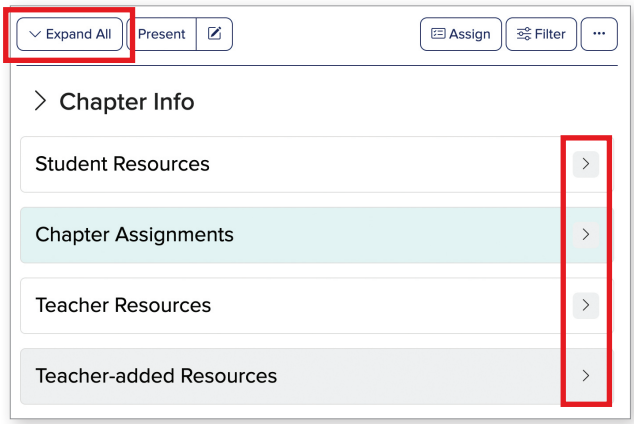
Select a **chapter** from the left hand navigation to review the chapter-level resources.



BROWSE CHAPTER CONTENTS

Select **Expand All** to open all of the chapter contents for both students and teachers.

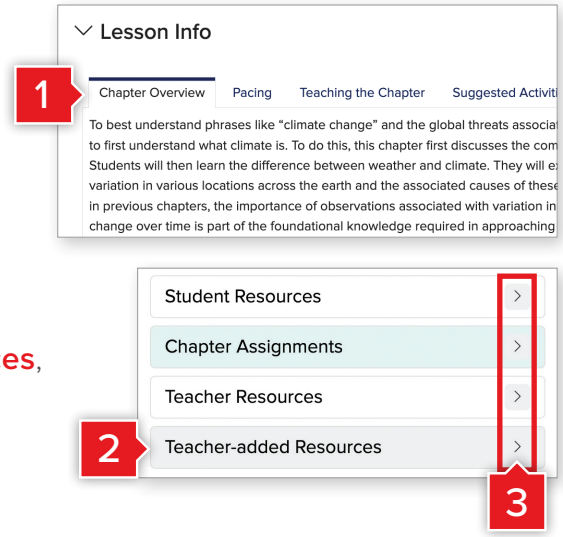
You can also click the **arrows** to the right of the blades to open one resource type at a time.



BROWSE INSTRUCTIONAL RESOURCES

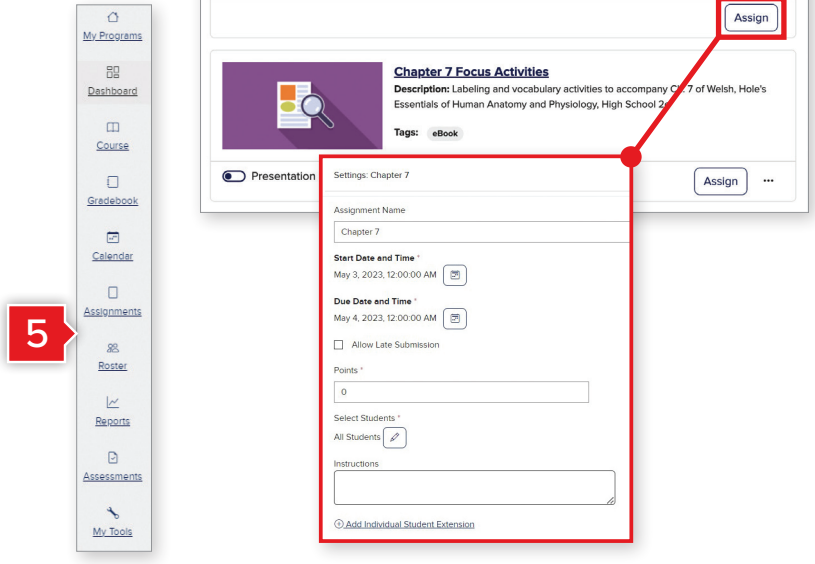
Selecting a chapter will take you to the **Chapter Landing Page**.

1. Click **Lesson Info** and use the tabs to explore Overviews, Pacing, Instructional Strategies, Suggested Assignments, and Benchmarks.
2. Your own materials can be uploaded and assigned to students in **Teacher-added Resources**.
3. The arrows to the right open to reveal **Student Resources**, **Chapter Assignments**, and **Teacher Resources**.



ASSIGN RESOURCES

4. Click on the tile to preview the resource or click **Assign** to open the course calendar and access options for assigning.
5. As you navigate your program, the Program Menu is always visible at the left side of the screen to help you navigate quickly to the **Gradebook**, **Calendar**, **Assignments**, **Roster**, **Reports**, and **Assessments**.

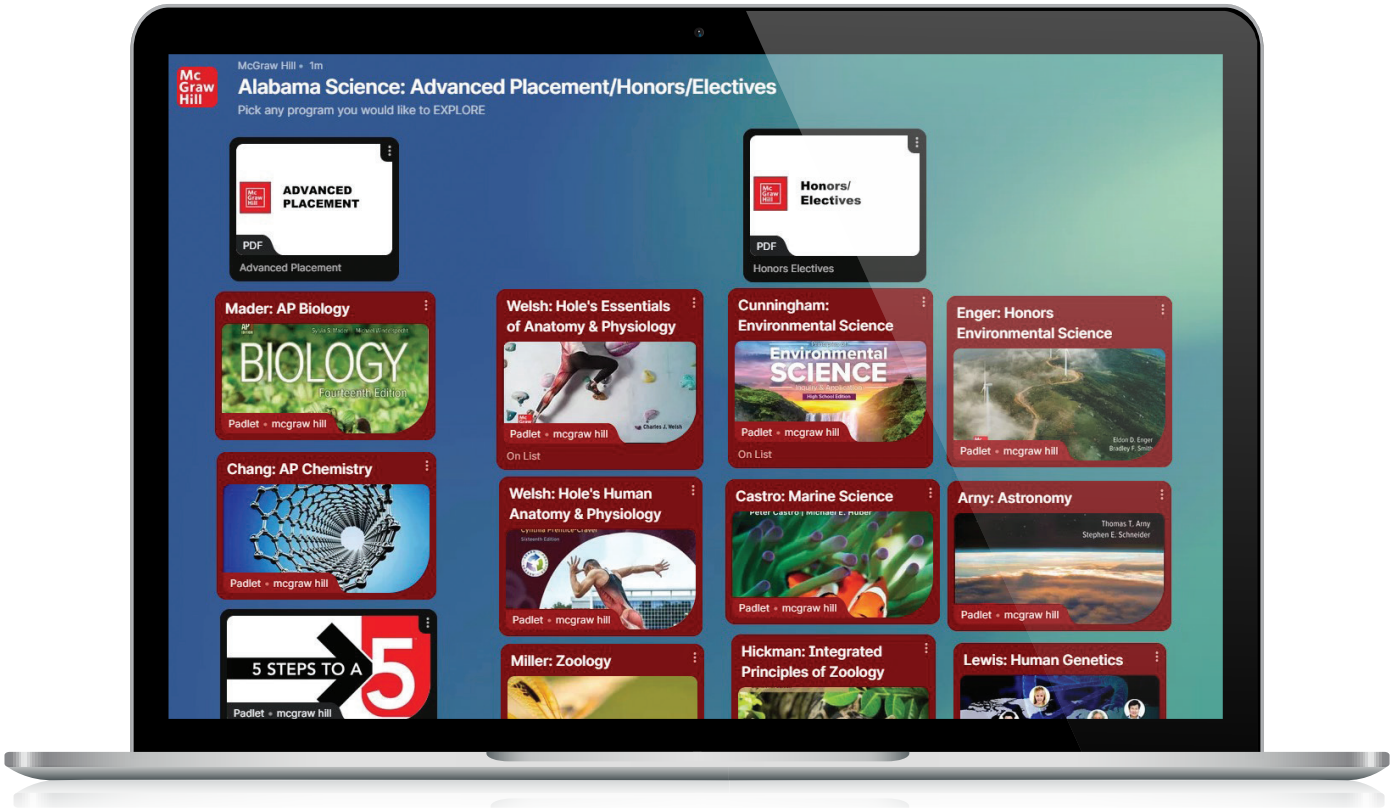


READ OFFLINE ANYTIME, ANYWHERE

Mobile ready! With the **McGraw Hill K–12 Portal app**, students can access their content any time on any device, with or without Internet access.

There's Even More To Explore

Find the right solutions to ensure students develop the academic and real-world skills they need to make the successful transition to college and/or the workforce. Provide meaningful experiences with purposeful lessons, extensive practice, and a variety of opportunities for concept mastery to lead them to success in college and beyond.



Scan the QR code to explore the resources that support Alabama AP®, Honors, and Electives teacher and student success!

Password: AL_APElectives

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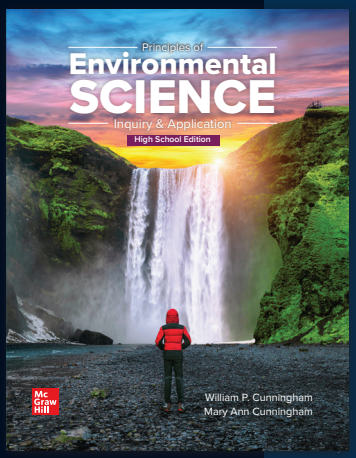
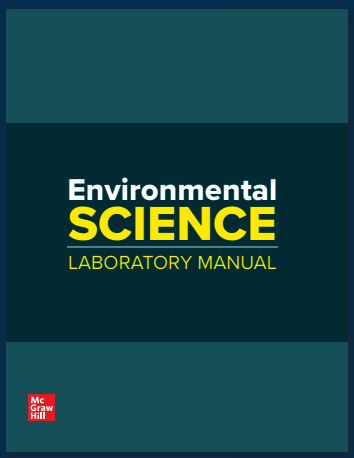
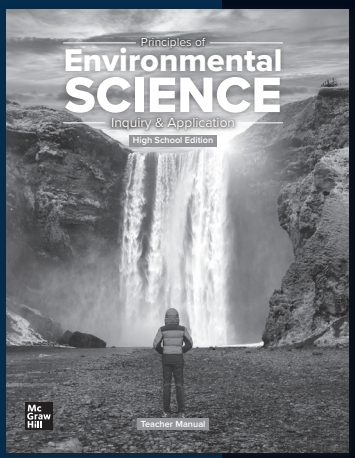


STUDENT EDITION



STUDENT LAB MANUAL



PRINTED TEACHER MANUAL

Learn more at **mheducation.com/Alabama**

Mc Graw Hill

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