Houghton Mifflin Harcourt

HMH SCIENCE DIMENSIONS™
ENGINEERED for the NEXT GENERATION

Earth & Space Science

Program Components and Features

GRADES 9–12

STUDENT RESOURCES

Student Edition, Print

FEATURE HIGHLIGHTS:

- ***Thing Explainer* illustrations** from **Randall Munroe of xkcd.com fame**...for additional coverage of Disciplinary Core Ideas
- **Driving Questions**...to stimulate students' thinking about the big ideas of science
- **Engaging lesson openers**...to connect learning to discrepant events or phenomena
- **Science Notebooking prompts**...to encourage students to gather evidence that supports their claims, draw models and diagrams, and develop the reasoning behind the scientific explanations they construct
- **Vocabulary** highlighted within the sentence... so students focus on the contexts and concepts behind words
- **Collaboration prompts**...so students drive their own learning through discussion and teamwork with peers
- **Modeling activities**...to enable students to practice this critical scientific and engineering process
- **Engineering connections**...to help students engage in the design process to solve problems like engineers
- **Math and English language arts connections**... to strengthen students' skills in cross-curricular areas
- **Guided Research features**...so students practice conducting and applying research
- **Lesson Self-Check**...to provide useful checkpoints for understanding
- **Checkpoints**...to measure student understanding of lesson concepts, skills, and applications
- **Hands-on Activities and Labs**...so students can demonstrate scientific procedures and analysis
- **Data Analysis**...to engage students in this critical process for constructing scientific explanations
- **Make Your Own Study Guide prompts**...to put students in charge of their own learning and review
- **Crosscutting Concept icons**...to highlight connections to Cause and Effect; to Energy and Matter; to Scale, Proportion, and Quantity; and more
- **Unit Connections**...so students can see how their learning applies to engineering, social studies, computer science, the arts, and other areas of study
- **Unit Practice and Review**...for review and evaluation
- **Unit Projects**...so students can engage in project-based learning
- **Unit Performance Task**...enabling students to construct their own solution to a problem

NEXT GENERATION SCIENCE STANDARDS

STUDENT RESOURCES

Student Edition, Interactive Online Edition

FEATURE HIGHLIGHTS:

- **All the features of the Print Student Edition *plus*:**
- **Animations and Videos**...to enhance student understanding through engaging multimedia
- **Open-ended prompts**...to encourage students to type or draw their answers to open-ended questions
- **Technology-enhanced inputs** like dropdown select, multi-select, and drag and drop...to prepare students for high-stakes tests, allow them to receive immediate feedback on their responses, and offer teachers ongoing formative assessment feedback
- **Take It Further**...to empower students with personalized learning paths, so they can continue their studies in the areas that most interest them
- **Extension opportunities**...to stimulate thinking in students who need an additional challenge
- **Vocabulary** highlighted and clickable...to link students directly to the definition
- **Unit Project Worksheets**...to help students plan their thinking around project-based learning
- **Downloadable PDF Worksheets for Labs**...for added convenience

Student Edition, eTextbook (ePub, download)

Student Edition PDF (Downloadable)

CliffsNotes® *On the Job* Videos

...to interest students in STEM careers and show them what an actual workday looks like in different fields!

Math and ELA Online Handbooks

...to refresh students' knowledge of essential math and English language arts skills

Science and Engineering Practices and Crosscutting Concepts Online Handbooks

...for students who need extra support in grasping the SEPs and CCCs

You Solve It

...to engage students in open-ended simulation-based learning with multiple answer options

TEACHER RESOURCES

Teacher Edition, Print

FEATURE HIGHLIGHTS:

- **3D Learning Objectives**—custom stepping-stone objectives...for integrating the Three Dimensions of Learning
- **PEs, SEPs, CCCs, and DCIs** clearly labeled for each lesson...to help you navigate the new standards
- **Connections to Math and ELA** outlined in each lesson...to connect science content to other curricular areas
- **Building on Prior Knowledge**...to access students' existing knowledge about the subject matter
- **Differentiating Instruction features**...to individualize instruction for every student
- **EL Support**...to address the needs of English learners in your classroom
- **Content Background refreshers**...to provide context for what is being taught in class
- **5E Model**...to maximize teaching effectiveness via a familiar learning model
- **Evidence Notebook support**...to guide students as they journal about their thinking
- **Collaboration support**...to help inspire group interaction
- **Hands-On Activities and Labs support**...to efficiently conduct labs by previewing the time required, the objective, and any preparations

Teacher Edition, Interactive Online Edition

FEATURE HIGHLIGHTS:

- **All the features of the Print Teacher Edition *plus*:**
- **K–12 Standards Trace Tool**...to clarify how NGSS* spirals through each grade and where your instruction fits
- **Professional Learning Videos**...to ease your transition to NGSS with support from thought leaders and experts
- **Lab Resources and Materials List**...to help you seamlessly integrate labs

Teacher Edition, eTextbook (ePub, download)

Teacher Edition PDF (Downloadable Teacher Resource Tool)

Google® Expeditions Teacher Guide

...providing tips and strategies for incorporating science-specific Google Expeditions into the curriculum

---

ASSESSMENT RESOURCES

Assessment Guide

... for easy access to your print assessment resources

Online Assessment with Item Banks

...for compiling your own quizzes and tests

Performance-Based Assessments

...to prepare students for high-stakes tests on the Performance Expectations of NGSS

PARENT RESOURCES

Parent-Facing Videos

...offering background and explanations concerning NGSS*

ADDITIONAL RESOURCES

Common Cartridge®

...supporting integration of content into compatible Learning Management Systems

Ed: Your Friend in Learning

...a new online learning system that combines the best of technology, HMH® content, and instruction to personalize the teaching and learning experience for every teacher and student

HMH Player® app

...for accessing program content offline and for maximum compatibility in 1:1 or in Bring Your Own Device learning environments

*Next Generation Science Standards and logo are registered trademarks of Achieve. Neither Achieve nor the lead states and partners that developed the Next Generation Science Standards was involved in the production of, and does not endorse, this product.

Connect with us: