

Earth Science offers a focused curriculum that explores Earth's composition, structure, processes, and history; its atmosphere, freshwater, and oceans; and its environment in space.

Course topics include an exploration of the major cycles that affect every aspect of life, including weather, climate, air movement, tectonics, volcanic eruptions, rocks, minerals, geologic history, Earth's environment, sustainability, and energy resources. Optional teacher-scored labs encourage students to apply the scientific method.

The content is based on the National Science Teachers Association (NSTA) standards and is aligned with state standards.

Length: Two semesters

## **UNIT 1: WHAT IS EARTH SCIENCE?**

### **LESSON 1: THINKING LIKE A SCIENTIST**

#### **Study: The Layers of Earth Science**

Learn about the fields that make up Earth science and about the scientists who work in them.

Duration: 1 hr

#### **Study: The Scientific Method**

Solve problems by applying the steps of the scientific method.

Duration: 1 hr

#### **Discuss: That Is My Specialty**

Discuss what you have learned about careers in Earth science.

Duration: 0 hrs 30 mins Scoring: 25 points

#### **Quiz: Working in Science**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### **LESSON 2: DISCOVERING PLANET EARTH**

#### **Study: A Global View**

Differentiate among models used to graphically represent Earth. Examine maps and learn about how they are arranged.

Duration: 1 hr

#### **Lab: Determining Longitude and Latitude**

Complete a lab to investigate how latitude and longitude are calculated and how they indicate a location on the globe. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

#### **Study: Maps and More**

Learn how different maps are used and made.

Duration: 1 hr

#### **Quiz: Do You Know Your Earth?**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

#### **Lab: Using a Topographic Map to Create a Landform**

Complete a lab to discover how you can use a topographic map to create a landform. Prentice Hall's *Earth Science Lab*

*Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

### LESSON 3: CONCEPTS IN EARTH SCIENCE

#### **Study: Equilibrium and Convection**

Discover why equilibrium and convection are important Earth science concepts. Learn how to recognize them in everyday life.

Duration: 1 hr

#### **Study: Cycling through the Conservation of Matter and Energy**

Discover why cycling and the conservation of matter and energy are important Earth science concepts. Learn how to recognize them in everyday life.

Duration: 1 hr

#### **Quiz: Big Earth, Big Concepts**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### LESSON 4: WHAT IS EARTH SCIENCE? WRAP UP

#### **Review: What Is Earth Science?**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 2 hrs

#### **Test (CS): What Is Earth Science?**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

#### **Test (TS): What Is Earth Science?**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

### LESSON 5: DIAGNOSTIC

#### **Diagnostic: What Is Earth Science?**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

## UNIT 2: WHERE IS EARTH?

### LESSON 1: THE UNIVERSE

#### **Study: The Big Bang Theory**

Discover the Big Bang theory and learn about what evidence is used to support it.

Duration: 1 hr

#### **Study: Galaxies**

The Milky Way is only one of many galaxies. Learn about the different types of galaxies in the universe.

Duration: 0 hrs 30 mins

#### **Study: Star Life Cycles**

Live like a star. Explore the life cycle of stars. Learn about why the size of a star influences how it dies.

Duration: 1 hr

#### **Quiz: Matter Formation**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

#### **Practice: Everything in the Universe**

Predict what will happen to stars and answer questions about the life cycles of stars.

Duration: 1 hr Scoring: 50 points

## LESSON 2: SOLAR SYSTEM FORMATION

### Study: Planet Formation

Discover how gravity influences the universe.

Duration: 0 hrs 30 mins

### Study: Comets and Asteroid Belts

Learn about comets and asteroids and how they are formed.

Duration: 0 hrs 30 mins

### Lab: Exploring Orbits

Complete a lab to follow the paths of planets. Prentice Hall's Earth Science Lab Manual required.

Duration: 1 hr 30 mins Scoring: 50 points

### Quiz: How Did Planets Form?

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## LESSON 3: OUR NEIGHBORHOOD

### Study: Here Comes the Sun

How hot is hot? Examine the structure of the sun and learn about its energy.

Duration: 0 hrs 30 mins

### Study: The Inner, Rocky Planets

Analyze similarities and differences among Mercury, Venus, Mars, and Earth.

Duration: 1 hr

### Quiz: The Solar System So Far

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### Study: The Gas Giants and Pluto

Analyze similarities and differences among Jupiter, Saturn, Neptune, Uranus, and Pluto.

Duration: 1 hr

### Quiz: The Rest of the Solar System

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### Journal: Choose a Planet

Create an article, real estate advertisement, or letter in order to share your thoughts about a planet you would like to visit.

Duration: 0 hrs 30 mins Scoring: 15 points

## LESSON 4: PLANET EARTH

### Study: The Moving Earth

Around and around we go. Discover how Earth's movements affect conditions on the planet.

Duration: 1 hr

### Practice: Stopping the Revolution

Determine how well you understand Earth's movement in space.

Duration: 1 hr Scoring: 50 points

### Study: The Living Planet

Discover why life is able to survive on Earth.

Duration: 0 hrs 30 mins

### **Study: The Moon**

Discover how the moon came into being and how it influences the Earth.

Duration: 1 hr

### **Quiz: The Earth and Moon System**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### **Discuss: Are We Alone?**

Discuss the possible existence of aliens and whether you think space travel and planet colonization might be possible in the future.

Duration: 0 hrs 30 mins Scoring: 25 points

## **LESSON 5: WHERE IS EARTH? WRAP-UP**

### **Review: Where Is Earth?**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

### **Test (CS): Where Is Earth?**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

### **Test (TS): Where Is Earth?**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

## **LESSON 6: DIAGNOSTIC**

### **Diagnostic: Where Is Earth?**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 3: EARTH'S WATER**

### **LESSON 1: THE BLUE PLANET**

#### **Study: Water, Water, Everywhere**

Get your feet wet. Discover why water exists on Earth, the three states of water, and the processes of the water cycle.

Duration: 0 hrs 30 mins

#### **Practice: Water World**

Answer questions to test your understanding of the states and movement of water.

Duration: 1 hr Scoring: 50 points

#### **Quiz: What Do You Know about Water?**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### **LESSON 2: GETTING FRESH**

#### **Study: Fresh Water**

Jump into lakes, swim down rivers, and prowl through wetlands as you explore freshwater on Earth.

Duration: 1 hr

#### **Study: You're Grounded**

Learn what groundwater is and how it influences systems above ground.

Duration: 0 hrs 30 mins

### **Quiz: Different Bodies of Water**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### **Discuss: Make a Big Splash**

Discuss the necessity of clean water and what you can do to protect this valuable resource.

Duration: 0 hrs 30 mins Scoring: 25 points

### **Journal: Your Water Diet**

Reflect on how much water you consume each day. Share your thoughts about preserving wetlands in your community.

Duration: 0 hrs 30 mins Scoring: 15 points

## **LESSON 3: THE OCEANS**

### **Study: An Oceanographic Voyage**

Travel on a research vessel to learn how oceanographers study the ocean and its inhabitants.

Duration: 1 hr

### **Lab: How Does Temperature Affect Water Density?**

Complete a lab to determine the effects of temperature on water density. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

### **Study: The Ocean in Motion**

Learn about waves, tides, and currents and how they influence the environment.

Duration: 1 hr

### **Study: Wild World Weather**

Assess the effects of El Niño and La Niña on global weather patterns.

Duration: 0 hrs 30 mins

### **Quiz: Earth's Oceans**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## **LESSON 4: EARTH'S WATER WRAP-UP**

### **Review: Earth's Water**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

### **Test (CS): Earth's Water**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

### **Test (TS): Earth's Water**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: Earth's Water**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 4: EARTH'S ATMOSPHERE**

## LESSON 1: THE SKY'S THE LIMIT

### Study: Layers of the Atmosphere

Float through the atmosphere on layers upon layers of air as an amateur meteorologist.

Duration: 1 hr

### Quiz: Know Your Layers

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### Discuss: What about This Ozone?

Discuss strategies for reducing our impact on the ozone layer.

Duration: 0 hrs 30 mins Scoring: 25 points

### Practice: Up, Up, and Away

Create a diagram to help you remember the layers of the atmosphere.

Duration: 1 hr Scoring: 50 points

### Lab: Determining How Temperature Changes with Altitude

Complete a lab to understand how the temperature of Earth's atmosphere changes with altitude. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

## LESSON 2: CYCLES IN THE ATMOSPHERE

### Study: Carbon and Nitrogen

What goes around comes around — especially when it comes to carbon and nitrogen.

Duration: 1 hr

### Study: Taking the Heat

Compare conduction, convection, and radiation. Learn how these methods of heat transfer drive atmospheric processes.

Duration: 1 hr

### Lab: Investigating Factors that Control Temperature

Complete a lab to understand the causes of temperature variations. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

### Quiz: Air Head

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## LESSON 3: THE WINDY PLANET

### Study: Why the Wind Blows

Discover how Earth's rotation and revolution, atmospheric gases, and differences in land, ice, and water conspire to create wind.

Duration: 1 hr

### Study: Which Way the Wind Blows

Learn about global patterns of air circulation and find out what drives and gets driven by them.

Duration: 1 hr

### Quiz: Do You Know about Currents?

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## LESSON 4: EARTH'S ATMOSPHERE WRAP-UP

### Review: Earth's Atmosphere

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

### **Test (CS): Earth's Atmosphere**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

### **Test (TS): Earth's Atmosphere**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: Earth's Atmosphere**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 5: WEATHER AND CLIMATE**

### **LESSON 1: HOW'S THE WEATHER?**

#### **Study: Weather or Not**

Identify the basic causes of most of the types of weather that we see.

Duration: 1 hr

#### **Study: In the Clouds**

Learn how clouds form and what different types of clouds mean for the forecast.

Duration: 0 hrs 45 mins

#### **Study: Going to Extremes**

Explore the causes and effects of severe weather, including tornadoes, hurricanes, blizzards, and more.

Duration: 1 hr

#### **Lab: Analyzing Severe Weather**

Complete a lab to determine where tornadoes are most likely to occur. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

#### **Quiz: Get in Front**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### **LESSON 2: IN THE FORECAST**

#### **Study: Instruments and Measurements**

Measure, read, gauge, and calculate. Learn about tools that are used to explore weather.

Duration: 1 hr

#### **Lab: Measuring Humidity**

Perform a lab to determine humidity. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

#### **Study: Weather Maps**

Examine weather maps from the inside out.

Duration: 1 hr

#### **Study: Making and Faking the Forecast**

Compare models used to help predict weather.

Duration: 1 hr

**Discuss: Rain Dance**

How reliable is the forecast? Can you and your classmates do a better job?

Duration: 0 hrs 30 mins Scoring: 25 points

**Quiz: Assess the Forecast**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

**LESSON 3: CLIMATE****Study: Climate Time**

Examine the factors that influence climate.

Duration: 1 hr

**Quiz: Climate Climb**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

**LESSON 4: WEATHER AND CLIMATE WRAP-UP****Review: Weather and Climate**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

**Test (CS): Weather and Climate**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

**Test (TS): Weather and Climate**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

**LESSON 5: DIAGNOSTIC****Diagnostic: Weather and Climate**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

**UNIT 6: SEMESTER REVIEW AND EXAM****LESSON 1: EARTH SCIENCE SEMESTER 1****Review: Earth Science Semester 1**

Prepare for the semester exam by reviewing key concepts covered in Earth Science Semester 1.

Duration: 3 hrs 30 mins

**Exam: Earth Science Semester 1**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in Earth Science Semester 1.

Duration: 0 hrs 40 mins Scoring: 80 points

**Final Exam: Earth Science Semester 1**

Take a teacher-scored exam to demonstrate your mastery of concepts and skills covered in Earth Science Semester 1.

Duration: 1 hr 20 mins Scoring: 120 points

**UNIT 7: LAYING THE GROUNDWORK****LESSON 1: EARTH'S LAYERS****Study: The Door to the Core**

Get to the center of everything. (Just because it is out of sight doesn't mean it is out of mind.)



Duration: 1 hr

### **Study: The Mantle and Crust**

Envision the layers of Earth's mantle and discover the composition and characteristics of the Earth's crust.

Duration: 0 hrs 45 mins

### **Practice: Digging Deep**

Diagram Earth's layers and answer questions about their composition.

Duration: 1 hr Scoring: 50 points

### **Discuss: Journey to the Center of Earth**

Discuss whether you think existing data supports current theories about Earth's interior. What additional research would be beneficial?

Duration: 0 hrs 30 mins Scoring: 25 points

### **Quiz: Earth's Layers**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## **LESSON 2: EARTH'S MAGNETISM**

### **Study: A Magnetic Personality**

Why does a magnet stick to the fridge? Learn about magnetism and the magnetic field that surrounds the Earth.

Duration: 1 hr

### **Practice: Taming the Compass**

Practice what you have learned about Earth's magnetic poles by taming the wild compass.

Duration: 1 hr Scoring: 50 points

### **Quiz: Magnetic Fields**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## **LESSON 3: IT IS DEEPLY MOVING**

### **Study: Plate Tectonics**

Consider how plate tectonics literally rock the world.

Duration: 1 hr

### **Practice: Chronic Tectonics**

Check to see if you understand the theory of plate tectonics.

Duration: 1 hr Scoring: 50 points

### **Study: Whose Fault Is It, Anyway?**

Examine fault lines and discover why they form.

Duration: 0 hrs 45 mins

### **Quiz: Fault Assault**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## **LESSON 4: LAYING THE GROUNDWORK WRAP-UP**

### **Review: Laying the Groundwork**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 2 hrs

### **Test (CS): Laying the Groundwork**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

### **Test (TS): Laying the Groundwork**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: Laying the Groundwork**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 8: THE MOVERS AND SHAKERS**

### **LESSON 1: MOUNTAINS TO TRENCHES**

#### **Study: Ocean Commotion**

Examine features of ocean ridges and trenches to learn how Earth's crust gets recycled.

Duration: 1 hr

#### **Study: Ain't No Mountain High Enough**

Learn how mountains grow and change around the globe.

Duration: 1 hr

#### **Quiz: Feature Creep**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

#### **Lab: Modeling a Plate Boundary**

Complete a lab using earthquake data to model a convergent boundary between two plates. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

### **LESSON 2: CREAKS AND HAZARDS**

#### **Study: In a Volcanic Panic**

Feel the heat, taste the ashes. Get up close and personal with some sleeping and waking volcanoes.

Duration: 1 hr

#### **Practice: The Yellowstone Supervolcano**

Practice your volcano smarts with a case-study look at Yellowstone National Park's supervolcano.

Duration: 1 hr Scoring: 50 points

#### **Study: Brake for Quakes**

Try to stay on your feet while you learn what happens when tectonic plates shift suddenly.

Duration: 1 hr

#### **Quiz: Cracking Up**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### **LESSON 3: SCULPTING EARTH**

#### **Study: Down and Dirty**

Discover what happens when wind, water, and gravity do their dirty work.

Duration: 0 hrs 45 mins

#### **Study: Karst Topography**

Consider how chemical weathering can cause the formation of caves and caverns.

Duration: 1 hr

### **Study: At a Glacial Pace**

When mighty glaciers come your way, you'd better run! Examine how glaciers shape the Earth and discover what they leave behind.

Duration: 1 hr

### **Lab: Continental Glaciers Change Earth's Topography**

Complete a lab to understand how continental glaciers change Earth's topography. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

### **Quiz: Wasting Away**

Test your understanding of weathering and erosion, karst topography, and glaciers.

Duration: 0 hrs 30 mins Scoring: 50 points

## **LESSON 4: THE MOVERS AND SHAKERS WRAP-UP**

### **Review: The Movers and Shakers**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

### **Test (CS): The Movers and Shakers**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

### **Test (TS): The Movers and Shakers**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

## **LESSON 5: DIAGNOSTIC**

### **Diagnostic: The Movers and Shakers**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 9: MINERALS AND ROCKS**

### **LESSON 1: MINERALS**

#### **Study: Mining for Minerals**

Explore the structure and general characteristics of minerals.

Duration: 1 hr

#### **Study: Identifying Minerals**

Explore the unique chemical and physical properties of minerals. Discover tests that geologists use to identify minerals.

Duration: 0 hrs 30 mins

#### **Lab: Mineral Identification**

Complete a lab to learn how to identify common minerals using simple tests and tools. Prentice Hall's *Earth Science Lab Manual* required. Alternate virtual lab available.

Duration: 1 hr 30 mins Scoring: 50 points

#### **Quiz: Mineral Logic**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## LESSON 2: IGNEOUS ROCKS

### Study: Cool, Magma

Discover how igneous rocks form.

Duration: 1 hr

### Study: Fire Up Your Skill

Get fired up about classifying igneous rocks.

Duration: 0 hrs 30 mins

### Quiz: Igneous Success

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## LESSON 3: SEDIMENTARY ROCKS

### Study: From Particles to Rock

Describe the formation of clastic, biogenic, and chemical sedimentary rocks and discover some fossils.

Duration: 1 hr

### Study: An Assortment of Sediments

Learn how to classify types of sedimentary rocks.

Duration: 0 hrs 30 mins

### Quiz: Sedimentary? It's Elementary!

Take a quiz to assess your understanding of the material.

Duration: 1 hr Scoring: 50 points

## LESSON 4: METAMORPHIC ROCKS

### Study: Ch-Ch-Changes

Consider how heat and pressure can change the structure of a rock.

Duration: 1 hr

### Study: Arranging Changes

Learn how to classify metamorphic rocks.

Duration: 0 hrs 30 mins

### Quiz: Metamorphism

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## LESSON 5: THE ROCK CYCLE

### Study: Rocky Road

Learn about the rock cycle and the forces that drive it.

Duration: 0 hrs 30 mins

### Discuss: Rock the Rock Cycle

Discuss the rock cycle.

Duration: 0 hrs 30 mins Scoring: 25 points

### Practice: Rock Steady

Practice what you have learned about the rock cycle.

Duration: 1 hr Scoring: 50 points

### Lab: Classifying Rocks Using a Key

Complete a lab to classify rocks using a key. Prentice Hall's *Earth Science Lab Manual* required. Alternate virtual lab available.

Duration: 1 hr 30 mins Scoring: 50 points

### Quiz: Rock It

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

## LESSON 6: MINERALS AND ROCKS WRAP-UP

### Review: Minerals and Rocks

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

### Test (CS): Minerals and Rocks

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

### Test (TS): Minerals and Rocks

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

## LESSON 7: DIAGNOSTIC

### Diagnostic: Minerals and Rocks

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

## UNIT 10: ALL THE TIME IN THE WORLD

### LESSON 1: MEASURING TIME

#### Study: Just in Time

Learn how scientists organize geologic time.

Duration: 0 hrs 45 mins

#### Study: Telling Time

Discover techniques that paleontologists use to date rocks and fossils.

Duration: 1 hr

#### Lab: Determining Geologic Ages

Complete a lab to interpret the fossil record. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

#### Study: The Docile Fossil

Learn how to read the fossil record. Discover when it is and is not possible to read between the lines.

Duration: 1 hr

#### Quiz: Keeping Time

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

### LESSON 2: THE PAST IS VAST

#### Study: Older Than Dirt

Catch a glimpse of what Earth looked like right after it formed and for the next few billion years or so the Precambrian era.

Duration: 1 hr

#### Study: Living History

Learn how the Paleozoic and Mesozoic eras supported an explosion of life and continental musical chairs.

Duration: 1 hr

**Quiz: Gone But Not Forgotten**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

**LESSON 3: NO TIME LIKE THE PRESENT****Discuss: On the Brink**

Discuss extinction from an Earth science point of view with your classmates.

Duration: 0 hrs 30 mins Scoring: 25 points

**Study: Now Means Now**

Trace the dramatic, climactic changes of the Cenozoic era and discover how scientists study early humans.

Duration: 1 hr

**Quiz: Quick! Cenozoic!**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

**LESSON 4: ALL THE TIME IN THE WORLD WRAP-UP****Review: All the Time in the World**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

**Test (CS): All the Time in the World**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

**Test (TS): All the Time in the World**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

**LESSON 5: DIAGNOSTIC****Diagnostic: All the Time in the World**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

**UNIT 11: EARTH'S RESOURCES****LESSON 1: WHAT FUELS YOU?****Study: Energy Expertise**

Examine different methods of energy production, from oil and gas to wind and water.

Duration: 1 hr

**Quiz: Energy Bill**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

**Journal: Bigfoot**

Capture data about your own energy use and reflect on the size of your ecological footprint.

Duration: 1 hr Scoring: 15 points

**LESSON 2: USE IT AND LOSE IT****Study: Take It to the Limit**

Find out how population growth affects Earth's ecosystems and how sustainability is the crucial for the future.

Duration: 0 hrs 45 mins

**Quiz: Sustained!**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

**Discuss: The Buzz**

Discuss the costs and benefits of alternative energy sources with your classmates.

Duration: 0 hrs 30 mins Scoring: 25 points

**LESSON 3: EARTH MATTERS****Lab: Human Impact on Climate and Weather**

Complete a lab to understand how we know that human activity is changing Earth's climates. Prentice Hall's *Earth Science Lab Manual* required.

Duration: 1 hr 30 mins Scoring: 50 points

**Study: Earth Matters**

Explore case studies to see why Earth matters. Or just pick up a newspaper — chances are there's an Earth science issue being discussed in your community right now.

Duration: 1 hr

**Practice: Environmental Journalism**

Write an article about an environmental issue as if you were writing for your local newspaper.

Duration: 1 hr Scoring: 50 points

**Quiz: Testing the Environment**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 30 mins Scoring: 50 points

**LESSON 4: EARTH'S RESOURCES WRAP-UP****Review: Earth's Resources**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 1 hr 30 mins

**Test (CS): Earth's Resources**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 15 mins Scoring: 30 points

**Test (TS): Earth's Resources**

Take a teacher-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 70 points

**LESSON 5: DIAGNOSTIC****Diagnostic: Earth's Resources**

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hrs 45 mins Scoring: 30 points

**UNIT 12: SEMESTER REVIEW AND EXAM****LESSON 1: EARTH SCIENCE SEMESTER 2****Review: Earth Science Semester 2**

Prepare for the semester exam by reviewing key concepts covered in Earth Science Semester 2.

Duration: 4 hrs

**Exam: Earth Science Semester 2**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in Earth Science Semester 2.

Duration: 0 hrs 40 mins Scoring: 80 points

## Final Exam: Earth Science Semester 2

Take a teacher-scored exam to demonstrate your mastery of concepts and skills covered in Earth Science Semester 2.

Duration: 1 hr 20 mins Scoring: 120 points