Course materials required. See 'Course Materials' below.

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 hr 30 min Scoring: 25 points

Quiz: Working in Science
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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 min Scoring: 50 points

Study: Maps and More
Learn how different maps are used and made.
**Quiz: Do You Know Your Earth?**
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 30 min 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 min Scoring: 50 points*

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**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 hr 30 min Scoring: 50 points*

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**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 hr*

**Test (CS): What Is Earth Science?**
Take a computer-scored test to assess what you have learned in this unit.
*Duration: 0 hr 15 min 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 hr 45 min Scoring: 70 points*

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**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 hr 45 min Scoring: 30 points*

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**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.
Lesson 1: Star Life Cycles
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 hr 30 min 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 hr 30 min

Study: Comets and Asteroid Belts
Learn about comets and asteroids and how they are formed.
Duration: 0 hr 30 min

Lab: Exploring Orbits
Complete a lab to follow the paths of planets. Prentice Hall's Earth Science Lab Manual required.
Duration: 1 hr 30 min Scoring: 50 points

Quiz: How Did Planets Form?
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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 hr 30 min

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 hr 30 min 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 hr 30 min 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.
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 hr 30 min

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 hr 30 min 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 hr 30 min 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 min

Test (CS): Where Is Earth?
Take a computer-scored test to assess what you have learned in this unit.
Duration: 0 hr 15 min Scoring: 30 points

Test (TS): Where Is Earth?
Take a teacher-scored test to assess what you have learned in this unit.
Duration: 0 hr 45 min 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 hr 45 min 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 hr 30 min
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 hr 30 min 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 hr 30 min

Quiz: Different Bodies of Water
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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 hr 30 min 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 hr 30 min 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 min 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 hr 30 min

Quiz: Earth’s Oceans
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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 min*

**Test (CS): Earth's Water**
Take a computer-scored test to assess what you have learned in this unit.

*Duration: 0 hr 15 min Scoring: 30 points*

**Test (TS): Earth's Water**
Take a teacher-scored test to assess what you have learned in this unit.

*Duration: 0 hr 45 min Scoring: 70 points*

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**LESSON 5: DIAGNOSTIC**

**Diagnostic: Earth's Water**
Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 45 min Scoring: 30 points*

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**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 hr 30 min Scoring: 50 points*

**Discuss: What about This Ozone?**
Discuss strategies for reducing our impact on the ozone layer.

*Duration: 0 hr 30 min 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 min Scoring: 50 points*

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**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 min Scoring: 50 points*
Quiz: Air Head
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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 hr 30 min 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 min

Test (CS): Earth's Atmosphere
Take a computer-scored test to assess what you have learned in this unit.
Duration: 0 hr 15 min Scoring: 30 points

Test (TS): Earth's Atmosphere
Take a teacher-scored test to assess what you have learned in this unit.
Duration: 0 hr 45 min 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 hr 45 min 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 hr 45 min

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 min Scoring: 50 points

**Quiz: Get in Front**
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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 min 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 hr 30 min Scoring: 25 points*

**Quiz: Assess the Forecast**
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 30 min 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 hr 30 min 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 min*

**Test (CS): Weather and Climate**
Take a computer-scored test to assess what you have learned in this unit.
*Duration: 0 hr 15 min Scoring: 30 points*

**Test (TS): Weather and Climate**
Take a teacher-scored test to assess what you have learned in this unit.
*Duration: 0 hr 45 min 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 hr 45 min 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 hr 30 min

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 hr 40 min 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 min 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 hr 45 min

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 hr 30 min Scoring: 25 points

Quiz: Earth's Layers
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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.
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 hr 45 min

Quiz: Fault Assault
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min 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 hr

Test (CS): Laying the Groundwork
Take a computer-scored test to assess what you have learned in this unit.
Duration: 0 hr 15 min Scoring: 30 points

Test (TS): Laying the Groundwork
Take a teacher-scored test to assess what you have learned in this unit.
Duration: 0 hr 45 min 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 hr 45 min 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.
**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 min  
**Scoring:** 50 points

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**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 hr 30 min  
**Scoring:** 50 points

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**LESSON 3: SCULPTING EARTH**

**Study: Down and Dirty**
Discover what happens when wind, water, and gravity do their dirty work.

**Duration:** 0 hr 45 min

**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 min  
**Scoring:** 50 points

**Quiz: Wasting Away**
Test your understanding of weathering and erosion, karst topography, and glaciers.

**Duration:** 0 hr 30 min  
**Scoring:** 50 points

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**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 min

**Test (CS): The Movers and Shakers**
Take a computer-scored test to assess what you have learned in this unit.
**Test (TS): The Movers and Shakers**
Take a teacher-scored test to assess what you have learned in this unit.
*Duration: 0 hr 15 min Scoring: 30 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 hr 45 min 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**
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 30 min*

**Lab: Mineral Identification**
Explore the unique chemical and physical properties of minerals. Discover tests that geologists use to identify minerals.
*Duration: 1 hr 30 min Scoring: 50 points*

**Quiz: Mineral Logic**
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: 0 hr 30 min Scoring: 50 points*

**LESSON 2: IGNEOUS ROCKS**

**Study: Cool, Magma**
Discover how igneous rocks form.
*Duration: 1 hr*

**Study: Fire Up Your Skill**
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 30 min*

**Quiz: Igneous Success**
Don't get burned as you practice classifying and describing igneous rocks.
*Duration: 0 hr 30 min 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**
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 30 min*
Quiz: Sedimentary? It's Elementary!
Practice classifying and describing sedimentary rocks.
*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
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 30 min*

Quiz: Metamorphism
Practice classifying and describing metamorphic rocks.
*Duration: 0 hr 30 min Scoring: 50 points*

**LESSON 5: THE ROCK CYCLE**

Study: Rocky Road
Learn about the rock cycle and the forces that drive it.
*Duration: 0 hr 30 min*

Discuss: Rock the Rock Cycle
Discuss the rock cycle.
*Duration: 0 hr 30 min 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 min Scoring: 50 points*

Quiz: Rock It
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 30 min 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 min*

Test (CS): Minerals and Rocks
Take a computer-scored test to assess what you have learned in this unit.
*Duration: 0 hr 15 min Scoring: 30 points*

Test (TS): Minerals and Rocks
Take a teacher-scored test to assess what you have learned in this unit.
*Duration: 0 hr 45 min 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 hr 45 min Scoring: 30 points*

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**UNIT 10: ALL THE TIME IN THE WORLD**

**LESSON 1: MEASURING TIME**

**Study: Just in Time**
Learn how scientists organize geologic time.

*Duration: 0 hr 45 min*

**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 min 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 hr 30 min Scoring: 50 points*

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**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 hr 30 min Scoring: 50 points*

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**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 hr 30 min 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 hr 30 min Scoring: 50 points*

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**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 min

Test (CS): All the Time in the World
Take a computer-scored test to assess what you have learned in this unit.
Duration: 0 hr 15 min 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 hr 45 min 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 hr 45 min 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 hr 30 min 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 hr 45 min

Quiz: Sustained!
Take a quiz to assess your understanding of the material.
Duration: 0 hr 30 min Scoring: 50 points

Discuss: The Buzz
Discuss the costs and benefits of alternative energy sources with your classmates.
Duration: 0 hr 30 min 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 min 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 hr 30 min **Scoring:** 50 points

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**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 min

**Test (CS): Earth's Resources**
Take a computer-scored test to assess what you have learned in this unit.

**Duration:** 0 hr 15 min **Scoring:** 30 points

**Test (TS): Earth's Resources**
Take a teacher-scored test to assess what you have learned in this unit.

**Duration:** 0 hr 45 min **Scoring:** 70 points

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**LESSON 5: DIAGNOSTIC**

**Diagnostic: Earth's Resources**
Take a diagnostic unit test that will generate a study plan based on your responses.

**Duration:** 0 hr 45 min **Scoring:** 30 points

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**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 hr

**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 hr 40 min **Scoring:** 80 points

**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 min **Scoring:** 120 points