

Module	Lesson	Description	Scored	Objective Code
Inside Earth				
.5 Credit	CREDIT RECOVERY ELECTIVE			
01:Characteristics of Earth				
	Earth's Interior	In this lesson, students learn about the use of data from rock samples and seismic waves to understand the structure of Earth.	Yes	MSSC-37.1.1
	Earth's Layers	In this lesson, students learn about the different characteristics of the crust, mantle, and core.	Yes	MSSC-37.2.1
	Convection and the Mantle	In this lesson, three types of heat transfer—radiation, conduction, and convection—are discussed, and students learn about the role of convection in Earth's mantle.	Yes	MSSC-37.3.1
01: Posttest				
02:Plate Tectonics				
	Movement of the Continents	This lesson introduces students to Wegener's hypothesis on continental drift. Evidence that supports and refutes his hypothesis is included.	Yes	MSSC-38.1.1
	Sea-Floor Spreading	In this lesson, students learn about mid-ocean ridges and how sea-floor spreading creates new ocean floor.	Yes	MSSC-38.2.1
	Hess's Theory	This lesson explains how evidence from molten material, magnetic stripes, and drilling samples support the theory of sea-floor spreading.	Yes	MSSC-38.3.1
	Subduction	This lesson explains how some ocean floor sinks back into the mantle in a process called subduction.	Yes	MSSC-38.4.1
	The Theory of Plate Tectonics	This lesson explains the theory of plate tectonics and the movements of the plates over time. In addition, students learn about the three types of plate boundaries.	Yes	MSSC-38.5.1
02: Posttest				
03:Earthquakes				
	Forces in Earth's Crust	In this lesson, students learn about the three types of stress that can occur in Earth's crust. They also learn about the types of faults that result from each type of stress.	Yes	MSSC-39.1.1
	Surface Features	This lesson links the types of stress in Earth's crust with the features they produce on Earth's surface.	Yes	MSSC-39.2.1
	Earthquakes and Seismic Waves	In this lesson, students are introduced to the three types of seismic waves. Students also learn how to use this information to locate the epicenter of an earthquake.	Yes	MSSC-39.3.1
	Monitoring Earthquakes	This lesson teaches students how a seismograph works and how the resulting data are used for the prediction of earthquakes.	Yes	MSSC-39.4.1
	Identifying Earthquake Risks	This lesson explains that the areas of high earthquake risk are associated with active faults. The lesson also identifies types of hazards associated with earthquakes.	Yes	MSSC-39.5.1

Module	Lesson	Description	Scored	Objective Code
	Earthquake Safety	This lesson addresses safety measures that individuals can take if they find themselves in an earthquake. The lesson also discusses safety measures for building construction.	Yes	MSSC-39.6.1
	<b>03: Posttest</b>			
<b>04:Volcanoes</b>				
	Volcanoes and Plates	In this lesson, students learn about the distribution of volcanoes and the differences among diverging, converging, and hot spot volcanoes.	Yes	MSSC-40.1.1
	Volcanic Eruptions	This lesson introduces students to the structures within a volcano and the sequence of events that occurs in a volcanic eruption.	Yes	MSSC-40.2.1
	Types of Eruptions	In this lesson, students learn that the differences among volcanic eruptions are related to the silica content and temperature of the magma.	Yes	MSSC-40.3.1
	<b>04: Posttest</b>			
<b>05:Minerals</b>				
	Properties of Minerals	This lesson presents the five characteristics that all minerals have in common.	Yes	MSSC-41.1.1
	Mineral Identification	In this lesson, students are introduced to the properties that are used to identify minerals.	Yes	MSSC-41.2.1
	Mineral Formation and Use	This lesson teaches students that minerals can form from magma and lava or from solutions. Additionally, students learn how minerals are used.	Yes	MSSC-41.3.1
	<b>05: Posttest</b>			
<b>06:Rocks</b>				
	Classifying Rocks	In this lesson, students learn that texture and color of rocks provide information on the mineral content. Students are also introduced to the three ways in which rocks are formed.	Yes	MSSC-42.1.1
	Igneous Rocks	This lesson describes how igneous rocks are classified by their origin, texture, and composition. Students also learn how igneous rocks are used.	Yes	MSSC-42.2.1
	Sedimentary Rocks	In this lesson, students learn about the processes that form sedimentary rocks, the three groups of sedimentary rocks, and the uses for sedimentary rocks.	Yes	MSSC-42.3.1
	Rocks From Reefs	This lesson explains how coral reefs form and how limestone deposits from coral reefs provide information about Earth's history.	Yes	MSSC-42.4.1
	Metamorphic Rocks	This lesson explains how heat and pressure produce metamorphic rock. The types of metamorphic rock and uses for them are also described.	Yes	MSSC-42.5.1
	The Rock Cycle	In this lesson, students learn that all types of rocks can transform into other types and that plate tectonics helps encourage this conversion.	Yes	MSSC-42.6.1
	<b>06: Posttest</b>			

Module	Lesson	Description	Scored	Objective Code
Earth's Land and Water				
.5 Credit	CREDIT RECOVERY ELECTIVE			
01:Mapping Earth's Surface				
	Exploring Earth's Surface	In this lesson, students learn that the topography, or shape of the land, is determined by its elevation, relief, and landforms.	Yes	MSSC-43.1.1
	Landforms	This lesson includes descriptions and examples of the three main types of landforms.	Yes	MSSC-43.2.1
	Topographic Maps	This lesson covers the features seen on topographic maps and an explanation of what these symbols mean.	Yes	MSSC-43.3.1
01: Posttest				
02:Weathering and Soil Formation				
	Rocks and Weathering	This lesson describes the processes of weathering and erosion in relation to the changing surface of Earth.	Yes	MSSC-44.1.1
	Types of Weathering	In this lesson, students learn about the different forces that cause mechanical and chemical weathering.	Yes	MSSC-44.2.1
	Factors That Affect Weathering	This lesson describes the influence of rock type, climate, and human activity on the weathering of rock.	Yes	MSSC-44.3.1
	How Soil Forms	This lesson describes soil, the components of soil, and the steps in soil formation.	Yes	MSSC-44.4.1
	Soil Diversity	In this lesson, students learn about the types of soil, how they are classified, and the role of organisms in soil formation.	Yes	MSSC-44.5.1
02: Posttest				
03:Erosion and Deposition				
	Earth's Changing Surface	This lesson introduces students to the actions of erosion and deposition that change Earth's surface. Students also learn about the types of mass movements caused by gravity.	Yes	MSSC-45.1.1
	Wind	This lesson describes wind as an agent of erosion and lists the types of wind erosion as well as the formations that result from wind deposition.	Yes	MSSC-45.2.1
	Glaciers	In this lesson, glaciers are discussed and information about the two types of glaciers is presented.	Yes	MSSC-45.3.1
	Glacial Erosion and Deposition	This lesson provides instruction on the process of glaciers eroding the landscape, as well as the various landforms created by glacial deposition.	Yes	MSSC-45.4.1
03: Posttest				
04:The Power of Water				
	Properties of Water	This lesson presents the structure of water and how the structure relates to the unique properties of water.	Yes	MSSC-46.1.1
	States of Water	In this lesson, students learn about the processes involved when water changes from one state to another.	Yes	MSSC-46.2.1

Module	Lesson	Description	Scored	Objective Code
	The Force of Moving Water	In this lesson, students learn that water has the power to perform work and is an effective agent of erosion.	Yes	MSSC-46.3.1
	Water Erosion	This lesson identifies water as the major agent of erosion and describes how rills develop into tributaries.	Yes	MSSC-46.4.1
	Features Formed From Water	This lesson describes the landforms that are created by water erosion and water deposition, such as waterfalls and deltas.	Yes	MSSC-46.5.1
	Floods	In this lesson, students learn about the causes and effects of floods, and they learn how people can protect themselves from floods.	Yes	MSSC-46.6.1
	<b>04: Posttest</b>			
<b>05:Water in the Oceans</b>				
	Waves	This lesson describes what a wave is as well as the characteristics of waves. Students also learn about how waves change as they approach the shore.	Yes	MSSC-47.1.1
	Wave Action	This lesson introduces students to the formation of ocean waves as well as the formations that are created from wave erosion and wave deposition.	Yes	MSSC-47.2.1
	Tides	This lesson explains that tides are caused by the interaction among Earth, the moon, and the sun. Students also learn that the tides vary as the locations of these three bodies change.	Yes	MSSC-47.3.1
	Currents	In this lesson, students learn how ocean currents form and how they affect the distribution of climate on Earth.	Yes	MSSC-47.4.1
	Deep Currents	This lesson describes how deep ocean currents bring cool water to the surface and the nutrient enrichment that results from upwelling.	Yes	MSSC-47.5.1
	<b>05: Posttest</b>			
<b>06:Features of the Oceans</b>				
	The Ocean Floor	In this lesson, students learn the names and descriptions of major formations on the ocean floor, including plains, ridges, and trenches.	Yes	MSSC-48.1.1
	Ocean Resources	This lesson lists the resources that are gathered from the ocean: living resources such as fish, and nonliving resources such as fuels.	Yes	MSSC-48.2.1
	Pollution in the Oceans	This lesson lists the common sources of ocean pollution and describes some of the international actions being taken to prevent continued pollution.	Yes	MSSC-48.3.1
	<b>06: Posttest</b>			
<b>07:Earth Through Time</b>				
	Fossils	This lesson describes the formation of fossils as well as the types of fossils. Students also learn how fossils can be used to better understand the past.	Yes	MSSC-49.1.1
	Relative Age	This lesson explains the difference between relative and absolute dating and instructs students how to evaluate rocks in relationship to one another.	Yes	MSSC-49.2.1
	Index Fossils	In this lesson, students learn what index fossils are and how they are used to provide information for dating rocks.	Yes	MSSC-49.3.1

Module	Lesson	Description	Scored	Objective Code
	Absolute Age	This lesson describes how one element can decay to another element and how this information can be used to determine the absolute age of rocks.	Yes	MSSC-49.4.1

**07: Posttest**

Module	Lesson	Description	Scored	Objective Code
Astronomy				
.5 Credit	CREDIT RECOVERY ELECTIVE			
01:Earth, Moon, and Sun				
	Earth in Space	In this lesson, students learn that the rotation of Earth is responsible for our 24-hour days and that the revolution of Earth is responsible for our 365-day years. In addition, students learn about the development of calendars.	Yes	MSSC-50.1.1
	Earth's Seasons	In this lesson, students learn that the experience of seasons on Earth is a result of the tilt of Earth's axis as it rotates around the sun.	Yes	MSSC-50.2.1
	What Affects Motion?	This lesson explains the two factors that affect the force of gravity between two objects and how gravity and inertia keep the moon and Earth in orbit.	Yes	MSSC-50.3.1
01: Posttest				
02:About Our Moon				
	The Moon's Appearance	In this lesson, students learn that the changing positions of Earth, the sun, and the moon are responsible for the changing appearance of the moon.	Yes	MSSC-51.1.1
	Casting Shadows	This lesson teaches students about the two types of eclipses: solar and lunar. Students also learn that eclipses are caused by the casting of shadows.	Yes	MSSC-51.2.1
	Earth's Moon	In this lesson, students learn about the surface and internal characteristics of the moon and the theory about its formation.	Yes	MSSC-51.3.1
02: Posttest				
03:Discovering Space				
	Exploring Space	This lesson describes the political climate that lead to the space race and the first technologies used.	Yes	MSSC-52.1.1
	Visiting the Moon	In this lesson, students learn about the purpose of the Apollo moon missions and some of the results of those missions.	Yes	MSSC-52.2.1
	Modern Space Exploration	This lesson describes the differences between space shuttles and space stations.	Yes	MSSC-52.3.1
	Farther in the Solar System	This lesson describes features common to all space probes as well as characteristics unique to only some probes.	Yes	MSSC-52.4.1
03: Posttest				
04:Life and Space				
	Conditions for Life	In this lesson, students learn how Earth provides suitable conditions for life. Students also learn about evidence that suggests other possible places for life in our solar system.	Yes	MSSC-53.1.1
	Difficulties in Space	In this lesson, students learn about challenges the human body experiences, such as extreme temperatures and microgravity, when astronauts travel outside of Earth's atmosphere.	Yes	MSSC-53.2.1
	Learning From Space	This lesson describes how many products developed for space exploration have also been useful for life on Earth.	Yes	MSSC-53.3.1

Module	Lesson	Description	Scored	Objective Code
	<b>04: Posttest</b>			
	<b>05:The Solar System</b>			
	Observing the Solar System	In this lesson, students learn about the difference between the geocentric and heliocentric models of the solar system. Students also learn about the individuals and discoveries that led to our current model.	Yes	MSSC-54.1.1
	Our Sun	In this lesson, students learn that the sun consists of three layers: the core, the radiation zone, and the convection zone.	Yes	MSSC-54.2.1
	Features of Our Sun	This lesson describes the layers of the sun's atmosphere and the unique features of the sun's surface, including sunspots and solar flares.	Yes	MSSC-54.3.1
	Objects in Space	This lesson provides instruction on the characteristics of comets, asteroids, and meteors.	Yes	MSSC-54.4.1
	<b>05: Posttest</b>			
	<b>06:The Planets</b>			
	Terrestrial Planets One	In this lesson, students learn about the characteristics of two terrestrial planets: Mercury and Venus.	Yes	MSSC-55.1.1
	Terrestrial Planets Two	In this lesson, students learn about the characteristics of the other two terrestrial planets: Earth and Mars.	Yes	MSSC-55.2.1
	Outer Planets One	In this lesson, students learn about the characteristics of two outer planets: Jupiter and Saturn.	Yes	MSSC-55.3.1
	Outer Planets Two	In this lesson, students learn about the characteristics of the other two outer planets: Uranus and Neptune. They also learn about the dwarf planet Pluto.	Yes	MSSC-55.4.1
	<b>06: Posttest</b>			
	<b>07:Learning About Space</b>			
	Radiation	This lesson describes the types of electromagnetic radiation, including its characteristics, that reaches Earth.	Yes	MSSC-56.1.1
	Telescopes	In this lesson, students learn about the types of telescopes and how they work.	Yes	MSSC-56.2.1
	Where to Place Telescopes	This lesson explains why telescopes are constructed in mountaintop observatories or in space.	Yes	MSSC-56.3.1
	<b>07: Posttest</b>			
	<b>08:The Life of Stars</b>			
	Stars	This lesson describes the characteristics, such as color, temperature, and brightness, that are used to classify stars.	Yes	MSSC-57.1.1
	How Far Away Are Stars?	This lesson describes how astronomers measure distances in light-years and how they use the changing position of celestial objects to suggest distance to the object.	Yes	MSSC-57.2.1
	Temperature and Brightness	In this lesson, students learn that scientists have constructed a graph which shows the relationship between temperature and absolute brightness of stars.	Yes	MSSC-57.3.1

Module	Lesson	Description	Scored	Objective Code
	A Star's Life	In this lesson, students learn that all stars begin as nebula, but that the stages a star progresses through and its final form are dependent upon its mass.	Yes	MSSC-57.4.1
	<b>08: Posttest</b>			
<b>09:Units of Stars</b>				
	Groups of Stars	This lesson teaches students that most stars belong to a group of two or more stars known as star systems. Students also learn that many star systems are arranged into clusters.	Yes	MSSC-58.1.1
	Stars Bound by Gravity	In this lesson, students learn that astronomers classify groups of stars as spiral, elliptical, or irregular galaxies and that our solar system, the Milky Way, is a spiral galaxy.	Yes	MSSC-58.2.1
	Measuring the Universe	This lesson teaches students that scientists use scientific notation to represent the size of the universe and the objects within it.	Yes	MSSC-58.3.1
	<b>09: Posttest</b>			
<b>10:Theories of Formation</b>				
	Beginning of the Solar System	This lesson explains the theory that a solar nebula was responsible for the formation of our solar system.	Yes	MSSC-59.1.1
	Formation of the Universe	This lesson explains the big bang theory, which astronomers believe explains the formation of the universe. The lesson also projects what will happen to the universe.	Yes	MSSC-59.2.1
	<b>10: Posttest</b>			



Module	Lesson	Description	Scored	Objective Code
Weather and Climate				
.5 Credit	CREDIT RECOVERY ELECTIVE			
01:Earth's Atmosphere				
	The Air Around You	This lesson describes the components of the atmosphere and explains why they are essential for life on Earth.	Yes	MSSC-60.1.1
	Air Pressure	In this lesson, students learn about factors affecting air pressure, how to measure air pressure, and how altitude affects properties of air.	Yes	MSSC-60.2.1
	Layers of the Atmosphere	In this lesson, students learn about the characteristics of the four layers of the atmosphere.	Yes	MSSC-60.3.1
01: Posttest				
02:Heat, Energy, and Wind				
	Energy in the Atmosphere	This lesson explains the types of energy in the electromagnetic spectrum. It also explains what happens to radiation in the atmosphere and at Earth's surface.	Yes	MSSC-61.1.1
	Heat Transfer	In this lesson, students learn about the relationship between temperature and thermal energy, as well as how thermal energy moves through the troposphere.	Yes	MSSC-61.2.1
	Winds	This lesson discusses wind, how it is measured, and the difference between local and global winds.	Yes	MSSC-61.3.1
	Major Wind Belts	This lesson describes how the global wind belts form and the directions in which they travel.	Yes	MSSC-61.4.1
02: Posttest				
03:Water and Weather				
	Water in the Atmosphere	In this lesson, students learn how water vapor enters the atmosphere, thereby creating humidity.	Yes	MSSC-62.1.1
	Cloud Formation	This lesson teaches students that clouds form from the condensation of water vapor and that clouds are classified by shape and altitude.	Yes	MSSC-62.2.1
	Precipitation	In this lesson, students learn what causes precipitation and about the various types of precipitation.	Yes	MSSC-62.3.1
03: Posttest				
04:Weather Patterns				
	Air Masses	This lesson explains that there are four main air masses in North America, each of which is named for the region where it forms.	Yes	MSSC-63.1.1
	Fronts	In this lesson, students learn about the four types of fronts, and they learn that fronts can cause cyclones and anticyclones.	Yes	MSSC-63.2.1
	Thunderstorms and Tornadoes	In this lesson, students learn how thunderstorms and tornadoes form, the damage associated with such storms, and ways in which people can protect themselves.	Yes	MSSC-63.3.1
	Hurricanes and Winter Storms	In this lesson, students learn how hurricanes and winter storms form, the damage such storms can cause, and ways in which people can protect themselves.	Yes	MSSC-63.4.1

Module	Lesson	Description	Scored	Objective Code
	Predicting the Weather	This lesson teaches students how meteorologists collect weather information and use computer technology to make weather forecasts.	Yes	MSSC-63.5.1
	Weather Maps	In this lesson, students learn the meaning of the types of symbols used on weather maps.	Yes	MSSC-63.6.1
	04: Posttest			
05: Learning About Climate				
	Influences on Temperature	In this lesson, students learn how altitude, proximity to a body of water, latitude, and ocean currents affect temperature.	Yes	MSSC-64.1.1
	Influences on Precipitation	This lesson teaches students how winds and mountain ranges affect precipitation.	Yes	MSSC-64.2.1
	Earth's Seasons	In this lesson, students learn that the experience of seasons on Earth is a result of the tilt of Earth's axis as it rotates around the sun.	Yes	MSSC-64.3.1
	Climate Regions: Part One	In this lesson, students learn that climates are classified by temperature and precipitation. Students also learn the locations and characteristics of various climate regions.	Yes	MSSC-64.4.1
	Climate Regions: Part Two	In this lesson, students learn about the locations and characteristics of the temperate marine and temperate continental climate regions.	Yes	MSSC-64.5.1
	05: Posttest			
06: Changes in Climate				
	Studying Climate Change	This lesson teaches students that scientists can learn about ancient climates by studying the types of pollen deposited and the growth patterns of tree rings.	Yes	MSSC-65.1.1
	Factors Causing Climate Change	In this lesson, students learn that there are multiple long- and short-term factors that contribute to climate change.	Yes	MSSC-65.2.1
	Human Interference	This lesson presents information and hypotheses about the causes and effects of atmospheric changes associated with global warming and depletion of the ozone layer.	Yes	MSSC-65.3.1
	06: Posttest			