

Wyoming Department of Education Required Virtual Education Course Syllabus

Niobrara County School District # 1

Program Name	Wyoming Virtual Academy	Content Area	SC
Course ID	D-OTH-032V1-DYN	Grade Level	9-12
Course Name	Astronomy	# of Credits	0.5
SCED Code	03004G0.5011	Curriculum Type	K12 Inc

COURSE DESCRIPTION

Why do stars twinkle? Is it possible to fall into a black hole? Will the sun ever stop shining? Since the first glimpse of the night sky, humans have been fascinated with the stars, planets, and universe. This course introduces students to the study of astronomy, including its history and development, basic scientific laws of motion and gravity, the concepts of modern HIGH SCHOOL 47 astronomy, and the methods used by astronomers to learn more about the universe. Additional topics include the solar system, the Milky Way and other galaxies, and the sun and stars. Using online tools, students examine the life cycle of stars, the properties of planets, and the exploration of space.

WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK (Standard/Indicator) Use the Standards and Benchmarks as Spreadsheets
HS-ESS1-2	Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe.
HS-ESS1-3	Communicate scientific ideas about the way stars, over their life cycle, produce elements.
HS-ESS1-4	Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.
HS-ESS1-6	Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.
HS-PS1-8	Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.
HS-ETS1-5	Evaluate the validity and reliability of claims in a variety of materials.

SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES OBJECTIVES/STUDENT CENTERED GOALS

<p>1: The Earth, Moon, and Sun Systems 1.00 Unit Summary 1.00 What Will You Learn in This Unit?</p>		<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>1: The Earth, Moon, and Sun Systems 1.01 History of Astronomy 1.02 Night and Day Cycles</p>		<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>1: The Earth, Moon, and Sun Systems 1.03 Solstices and Equinoxes 1.04 Lunar Phases 1.05 Eclipses</p>		<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>

<p>1: The Earth, Moon, and Sun Systems 1.06 Questions to Think About</p>		<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>1: The Earth, Moon, and Sun Systems 1.07 Text Questions 1.07 Graded Assignment: Text Questions</p>	<p>HS-ESS1-2, HS-ESS1-4</p>	<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>1: The Earth, Moon, and Sun Systems 1.08 Lab Questions 1.08 Graded Assignment: Lab Questions</p>	<p>HS-ESS1-2, HS-ESS1-4</p>	<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>

<p>1: The Earth, Moon, and Sun Systems 1.09 Quiz Review 1.10 Quiz Game</p>	<p>HS-ESS1-2, HS-ESS1-4</p>	<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>1: The Earth, Moon, and Sun Systems 1.11 Quiz: The Earth, Moon, and Sun Systems 1.12 Discussion 1</p>	<p>HS-ESS1-2, HS-ESS1-4</p>	<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>1: The Earth, Moon, and Sun Systems 1.13 Discussion 2 1.14 Podcast</p>	<p>HS-ESS1-2, HS-ESS1-4</p>	<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p> <p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>1: The Earth, Moon, and Sun Systems (cont.) 1.13 Discussion 2 1.14 Podcast</p>	<p>HS-ESS1-2, HS-ESS1-4</p>	<p>Learn about the interactions between the Sun, Earth, and Moon</p> <p>Describe how the motion of the Earth causes seasons and night-day cycle.</p> <p>Identify the characteristics and phases of the moon</p>

		<p>Explore how the moon's gravitational pull manipulates tides on Earth.</p> <p>Distinguish between a lunar eclipse and a solar eclipse</p>
<p>2: The Universe 2.00 Unit Summary 2.00 What Will You Learn in This Unit?</p>		<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>2: The Universe 2.01 Introduction to Cosmology 2.02 What is the Universe?</p>		<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>2: The Universe 2.03 Origin of the Universe 2.04 Age of the Universe 2.05 Fate of the Universe</p>		<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>

<p>2: The Universe 2.06 Questions to Think About</p>		<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>2: The Universe 2.07 Text Questions 2.07 Graded Assignment: Text Questions</p>	<p>HS-ESS1-2, HS-ESS1-3, HS-PS1-8</p>	<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>2: The Universe 2.08 Lab Questions 2.08 Graded Assignment: Lab Questions</p>	<p>HS-ESS1-2, HS-ESS1-3</p>	<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>2: The Universe 2.09 Quiz Review 2.10 Quiz Game</p>	<p>HS-ESS1-2, HS-ESS1-3</p>	<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>

<p>2: The Universe 2.11 Quiz: The Universe 2.12 Discussion 1</p>	<p>HS-ESS1-2, HS-ESS1-3</p>	<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>2: The Universe 2.13 Discussion 2 2.14 Podcast</p>	<p>HS-ESS1-2, HS-ESS1-3</p>	<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>2: The Universe (cont.) 2.13 Discussion 2 2.14 Podcast</p>	<p>HS-ESS1-2, HS-ESS1-3</p>	<p>Describe the study of the cosmos</p> <p>Discuss the theory of the origin of the universe</p> <p>Examine the evidence that supports the big bang theory</p> <p>Examine the composition on matter and how it is distributed within the universe</p> <p>Describe the theories of evolution and fate of the universe.</p>
<p>3: Stars 3.00 Unit Summary 3.00 What Will You Learn in This Unit?</p>		<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p>

		Examine the evolution of stars.
<p>3: Stars 3.01 What are Stars? 3.02 Constellations</p>		<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars 3.03 Characterizing Stars 3.04 Temperature and Color</p>		<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>

<p>3: Stars 3.05 Life Cycle of Stars 3.06 Death of Stars</p>		<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars 3.07 Questions to Think About</p>		<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars 3.08 Text Questions 3.08 Graded Assignment: Text Questions</p>	<p>HS-ESS1-3, HS-ESS1-2</p>	<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars 3.09 Lab Questions 3.09 Graded Assignment: Lab Questions</p>	<p>HS-ESS1-3, HS-ESS1-2</p>	<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and</p>

		<p>describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars 3.10 Quiz Review 3.11 Quiz Game</p>	<p>HS-ESS1-3, HS-ESS1-2, HS-PS1-5, HS-PS1-8</p>	<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars 3.12 Quiz: Stars 3.13 Discussion 1</p>	<p>HS-ESS1-3, HS-ESS1-2</p>	<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars 3.14 Discussion 2 3.15 Podcast</p>	<p>HS-ESS1-3, HS-ESS1-2</p>	<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p>

		<p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>3: Stars (cont.) 3.14 Discussion 2 3.15 Podcast</p>	HS-ESS1-3, HS-ESS1-2	<p>Describe the composition and characteristics of stars.</p> <p>Learn how astronomers identify and describe constellations such as Ursa Major, Ursa Minor, Orion, and Cassiopeia.</p> <p>Analyze and characterize stars by their physical and chemical properties</p> <p>Explain the use of diagrams and models in obtaining physical data on stars.</p> <p>Examine the evolution of stars.</p>
<p>4: Galaxies 4.00 Unit Summary 4.00 What Will You Learn in This Unit?</p>		<p>Differentiate and describe the types of galaxies within the universe</p> <p>Characterize the Milky Way</p> <p>Identify how galaxies are organized and distributed within the universe.</p> <p>Describe the evolution of galaxies.</p> <p>Examine the forces that shape galaxies of stars.</p>
<p>4: Galaxies 4.01 Galaxies 4.02 Classification of Galaxies</p>		<p>Differentiate and describe the types of galaxies within the universe</p> <p>Characterize the Milky Way</p> <p>Identify how galaxies are organized and distributed within the universe.</p> <p>Describe the evolution of galaxies.</p> <p>Examine the forces that shape galaxies of stars.</p>
<p>4: Galaxies 4.03 Milky Way 4.04 Dwarf Galaxies</p>		<p>Differentiate and describe the types of galaxies within the universe</p> <p>Characterize the Milky Way</p>

		<p>Identify how galaxies are organized and distributed within the universe.</p> <p>Describe the evolution of galaxies.</p> <p>Examine the forces that shape galaxies of stars.</p>
<p>4: Galaxies 4.05 Evolution of Galaxies 4.06 Galaxy Distribution 4.07 Galaxies in Motion</p>		<p>Differentiate and describe the types of galaxies within the universe</p> <p>Characterize the Milky Way</p> <p>Identify how galaxies are organized and distributed within the universe.</p> <p>Describe the evolution of galaxies.</p> <p>Examine the forces that shape galaxies of stars.</p>
<p>4: Galaxies 4.08 Questions to Think About</p>		<p>Differentiate and describe the types of galaxies within the universe</p> <p>Characterize the Milky Way</p> <p>Identify how galaxies are organized and distributed within the universe.</p> <p>Describe the evolution of galaxies.</p> <p>Examine the forces that shape galaxies of stars.</p>
<p>4: Galaxies 4.09 Text Questions 4.09 Graded Assignment: Text Questions</p>	HS-ESS1-2, HS-ETS1-5	<p>Differentiate and describe the types of galaxies within the universe</p> <p>Characterize the Milky Way</p> <p>Identify how galaxies are organized and distributed within the universe.</p> <p>Describe the evolution of galaxies.</p> <p>Examine the forces that shape galaxies of stars.</p>
<p>4: Galaxies 4.10 Lab Questions 4.10 Graded Assignment: Lab Questions</p>	HS-ESS1-2	<p>Differentiate and describe the types of galaxies within the universe</p> <p>Characterize the Milky Way</p> <p>Identify how galaxies are organized and distributed within the universe.</p> <p>Describe the evolution of galaxies.</p>

		Examine the forces that shape galaxies of stars.
4: Galaxies 4.11 Quiz Review 4.12 Quiz Game	HS-ESS1-2	Differentiate and describe the types of galaxies within the universe Characterize the Milky Way Identify how galaxies are organized and distributed within the universe. Describe the evolution of galaxies. Examine the forces that shape galaxies of stars.
4: Galaxies 4.13 Quiz: Galaxies 4.14 Discussion 1	HS-ESS1-2	Differentiate and describe the types of galaxies within the universe Characterize the Milky Way Identify how galaxies are organized and distributed within the universe. Describe the evolution of galaxies. Examine the forces that shape galaxies of stars.
4: Galaxies 4.15 Discussion 2 4.16 Podcast	HS-ESS1-2	Differentiate and describe the types of galaxies within the universe Characterize the Milky Way Identify how galaxies are organized and distributed within the universe. Describe the evolution of galaxies. Examine the forces that shape galaxies of stars.
4: Galaxies (cont.) 4.15 Discussion 2 4.16 Podcast	HS-ESS1-2	Differentiate and describe the types of galaxies within the universe Characterize the Milky Way Identify how galaxies are organized and distributed within the universe. Describe the evolution of galaxies. Examine the forces that shape galaxies of stars.
Unit: Midterm Exam Midterm Exam Midterm Exam Discussion		

<p>Unit: Midterm Exam Midterm Exam Discussion (cont.)</p>		
<p>5: Inner Planets 5.00 Unit Summary 5.00 What Will You Learn in This Unit?</p>		<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets 5.01 Inner Planets Introduction 5.02 Mercury</p>		<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets 5.03 Venus 5.04 Earth 5.05 Mars</p>		<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>

<p>5: Inner Planets 5.06 Questions to Think About</p>		<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets 5.07 Text Questions 5.07 Graded Assignment: Text Questions</p>	<p>HS-ESS1-6</p>	<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets 5.08 Lab Questions 5.08 Graded Assignment: Lab Questions</p>	<p>HS-ESS1-6</p>	<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets 5.09 Quiz Game</p>	<p>HS-ESS1-6</p>	<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p>

		<p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets 5.10 Quiz: Inner Planets 5.11 Discussion 1</p>	<p>HS-ESS1-6</p>	<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets 5.12 Discussion 2 5.13 Podcast</p>	<p>HS-ESS1-6</p>	<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>
<p>5: Inner Planets (cont.) 5.12 Discussion 2 5.13 Podcast</p>	<p>HS-ESS1-6</p>	<p>Describe how planetary matter is distributed within the solar system.</p> <p>Explain the formation of the solar system</p> <p>Differentiate and describe the inner planets within our solar system</p> <p>Identify the shared characteristics among all inner planets in the solar system.</p> <p>Explain the features of Earth that are essential to the development of life.</p>

<p>6: Outer Planets 6.00 Unit Summary 6.00 What Will You Learn in This Unit?</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.01 Outer Planets Introduction 6.02 Jupiter</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.03 Atmosphere 6.04 Saturn</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>

<p>6: Outer Planets 6.05 Atmosphere 6.06 Uranus</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.07 Neptune 6.08 Atmosphere 6.09 The Dwarf Planets</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.10 Questions to Think About</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.11 Text Questions 6.11 Graded Assignment: Text Questions</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and</p>

		<p>characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.12 Lab Questions 6.12 Graded Assignment: Lab Questions</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.13 Quiz Game</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>

<p>6: Outer Planets 6.14 Quiz: Outer Planets 6.15 Discussion 1</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets 6.16 Discussion 2 6.17 Podcast</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>
<p>6: Outer Planets (cont.) 6.16 Discussion 2 6.17 Podcast</p>		<p>Differentiate and describe the unique characteristics of the outer planets in the Solar System</p> <p>Identify the shared features and characteristics among the outer planets in the Solar System</p> <p>Describe the arrangements and distances between the outer planets.</p> <p>Explain why Pluto is no longer classified as a true planet of the Solar System</p> <p>Compare and contrast the outer planets with Earth</p>

<p>7: The Sun 7.00 Unit Summary 7.00 What Will You Learn in This Unit?</p>		<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.01 The Sun Introduction 7.02 The Structure of the Sun</p>		<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.03 The Shining Sun 7.04 The Death of the Sun?</p>		<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.05 Solar Flares 7.06 Solar Eclipses</p>		<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>

<p>7: The Sun 7.07 Questions to Think About</p>		<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.08 Text Questions 7.08 Graded Assignment: Text Questions</p>	<p>HS-ESS1-3, HS-PS1-8</p>	<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.09 Lab Questions 7.09 Graded Assignment: Lab Questions</p>	<p>HS-ESS1-3</p>	<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.10 Quiz Game</p>	<p>HS-ESS1-3</p>	<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.11 Quiz: The Sun 7.12 Discussion 1</p>	<p>HS-ESS1-3</p>	<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p>

		<p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun 7.13 Discussion 2 7.14 Podcast</p>	HS-ESS1-3	<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>7: The Sun (cont.) 7.13 Discussion 2 7.14 Podcast</p>	HS-ESS1-3	<p>Identify the five regions of the Sun</p> <p>Discuss the structure and composition of the Sun</p> <p>Learn about nuclear fusion in the Sun, including the proton-proton chain reaction.</p> <p>Examine solar activity, such as sunspots and solar flares</p> <p>Define and discusses solar eclipses.</p>
<p>8: Comets, Asteroids, and Meteors 8.00 Unit Summary 8.00 What Will You Learn in This Unit?</p>		<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>8: Comets, Asteroids, and Meteors 8.01 Comets, Asteroids, and Meteors Introduction 8.02 Comets</p>		<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p>

		Investigate how comets, asteroids, and meteorites influence life on Earth.
<p>8: Comets, Asteroids, and Meteors 8.03 Where Do Comets Come From? 8.04 Asteroids</p>		<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>8: Comets, Asteroids, and Meteors 8.05 Sizes and Shapes 8.06 Meteors</p>		<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>8: Comets, Asteroids, and Meteors 8.07 Questions to Think About</p>		<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>

<p>8: Comets, Asteroids, and Meteors 8.08 Text Questions 8.08 Graded Assignment: Text Questions</p>	<p>HS-ESS1-6</p>	<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>8: Comets, Asteroids, and Meteors 8.09 Lab Questions 8.09 Graded Assignment: Lab Questions</p>	<p>HS-ESS1-6</p>	<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>8: Comets, Asteroids, and Meteors 8.10 Quiz Game</p>	<p>HS-ESS1-6</p>	<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>8: Comets, Asteroids, and Meteors 8.11 Quiz: Comets, Asteroids, and Meteors 8.12 Discussion 1</p>	<p>HS-ESS1-6</p>	<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>

<p>8: Comets, Asteroids, and Meteors 8.13 Discussion 2 8.14 Podcast</p>	<p>HS-ESS1-6</p>	<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>8: Comets, Asteroids, and Meteors (cont.) 8.13 Discussion 2 8.14 Podcast</p>	<p>HS-ESS1-6</p>	<p>Define comet, asteroid, meteoroid, meteor, and meteorite.</p> <p>Examine the origin of comets and how their trails form.</p> <p>Discuss the location of asteroids in the Solar System.</p> <p>Learn about the different types of meteorites</p> <p>Investigate how comets, asteroids, and meteorites influence life on Earth.</p>
<p>Unit: Final Exam Final Exam Final Exam Discussion</p>		
<p>Unit: Final Exam Final Exam Discussion (cont.)</p>		