

Earth and Space Science Scope & Sequence

Days	Unit	Standard(s)/Outcome(s)	Essential/Guiding Questions
9	Geology <ul style="list-style-type: none"> ● The earth's interior ● Plate tectonics ● Earthquakes ● Volcanoes ● Minerals ● Rocks and the rock cycle 	<p>Describe how the interior of the Earth is differentiated into layers.</p> <p>Explain how Plate tectonics shape the Earth's surface.</p>	<p><i>How does plate tectonics shape Earth's surface?</i></p> <p><i>Why do volcanoes and earthquakes occur?</i></p>
9	Oceanography <ul style="list-style-type: none"> ● Mapping the seafloor ● Ocean layers ● Ocean currents ● Waves and coastal features 	<p>Explain how the water in the ocean is differentiated into layers.</p> <p>Describe the physical characteristics of the ocean's waters.</p> <p>Explain how ocean currents move throughout the ocean</p> <p>Describe how temperature and salinity influence the formation of ocean currents</p> <p>Explain how waves erode and shape coastlines?</p>	<p><i>How do ocean currents affect weather patterns and climate?</i></p> <p><i>How do waves erode and shape Earth's coastlines?</i></p>

9	Atmosphere <ul style="list-style-type: none"> ● Earth's atmosphere ● Weather ● Severe weather events 	Differentiate and describe the importance of the layers of Earth's atmosphere. Explain how severe weather events occur	<i>Why do severe weather events occur?</i>
9	Astronomy - Earth and the Solar System <ul style="list-style-type: none"> ● Earth's rotation and revolution ● Earth's moon ● Solar system ● Earth and terrestrial climate ● Mars mission 	Analyze our understanding of our solar system Develop a model of our solar system	<i>How can we explain the Earth, sun, and moon relationship in our solar system?</i> <i>How was our solar system formed?</i>
9	Astronomy - Exploration Outside the Solar System <ul style="list-style-type: none"> ● Telescopes and applications ● Spectroscopy ● Exoplanets ● Transit analysis 	Identify the uses of telescopes in modern astronomy Analyze how the use of telescopes led to the discovery of the speed of light	<i>How do we know what exists beyond our solar system?</i>