



**Science
Pre-Advanced Placement
Grade 8**

Unit Name Earth Science			6 Weeks Days to Teach: 3rd-4th 6 weeks (about 8 weeks)
Date Taught	TEKS and AP Required Elements	Content/Vocabulary	Guiding Questions
	<p>8.10 The student knows that complex interactions occur between matter and energy. The student is expected to: (B) describe interactions among solar, weather, and ocean systems</p> <p>8.12 The student knows that cycles exist in Earth systems. The student is expected to: (A) analyze and predict the sequence of events in the lunar and rock cycles; (B) relate the role of oceans to climatic changes; and (C) predict the results of modifying the Earth's nitrogen, water, and carbon cycles.</p> <p>8.13 The student knows characteristics of the universe. The student is expected to: (A) describe characteristics of the universe such</p>	<p>Topography Continental Drift Sea Floor Spreading Plate Tectonics Convergent Boundary Divergent Boundary Transform Boundary Rift Valley Trench Subduction Deformation Hot Spot Rock Cycle Climate Water Cycle Carbon Cycle Nitrogen Cycle Nitrogen Fixing Bacteria Legume Spiral Galaxy Elliptical Galaxy Irregular Galaxy Universe Comet Big Bang Theory</p>	<p>Guided Questions for TEK 8.10 What is the energy source that drives our weather and our ocean currents?</p> <p>Guided Questions for TEK 8.12 What kinds of tides occur at new and full moon? 1st and 3rd Quarter? What is the driving force for the Earth's Rock Cycle? How does the EAC (East Australian Current) affect Australia's East Coast Climate? What is the major addition humans make to modify each of the cycles listed? Water Cycle? Carbon Cycle? Nitrogen Cycle?</p>



**Science
Pre-Advanced Placement
Grade 8**

	<p>as stars and galaxies;</p> <p>(B) explain the use of light years to describe distances in the universe; and</p> <p>(C) research and describe historical scientific theories of the origin of the universe</p> <p>8.14</p> <p>Science concepts. The student knows that natural events and human activities can alter Earth systems. The student is expected to:</p> <p>(A) predict land features resulting from gradual changes such as mountain building, beach erosion, land subsidence, and continental drift;</p> <p>(B) analyze how natural or human events may have contributed to the extinction of some species; and</p> <p>(C) describe how human activities have modified soil, water, and air quality.</p>		<p>Guided Questions for TEK 8.13</p> <p>What are the size, temperature, and brightness of our Sun?</p> <p>What type of galaxy do we live in and how big is Earth in relation to our Galaxy?</p> <p>What is the distance from the Earth to the sun?</p> <p>Can you differentiate the existing theories of the creation of the universe?</p> <p>Guided Questions for TEK 8.14</p> <p>What land features result at each of the 3 plate boundaries?</p> <p>What did humans do to cause the extinction of the Coqui frog in the rain forest?</p> <p>What have we done to the soil, water, and air quality in the DFW area?</p> <p>How do our actions here affect the rest of the world?</p>
--	--	--	--