

Currituck County Schools
Earth Science Pacing Guide
2011-2012

Grading Period	Time to complete	Unit of Study
1st Nine Weeks	16 days	<p style="text-align: center;">Astronomy</p> <p>EEn.1.1.1 Explain the Earth's motion through space, including precession, nutation, the barycenter, and its path about the galaxy.</p> <p>EEn.1.1.2 Explain how the Earth's rotation and revolution about the Sun affect its shape and is related to seasons and tides.</p> <p>EEn.1.1.3 Explain how the sun produces energy which is transferred to the Earth by radiation.</p> <p>EEn.1.1.4 Explain how incoming solar energy makes life possible on Earth.</p>
1 st Nine Weeks	16 days	<p style="text-align: center;">Lithosphere</p> <p>EEn.2.1.1 Explain how the rock cycle, plate tectonics, volcanoes, and earthquakes impact the lithosphere.</p> <p>EEn.2.1.2 Predict the locations of volcanoes, earthquakes, and faults based on information contained in a variety of maps.</p> <p>EEn.2.1.3 Explain how natural actions such as weathering, erosion (wind, water and gravity), and soil formation affect Earth's surface.</p> <p>EEn.2.1.4 Explain the probability of and preparation for geohazards such as landslides, avalanches, earthquakes and volcanoes in a particular area based on available data</p> <p>EEn.2.2.1 Explain the consequences of human activities on the lithosphere (such as mining, deforestation, agriculture, overgrazing, urbanization, and land use) past and present.</p> <p>EEn.2.2.2 Compare the various methods humans use to acquire traditional energy sources (such as peat, coal, oil, natural gas, nuclear fission, and wood).</p>
1 st Nine weeks & 2 nd nine weeks	16 days	<p style="text-align: center;">Hydrosphere</p> <p>EEn.2.3.1 Explain how water is an energy agent (currents and heat transfer).</p> <p>EEn.2.3.2 Explain how ground water and surface water interact.</p> <p>EEn.2.4.1 Evaluate human influences on freshwater availability.</p>

		EEn.2.4.2 Evaluate human influences on water quality in North Carolina's river basins, wetlands and tidal environments.
1 st Nine weeks	16 days	<p style="text-align: center;">Meteorology</p> <p>EEn.2.5.1 Summarize the structure and composition of our atmosphere.</p> <p>EEn.2.5.2 Explain the formation of typical air masses and the weather systems that result from air mass interactions.</p> <p>EEn.2.5.3 Explain how cyclonic storms form based on the interaction of air masses.</p> <p>EEn.2.5.4 Predict the weather using available weather maps and data (including surface, upper atmospheric winds, and satellite imagery).</p> <p>EEn.2.5.5 Explain how human activities affect air quality.</p> <p>EEn.2.6.1 Differentiate between weather and climate.</p> <p>EEn.2.6.2 Explain changes in global climate due to natural processes.</p> <p>EEn.2.6.3 Analyze the impacts that human activities have on global climate change (such as burning hydrocarbons, greenhouse effect, and deforestation).</p> <p>EEn.2.6.4 Attribute changes to Earth's systems to global climate Change (temperature change, changes in pH of ocean, sea level changes, etc.).</p>
2 nd Nine Weeks	16 days	<p style="text-align: center;">Environmental Studies</p> <p>EEn.2.7.1 Explain how abiotic and biotic factors interact to create the various biomes in North Carolina.</p> <p>EEn.2.7.2 Explain why biodiversity is important to the biosphere.</p> <p>EEn.2.7.3 Explain how human activities impact the biosphere.</p> <p>EEn.2.8.1 Evaluate alternative energy technologies for use in North Carolina.</p> <p>EEn.2.8.2 Critique conventional and sustainable agriculture and aquaculture practices in terms of their environmental impacts.</p> <p>EEn.2.8.3 Explain the effects of uncontrolled population growth on the Earth's resources.</p> <p>EEn.2.8.4 Evaluate the concept of "reduce, reuse, recycle" in terms of impact on natural resources.</p>
2 nd Nine Weeks	5 days	Final Exam Review