

# Currituck County Schools

## Earth Science Pacing Guide

### 2021-2022

Grading Period	Time to complete	Unit of Study
1st Nine Weeks	16 days	<p style="text-align: center;"><b>HYDROSPHERE</b></p> <p>EEn.2.3.1--Explain how water is an energy agent(current 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> <p>EEn.2.4.2—Evaluate human influences on water quality in North Carolina’s river basins ,wetlands, and tidal environments.</p>
1 <sup>st</sup> Nine Weeks	16 days	<p style="text-align: center;"><b>METEOROLOGY</b></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>
1 <sup>st</sup> Nine weeks &	22 days	<p style="text-align: center;"><b>ENVIRONMENTAL STUDIES</b></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>

2 <sup>nd</sup> nine weeks		<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 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 <sup>nd</sup> Nine weeks	16 days	<p style="text-align: center;"><b>LITHOSPHERE</b></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 an 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>
2 <sup>nd</sup> Nine Weeks	12 days	<p style="text-align: center;"><b>ASTRONOMY</b></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>

2 <sup>nd</sup> Nine Weeks	3 days	Final Exam Review
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