

# Earth and Environmental Science

## [TENTATIVE PACING GUIDE FALL 2019 - PROJECTS NOT INCLUDED]

<p>[5 Days] Aug. 26 - Aug. 30  <b>Vocabulary Quiz 1 Aug. 29</b>  <b>Unit 1 Test Aug. 30</b></p>	<p><b>Unit 1: Intro to Earth, Measurements, Scientific Method, &amp; Mapping</b></p>
<p>[9 Days] Sept. 3 - Sept. 13  <b>Vocabulary Quiz 2 Sept. 5</b>  <b>Vocabulary Quiz 3 Sept. 12</b>  <b>Unit 2 Test Sept. 13</b></p>	<p><b>Unit 2: Geosphere Part 1 - Earth's Interior</b>  <b>Standards:</b> 2.1.1 Explain how the rock cycle, plate tectonics, volcanoes, and earthquakes impact the lithosphere. 2.1.2 Predict the locations of volcanoes, earthquakes, and faults based on information contained in a variety of maps. 2.1.4 Explain the probability of and preparation for geohazards such as landslides, avalanches, earthquakes, and volcanoes in a particular area based on the available data.</p>
<p>[10 Days] Sept. 16 - Sept. 27  <b>Vocabulary Quiz 4 Sept. 19</b>  <b>Vocabulary Quiz 5 Sept. 26</b>  <b>Unit 3 Test Sept. 27</b></p>	<p><b>Unit 3: Geosphere Part 2 - Rocks, Minerals, &amp; Soil</b>  <b>Standards:</b> 2.1.1 Explain how the rock cycle, plate tectonics, volcanoes, and earthquakes impact the lithosphere. 2.1.3 Explain how natural actions such as weathering, erosion (wind, water, and gravity), and soil formation affect Earth's surface.</p>
<p>[10 Days] Sept. 30 - Oct. 11  <b>Vocabulary Quiz 6 Oct. 3</b>  <b>Vocabulary Quiz 7 Oct. 10</b>  <b>Unit 4 Test Oct. 11</b></p>	<p><b>Unit 4: Energy &amp; Natural Resources</b>  <b>Standards:</b> 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. 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>
<p>[9 Days] Oct. 14 - Oct. 25  <b>Vocabulary Quiz 8 Oct. 17</b>  <b>Vocabulary Quiz 9 Oct. 24</b>  <b>Unit 5 Test Oct. 25</b></p>	<p><b>Unit 5: Hydrosphere - Streams, Rivers, &amp; Groundwater</b>  <b>Standards:</b> 2.3.2 Explain how groundwater and surface water interact. 2.4.1 Evaluate human influences on freshwater availability. 2.4.2 Evaluate human influences on water quality in North Carolina's river basins, wetlands, and tidal environments.</p>
<p>[5 Days] Oct. 28 - Nov. 1  <b>Vocabulary Quiz 10 Oct. 31</b>  <b>Unit 6 Test Nov. 1</b></p>	<p><b>Unit 6: Hydrosphere - Oceanography, Coastlines, Estuaries, &amp; Oceans</b>  <b>Standards:</b> 1.1.2 Explain how the Earth's rotation and revolution about the Sun affect its shape and is related to seasons and tides. 1.1.4 Explain how incoming solar energy makes life possible on Earth. 2.3.1 Explain how water is an energy agent (currents and heat transfer). 2.4.2 Evaluate human influences on water quality in North Carolina's river basins, wetlands, and tidal environments. 2.6.2 Attribute changes to Earth's systems to global climate change (temperature change, changes in pH of the ocean, sea level changes, etc.).</p>

<p><u>[9 Days] Nov. 4 - Nov. 15</u>  <b>Vocabulary Quiz 11 Nov. 7</b>  <b>Vocabulary Quiz 12 Nov. 14</b>  <b>Unit 7 Test Nov. 15</b></p>	<p><b>Unit 7: Atmosphere</b>  <b>Standards:</b> 2.5.1 Summarize the structure and composition of our atmosphere. 2.5.2 Explain the formation of typical air masses and the weather systems that result from air mass interactions. 2.5.3 Explain how cyclonic storms form based on the interaction of air masses. 2.5.4 Predict the weather using available weather maps and data (including surface, upper atmospheric winds, and satellite imagery). 2.5.5 Explain how human activities affect air quality. 2.6.1 Differentiate between weather and climate.</p>
<p><u>[7 Days] Nov. 18 - Nov. 26</u>  <b>Vocabulary Quiz 13 Nov 21</b>  <b>Unit 8 Test Nov. 26</b></p>	<p><b>Unit 8: Biodiversity &amp; Biomes</b>  <b>Standards:</b> 2.7.1 Explain how abiotic and biotic factors interact to create the various biomes in North Carolina. 2.7.2 Explain why biodiversity is important to the biosphere. 2.7.3 Explain how human activities impact the biosphere. 2.8.3 Explain the effects of uncontrolled population growth on the Earth's resources. 2.8.4 Evaluate the concept of "reduce, reuse, recycle" in terms of impact on natural resources.</p>
<p><u>[7 Days] Dec. 2 - Dec. 10</u>  <b>Vocabulary Quiz 14 Dec. 5</b>  <b>Unit 9 Test Dec. 10</b></p>	<p><b>Unit 9: Astronomy</b>  <b>Standards:</b> 1.1.1 Explain the Earth's motion through space, including precession, nutation, the barycenter, and its path about the galaxy. 1.1.2 Explain how the Earth's rotation and revolution about the Sun affect its shape and is related to seasons and tides. 1.1.3 Explain how the sun produces energy which is transferred to the Earth by radiation. 1.1.4 Explain how incoming solar energy makes life possible on Earth.</p>
<p><u>[3 Days] Dec. 11 - Dec. 13</u></p>	<p><b>Review</b></p>
<p><u>[5 Days] Dec. 16 - Dec 20</u></p>	<p><b>Final Exams</b></p>