

Implementing Common Core Standards

North Carolina Essential Standards addressed in this unit are:

EEn.2.6 Analyze patterns of global climate change over time.

Within this unit global climate change will be examined in detail in a global context as well as a local context.

EEn.2.6.1 Differentiate between weather and climate.

Students will investigate how weather is impacted by global climate change.

EEn.2.6.2 Explain changes in global climate due to natural processes.

In researching global climate change, students will address natural processes.

EEn.2.6.3 Analyze the impacts that human activities have on global climate change (such as burning hydrocarbons, greenhouse effect, and deforestation).

Students will study anthropogenic climate change in-depth. Students will analyze data and research greenhouse gases and their affect on climate. Students will also create a graph of atmospheric carbon dioxide levels through time. Students will calculate their carbon footprint. Task 1 addresses this standard by examining the affect of transportation, land use, urban sprawl, and public transportation on levels of greenhouse gases and climate change.

EEn.2.6.4 Attribute changes in Earth systems to global climate change (temperature change, changes in pH of ocean, sea level changes, etc.).

The impacts of climate change are examined in this unit both globally and locally. Scenario 2 addresses this standard by analyzing weather change caused by increased temperatures.