

Students will choose one of the standards listed below and write a 1 page discussion on the subject.

E.12.A.1 – Students know the Sun is the major source of Earth’s energy, and provides the energy driving Earth’s weather and climate.

E.12.A.2 – Students know the composition of Earth’s atmosphere has changed in the past and is changing today.

E.12.A.3 – Students understand the role of the atmosphere in Earth’s greenhouse effect.

HS-ESS2-2 – Analyze geoscience data to make the claim that one change to Earth’s surface can create feedbacks that cause changes to other Earth systems.

HS-ESS2-4 – Use a model to describe how variations in the flow of energy into and out of Earth systems result in changes in climate.

HS-ESS3-5 – Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.

HS-ESS3-4 – Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-6 – Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

N.12.A.3 – Students know repeated experimentation allows for statistical analysis and unbiased conclusions.

N.12.B.1 – Students know science, technology and society influence one another in both positive and negative ways.

N.12.B.2 – Students know consumption patterns, conservation efforts, and cultural or social practices in countries have varying environmental impacts.\

Students will work as individuals over Days 1 – 4 to view the global warming powerpoint, including associated videos, and taking notes on what is observed. Students will be assigned to one of three groups: 1) global warming is man’s fault, 2) global warming is nature’s fault, 3) the Senate Committee on the Environment. Students will write a minimum 1 page summary of notes taken over previous days to explain and defend their assigned group position and how one of the standards listed above fits into the lesson plan. The paper will be worth 20 classroom points.

Students will work in teams over Days 6 – 8 to read provided global warming information and extract important and appropriate data and statistics to support their assigned group position. Students will develop a team placemat containing important data and statistics that support their assigned group

position. Students will participate in a discussion/debate on Day 9 pitting the Its Man's Fault group against the Its Nature's Fault Group in testimony before the Senate Committee. The Senate Committee will evaluate the data and arguments presented by opposing groups and render a decision on what action they will recommend the U.S. Senate take to address global warming. The group placemat and oral presentations will be worth 20 classroom points.