

# Geography and History Activity



## The World

### The Global Warming Debate

The subject of global warming is one that has kept people disagreeing for years. The issues concern the causes of increased surface temperatures on Earth, whether the change is normal, and what the consequences of such warming will be. These issues are of ongoing debate. As part of an informed debate, it helps to learn both sides of the issue. Each argument below is next to a related argument from the opposite side of the debate.

Arguments to Support Climate Change	Arguments to Refute Climate Change
<ul style="list-style-type: none"> <li>Since various human activities such as the burning of fossil fuels began more than 100 years ago, the temperature of Earth's atmosphere has been slowly rising.</li> </ul>	<ul style="list-style-type: none"> <li>Geography shows that Earth has gone through many natural climate changes of heating and cooling for billions of years, far longer than humans have lived on Earth.</li> </ul>
<ul style="list-style-type: none"> <li>The release of carbon dioxide, or CO<sub>2</sub>, into the air has caused some incoming solar radiation to become trapped in the atmosphere. The trapped radiation causes a greenhouse effect, in which temperatures slowly rise.</li> </ul>	<ul style="list-style-type: none"> <li>Carbon dioxide is a gas naturally occurring in the atmosphere. Not enough years of scientific data are available to track CO<sub>2</sub> levels over time to compare climate conditions throughout Earth's history.</li> </ul>
<ul style="list-style-type: none"> <li>These effects of global warming will bring dangerous consequences to Earth. These include increased extreme weather, threatening of ecosystems, plant and animal extinctions, and rising ocean levels due to the melting of glaciers.</li> </ul>	<ul style="list-style-type: none"> <li>An increase in extreme weather conditions, ecosystem changes, plant and animal extinctions, and rising ocean waters cannot be scientifically proven to have a link to climate change or human activity.</li> </ul>
<ul style="list-style-type: none"> <li>Cutting down on the use of fossil fuels can reverse the course of climate change and improve climate conditions.</li> </ul>	<ul style="list-style-type: none"> <li>It has not been proven that human activity changes the condition of Earth's atmosphere or influences the climate, so why should people change their behavior?</li> </ul>

# Geography and History Activity *cont.*

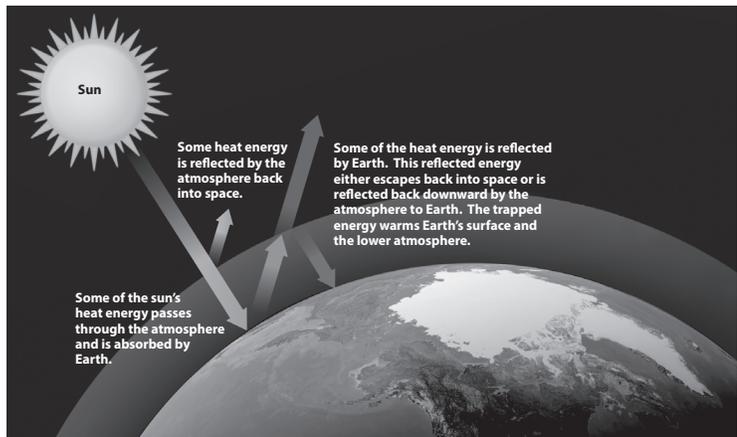


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### Applying Geography to History

**Directions:** Read the information about climate change and examine the diagram. Then answer the questions that follow.

Incoming solar radiation is reflected back into the atmosphere but becomes trapped in a layer of greenhouse gases, mainly carbon dioxide. Over time, temperatures around the world rise.



**1. Drawing Conclusions** What might someone who supports the climate change argument say about a law that would limit the levels of CO<sub>2</sub> in the atmosphere?

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**2. Drawing Conclusions** What might someone who refutes the climate change argument say about a law that would limit the levels of CO<sub>2</sub> in the atmosphere?

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### Mapping Activity

Research the Internet for facts on the impacts of climate change on different parts of the world. For example, the Environmental Protection Agency (EPA) indicates that impacts to the southeastern coastal communities in the United States would likely include sea-level rise and increased hurricane intensity. Then using a copy of a current world map, write callouts of your facts on the map to show a global picture of what changes are predicted to happen as a result of global climate change.