Global Warming and the Greenhouse Effect

Perhaps you have heard of the greenhouse effect. In a greenhouse, sunlight comes in through the glass and warms everything inside. The heat that radiates from the inside surfaces cannot pass back out through the glass very easily. Heat builds inside the greenhouse because of this captured energy from the sun.

Certain gases in Earth’s atmosphere—especially water vapor and carbon dioxide—are like the glass in a greenhouse. We call this the greenhouse effect, and we call these gases greenhouse gases, because they trap some of the heat that rises from Earth’s surface when it’s heated up by sunlight. Our atmosphere is like an invisible but warming blanket. Most greenhouse gases occur naturally, but some are added to our atmosphere by human actions.

Image by Will Elder, National Park Service

Global warming refers to the rise in average temperatures at Earth’s surface and lower atmosphere over the last century. Most scientists believe that greenhouse gases produced by human activity are contributing to global warming. The danger in this warming is that it could alter Earth’s climate patterns, increase coastal flooding, and force major changes in the way people live. The more we can learn about global warming, the better prepared we may be to deal with the possible consequences of a changing environment.