

Climate Change and Its Effects

Exit Quiz – Student Edition

Answer the following questions.

1. What would happen to Earth's temperature if the energy absorbed from the sun (solar radiation) was less than the emitted (thermal) energy leaving the Earth? How can this result in climate change?

2. What are greenhouse gases? Give at least three examples then describe how these gases can impact the Earth's climate?

3. Sea ice is highly reflective and causes less solar radiation to be absorbed compared to the darker ocean. Sea ice is likely to become less extensive as temperatures warm. Based on these considerations, will the effects of sea ice enhance or lessen warming due to increased greenhouse gases? Why?

4. Why is the future climate response to increasing greenhouse gas concentrations uncertain?

5. Will clouds enhance or diminish the warming due to future increases in greenhouse gases?
