

Grade 9 Geography – Unit 1 Lesson 8

Al Gore's An Inconvenient Truth

Humanity is sitting on a ticking time bomb. If the vast majority of the world's scientists are right, we have just ten years to avert a major environmental catastrophe that could include involving extreme weather, floods, droughts, epidemics and killer heat waves.

An Inconvenient Truth is the crusade by former USA Vice-President Al Gore to save Earth. His “traveling road show” is about Global Climate Warming. Gore reviews the scientific opinion on climate change, discusses the politics and economics of global warming and describes the consequences that global climate change may produce if the amount of human-generated greenhouse gases are not significantly reduced in the very near future. A focus of the film is his examination of the annual temperature and CO₂ levels for the past 650,000 years in Antarctic ice core samples.

For his actions, Gore was awarded a 2007 Nobel Peace Prize.

Task

- ? Watch the DVD
 - ? Answer the questions
1. Identify five (5) new things about Global Climate Warming that you learned from watching the DVD.
 2. Do you think Global Climate Warming can be stopped? How? Provide three ideas with your answer.
 3. What do you promise to change in your life tomorrow to help save the planet? Name one promise you will make and keep.

Question Sheet for the movie

1. When was the first picture of Earth, called “Earthrise” taken?
2. Why is the 11 December 1972 picture of Earth the most commonly published photograph of the Earth?
3. What did Roger Revelle and Charles David Keeling recommend measuring in the Earth's atmosphere?
4. Why did they choose the middle of the Pacific Ocean to make their initial measurements?
5. Name a warm cycle in Earth's climate that occurred in the last 1000 years.
6. Scientist use ice cores from Antarctica to model Earth's historic atmospheric CO₂ levels. How far back does this CO₂ record go?
7. What is the relationship between atmospheric CO₂ and air temperatures?

8. When have the ten hottest years on record occurred?
9. What year was the hottest on record?
10. What do your answers for Question 8 and Question 9 suggest about Global Warming and Climate Change?
11. An extreme heat wave occurred in Europe and parts of Asia in the 2003 summer. How hot did India get?
12. How many cities in the Western Hemisphere recorded all-time high temperatures during the same period?
13. Thirty-five years ago, you could drive on the Arctic permafrost for 225 days in each year. In 2006, how many days can you drive on the permafrost? Why is this important to know? Provide one reason with your explanation.
14. The Arctic sea ice extent and thickness has decreased significantly over the last 40 years. What is the percentage change?
15. Scientists predict the Arctic sea ice could entirely disappear during the Arctic summers. How soon could that event occur?
16. What did you learn about the impacts of Global Warming in the Arctic from Questions 13-15?
17. Gore suggested that is an “alarm bell” for Global Warming. What is it?
18. During which year did the Larsen B Ice Shelf break up?
19. How much would ocean levels rise if West Antarctica melted?
20. How many people in Calcutta and Bangladesh would be displaced as Environmental Refugees if Greenland or West Antarctica melted?
21. What did you learn about the human and social costs of Global Warming from Questions 17-20?
22. What percentage of recent scientific articles disagree with Global Warming?
23. What percentage of news articles in the popular press disagree with Global Warming?
24. What do your answers for Question 22 and Question 23 suggest about researching and reporting Global Warming?
25. We have the technical ability to reduce Greenhouse Gas Emissions below the 1970 emission levels. Why do we hesitate? Provide three reasons with your answer.
26. What are the three factors leading to the “collision between civilization and natural Earth?”