

EcoSchools Multimedia Presentation:

Changing Climate, Changing Attitudes

This student question sheet will help you make notes for the EcoSchools multimedia presentation, *Changing Climate, Changing Attitudes*. Included in the presentation are video clips linked to specific slides providing additional information that relates the impacts on specific people and communities. Answers to the questions below will be found in both the slides and the video clips.

Introduction: Slides 1-23

1. What is climate?
2. Describe the greenhouse effect.
3. Draw a diagram of the greenhouse effect
4. What is the climate-changing gas that humans have released the most of (by volume)?
5. What are two natural sources of carbon in the global climate system?
6. What are two natural sinks (absorbers) of carbon?
7. What human processes release carbon into the atmosphere at a rate faster than the natural system can absorb?

8. What other human activities have contributed to the reduction in carbon absorption?
9. During what period did concentrations of carbon dioxide in the atmosphere show a dramatic increase? What in particular contributed to the increase in carbon dioxide?
10. How do scientists know that the climate and the gases in the atmosphere have changed in the past?
11. Slides 17-21 describe the changes in concentration of carbon in the atmosphere. Fill in the table below based on the information from three of the slides:

Time period	Major transportation methods	Cooking, heating and light sources	Farming methods	Types of industries	What is the major energy source during this period?
Early 1800s (Slide 17)					
Early 1900s (Slide 19)					
Today (Slide 21)					

12. Fill in the blanks:

_____ % of Ontario's energy is generated from coal-fired electricity plants.

The greenhouse gas emissions from these plants is equivalent to the greenhouse gas emissions from _____ million vehicles.

Impacts of climate change: Slides 24–40

13. What is the name of the international organization that released a report in 2001 that concluded that the earth's climate was definitely changing because of human activities? Who belongs to this panel? Why is it important?

14. What 3 impacts have scientists agreed that climate change has had?

15. List ways that climate change will have an impact on the weather.

16. How might climate change affect natural ecosystems?

17. List ways that climate change will affect human communities.

18. Describe the international agreement that addresses climate change

Climate Change Challenge: Slides 41-59

19. What is the Canadian government doing about climate change?

20. What changes in energy use are needed to reduce the impacts of climate change?

21. What are three actions you can take to reduce your carbon dioxide emissions?