



The Environment: What Are the Issues?

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Lesson Objective

This lesson addresses the societal issues that focus on environmental issues. The lesson provides an opportunity for students to examine the implications of deforestation and other environmental threats. Students will identify threats and hazards to the environment and consider the moral, social and economic implications. Students will also be encouraged to think about how their lifestyle choices affect the environment. This lesson stimulates further research related to environmental issues. Encourage students to display their findings by creating posters and giving presentations.

Science 10 Learner Outcome

Unit 1 Energy from the Sun: students should be able to demonstrate the interrelationship between science, technology and society by describing the responsibility of society, through science and technology, to protect the environment and use natural resources judiciously to ensure quality of life for future generations (e.g., global deforestation).

Safe and Caring Topics and Concepts

Living Respectfully

Examining Rights and Responsibilities

Instructional Strategies

Go to	Cooperative Learning	Inquiry Learning	Direct Instruction
www.sacsc.ca for Strategies/Resources for strategy descriptions			

Generalization and Transfer	Peer Teaching	Empathy/Affective Education	General Teaching Activities/Ideas
		<ul style="list-style-type: none"> Social Perception Teachable Moments 	<ul style="list-style-type: none"> Creating Posters New Centres Interactive Bulletin Boards Brainstorming

Supplementary Resources

Visions I Chapter 1.

Learning Activities for The Environment: What Are the Issues?

Knowledge Now

Ask students to tell you what they know about threats and hazards that affect the biosphere or that negatively impact the environment. Write their collective ideas on flip chart paper. Consider making a concept map while students volunteer their answers. List five examples.

Encourage suggestions such as the greenhouse effect, ozone depletion, species extinction, water, air or noise pollution, deforestation or desertification. Make a T-chart that lists causes on one side and effects on the other. Brainstorm for present knowledge about the causes and effects of the above mentioned environmental conditions. Post the chart and refer to it as the lesson progresses. Be ready to add or delete information to increase the accuracy of the information.

Form groups of four to five and discuss the topics. Ask these questions:

- How do humans contribute to these conditions?
- What threats or hazards do you or your family personally experience?
- Are you worried about the long-term effects of these threats or hazards?
- Do you think the environment is more or less threatened than in the past? Why?
- Which threat or hazard is most serious?
- What actions do you take to promote or prevent these threats?

Engaging Interest

Ask students to critically examine various threats to the environment by describing their effects. Encourage students to draw on their own experiences traveling in Canada or other countries. Share this information in groups of four to five people.

Use these questions to stimulate critical thinking:

- Which environmental issue interests, worries or concerns you most? Provide reasons for your choice.
- Which environmental issue is most threatening?
- To what extent does a high standard of living come at the cost of depleting or destroying the environment?
- Are actions that harm the environment ultimately going to result in better lifestyles or a higher standard of living?

This discussion should help students choose a topic for further research.

Experiential Learning / Skill Practice

Use the following process to identify the class's top ten environmental threats. First, ask each person to rank his or her own top ten threats by making a list. Second, in small groups rerank the top 10 using consensus to determine the new order. Third, number each group and make a chart on the whiteboard. List the group numbers in a row at the top and

the threats in the lefthand column. Ask a member from each group to list their group's responses in the designated column. The highest number is threat number 1, the second highest is number 2 and so on.

Use information in the *Visions* text (Chapter 1, pages 31 to 33) to learn more about environmental issues. Create groups based on common interests. Provide time for each group to research its topic and prepare a presentation. A research assignment of this nature requires two or three classes. Encourage students to be creative in the presentation of their topics. They can write reports, make visual displays such as posters or collages or create PowerPoint presentations. Tell them that their presentations should stimulate questions and help the class engage in thinking more about the facts and issues.

New Knowledge, Skills and Attitudes

Having listened to the class presentations, provide a personal description of the environmental threat that outrages, worries or concerns students most. Ask students to

- determine to what extent they may have contributed to the problem, and
- determine to what extent they may have minimized it.

Application and Assessment

Ask students:

- What other factors (such as values, beliefs, experiences, peers, parents and so on) have influenced your views about environmental degradation?

Explain that often people judge others by their own beliefs about what is right and true and this can lead to conflict and stereotyping. For example, if people recycle does that make them a *treehugger* or if they don't are they *ecoterrorists*?

What can students do to get a better understanding of someone else's perspective of environmental threats by exploring complex dilemmas? For example, if your family lived in a country that was suffering a drought, would you kill an endangered species if it meant your family's survival?

End by helping students understand their impact on the environment. Challenge students to think of ways they can personally reduce their negative impact on the environment. Challenge them to think about what they can do as a group at home, at school and in the community.

Find out about *ecological footprint* to examine the relative differences of various nations' impacts on the environment.