



A Climate of Change Hopscotch

Global climate change can seem like an overwhelming problem. The scale of the problem and the scientific language surrounding it are hard to comprehend. Many people do not know how they can act to help solve this challenging problem. It is important for everyone to learn the simple steps and actions they can take to help. If everyone does a bit of the work, the problem becomes manageable. As the saying goes, "Many hands make light work!"

Activity Time:

40 minutes

Setting:

Indoor in gymnasium or outdoors on pavement

Materials:

- Vocabulary/concept information
- Chalk
- Paper (if playing indoors)
- Green masking tape (if playing indoors – won't leave sticky residue on floors)
- Tokens

Grade Level:

Grade 4-7

Subject Areas:

Biology, chemistry, ecology, geography, social studies

Group Size:

Any

Keywords: (may vary)

Atmosphere, climate change, CO₂, emissions, fossil fuels, greenhouse gas, methane, nitrous oxides, personal choice, sink, source

* Source: ffl.nbed.nb.ca



WildBC

Summary

Students reinforce vocabulary and concepts around climate change through an active game of hopscotch.

Objectives

The students will

- Analyze how BC's living and non-living resources are used
- Describe potential environmental impacts of using BC's living and non-living resources
- Determine how personal choices and actions have environmental consequences
- Evaluate human impacts on local ecosystems
- Assess the requirements for sustaining healthy local ecosystems

Making Connections

Human activities have impacts, both positive and negative, on local and global ecosystems resulting environmental consequences that can be far reaching. It is easy to feel overwhelmed by the enormity of global climate change and what is causing it. This leads to a feeling of helplessness and often

to depression or paralysis in the face of what appears to be looming catastrophe. It is important to understand that human actions are not all negative and that for every action that causes harm, there are other actions that can counteract, mitigate or replace it. Once people have learned what they can do and begin to do it, a culture of behaviour change will emerge along with human efforts to minimize greenhouse gas emissions. Just as with littering and wearing seatbelts, the culture of society changed as individuals changed their actions. In this activity, students reinforce their understanding of the positive and the negative effects of human action and affirm what action an individual can take on this issue.

Background

To guide student brainstorming, you will need to be familiar with the causes of greenhouse gas emissions and with actions that individuals can take to mitigate or curtail emissions. The Climate Change Primer provides an introduction to the causes of climate change. Visit the site yosemite.epa.gov/oar/



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globalwarming.nsf/content/climate.html (also cited in the Climate Change Primer) for more detailed information. Look for the following tabs to find out more about human actions and climate change: Emissions, Individual, and Individuals Can Make A Difference.

Procedure

Warm Up

1. Brainstorm with students the ways that human activities contribute to climate change. Continue the brainstorm for ways that humans can change their behaviour or provide mitigation for climate change.

Negative: idling cars, clearing forests, over-consumption, airline travel, etc.

Positive: riding bicycles, planting trees, turning out lights, cutting down on use of plastics by using cloth shopping bags, etc.

2. Sort students into pairs.

Depending upon which hopscotch template you are using, **have students select eight or more options from the brainstorm.** The options should be a mixture of negative and positive contributions. Students should list these on a single sheet of paper or, if you are playing indoors, write one each on a single 8 1/2" X 11" sheet in heavy marker.

The Activity

1. Have students create their hopscotch pattern. There are many different designs that can be used. Have students use the standard eight squares (three singles, one double, one single, one double) or conduct a quick Internet search to find a variety of patterns for students to choose from. The pattern they use will determine how many squares they will need to fill with climate change action information.

2. In the pattern, have students write or place one action in each square. The positive and negative actions should be fairly equally distributed.

3. Students then play each other's hopscotch games. One partner stays at the hopscotch site while the other travels to the other hopscotch games. When partner #1 has tried all the games, they return to their own hopscotch game and partner #2 tries the hopscotch games.

4. The object of the game is to successfully hop through the pattern without touching down on any of the negative impact squares.

Wrap Up

Have student pairs decide which of their positive activities is the best one. Bring group together and have each pair tell what their positive choices were and which one they chose as best. Student pairs should then justify this with thoughtful reasoning.

Assessment

Have students explain in their own words why it is important for people to understand what positive steps they can take to mitigate the effects of climate change and to prevent further excessive emissions of greenhouse gases.