Disasters in Nunavik

Learning Objectives:

- Students will learn about natural and man-made disasters that occurred in Nunavik.
- Students will compare disasters in Nunavik and Canada and highlight the differences and similarities.

Materials:

- Nunavik outline card (1)
- Coloured pylons (16)
- Coloured chains (12)
- Disaster icons (4)
- Comparative fact sheets on disasters in Nunavik and Canada (8)

Targeted Levels:

• Grade 4 to Secondary 2

Time

• 75 minutes

Introduction

Present the map to students and ask them to locate Canada's provinces and territories. Since there are no borders drawn on the map, have students use the chains to outline the provincial and territorial borders.

Introduce students to the Northern Quebec region called Nunavik. Ask students: Where is Nunavik? Nunavik is located above which parallel? (55th parallel) How many communities are there? (14 communities) What are the two largest bays? (Hudson Bay and Ungava Bay) Have students use a chain to show Northern Quebec on the giant map. Then, ask students to use the pylons to locate the communities to the best of their knowledge. Help students out by telling them that the villages are located near water (the shorelines).

In most northern villages, there is snow from October to June, and sometimes longer for those farther north. Moreover, only four communities are located in the taiga (an ecoregion with small trees and conifers), while the others are in the tundra (an ecoregion with mosses, lichens and some small shrubs). Ask students to try to find the four villages where trees grow (Kuujjuarapik, Umiujaq, Kuujjuaq and Kangiqsualujjuaq) and explain their reasoning. Then, help students mark the treeline using a coloured chain.

Inform students that the electricity produced in Nunavik comes from thermal power plants that use diesel, which needs to be transported from other parts of Canada.

Now that they know all these facts, ask students if they can name some natural disasters (floods, forest fires, avalanches, etc.) and man-made disasters (oil spills, etc.) that might have occurred in Northern Quebec.

Ensure that you have discussed the difference between natural and man-made disasters with your students.

Development

Using the Nunavik outline card, have students place the pylons to locate the 14 Inuit communities on the giant map. Ask students about their knowledge of natural and man-made disasters in Nunavik. Examples of questions include:

- Could this disaster (flood, forest fire, avalanche, oil spill, etc.) occur anywhere else in Canada?
- What kind of vegetation is found in Nunavik? Are forest fires a possibility?
- Where are the villages of Nunavik located? Are they near the water? Do you think a flood could occur?
- No roads are available between villages. What do you think are the methods of transportation? How is oil or diesel transported? Could a ship cause an oil spill?

Distribute the disaster icons to students and ask them to stand on or near a community where they think the disaster could have occurred. Ask the students to share their reasoning with the class.

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Present the information on the comparative fact sheets about the disasters in Nunavik:

- Flood: Kuujjuaq (May 1979)
- Forest fire: Kuujjuaq (June 22, 2014)
- Oil spill: Salluit (October 7, 2015)
- Avalanche: Kangiqsualujjuaq (January 1, 1999)

Ask students holding the different disaster icon cards to stand on or near the community where the type of disaster depicted on their card occurred. Have students read the comparative fact sheets for each disaster. Elaborate on the disasters that happened in Nunavik and those in the rest of Canada.

Here are the disasters in the rest of Canada for study:

- Flood: Sussex and Sussex Corner, New Brunswick (April 2014)
- Forest fire: Fort McMurray, Alberta (May 2016)
- Oil spill: Lac-Mégantic, Quebec (July 6, 2013)
- Avalanche: Revelstoke, British Columbia (January 20, 2003)

Ask students to identify differences and similarities between examples from Nunavik and the rest of Canada. Discuss the effects on communities. To consolidate this activity, have students reflect on the effects of the forest fire in Kuujjuaq (the box is empty on the comparative fact sheet). Here are some questions to guide the discussion:

- In your opinion, what were the effects on the physical environment? And what were the effects on the community?
- If the winds had not blown the blaze in Kuujjuaq farther away, what would have been the impact? What would the community have done?

Conclusion

After students have compared similar disasters that occurred in two different locations in Canada, have them present what they learned to their class using visual aids (photos, slide presentation, demonstration on the giant floor map with the pylons and chains, etc.). Separate the class into small groups for this activity. Students should be able to explain the differences between the effects on urban and rural communities and highlight the similarities and differences between similar disasters that occurred in different places. They can also choose two different types of disasters and compare them.

Extend Your Geographical Thinking

Have students research natural and man-made disasters that have occurred in other parts of the world. Have them compare those disasters to the disasters that occurred in Nunavik and the rest of Canada. Questions to ask:

- How are they similar and how are they different?
- Why did they happen there?
- What were the impacts on humans and the physical environment?