Canadian Geographic EDUCATION

CAPP
CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS

ENERGYIQ

LEARNING INQUIRIES

RETHINKING ENERGY: OPTIONS AND IMPACTS IN CANADA AND BEYOND

TIME: MULTI-DAY/MULTI-WEEK

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OVERVIEW/FOCUS QUESTION

Students will gain a better understanding of the types of energy found in Canada. They will explore the options for energy production, locate each energy type on a map (using Giant Floor Maps as well as individual maps) and research the benefits and drawbacks of each energy resource.

- What types of energy are found in Canada and where?
- What are the benefits of each energy resource?
- What are some concerns associated with each energy resource?
- What type(s) of renewable energy would be best for reducing or replacing non-renewable energy resources in your region?

SUBJECT/TOPIC

ENERGY RESOURCES

GRADE LEVEL

INTERMEDIATE (GRADES 7-10)

MATERIALS NEEDED

- Giant Floor Map or tiled map
  http://www.canadiangeographic.com/educational_products/energy_production_floor_map.asp
  OR
  http://www.canadiangeographic.com/educational_products/tiled_map_canada.asp
- Canada Map (with political boundaries and landform features)
- Coloured pencils
- Materials to create models for each energy type
- Computers for research

INTRODUCTION

Canada is a diverse nation, both in terms of our people and our landscape. It provides opportunities for the people within our borders and beyond. Students will begin by exploring a map of Canada and working towards understanding how the landscape and topography shape our reliance on a variety of energy resources (renewable and non-renewable). Students will work independently, with partners, and then in small groups, and convene as a class to share their findings.

LESSON IMPLEMENTATION

DAY 1

1. Distribute copies of the tiled map of Canada (one page to each student initially or until the entire map is passed out).
2. Have students work collaboratively to complete the map.
3. Once completed, have students work to label their own small map of Canada. Ask them to locate the following:
    a. Provinces
    b. Territories
    c. Capital cities
    d. Pacific Ocean
    e. Atlantic Ocean
    f. Arctic Ocean
    g. James Bay
    h. Hudson Bay
    i. St. Lawrence River

DAY 2

1. Have students make a chart in their notebooks about the different types of energy produced in Canada.
2. Students will login to chromebooks/computers and use the following website: https://energyiq.canadiangeographic.ca/main/energy_map#3&-203+91&94+53&1&38&1
3. Students will complete the energy table independently.

DAYS 3 AND 4

1. Review the information from yesterday and have students complete any missing information.
2. Divide students into groups of four. Each group will construct a model to place on the map of Canada reflecting the type of energy produced in that region.
3. Students will place the model in the appropriate place on the tiled map with a card attached that shows the percentage of usage for each type of energy produced.

DAY 5

1. Have students use their tables and smaller maps to create a more detailed map showing the energy type/usage for all of Canada. As a class, create symbols for each type of energy.
2. Have students answer the question: What story does your map tell about energy production and transmission in Canada?

DAY 6

1. Have students share their findings with their classmates.