Canada: A Land of Regions

OVERVIEW & OBJECTIVES

Students begin by examining a regional map of North America and identifying U.S. regions extending into Canada before working in small groups to identify each region's human and physical characteristics. Students then identify where regional economic features may be located and conclude how regions are formed. This lesson focuses on Canada, but may be expanded to focus on regions in the U.S. and Mexico.

Students will be able to...
- Identify physical regions of Canada and the U.S.
- Identify physical and human characteristics of Canada's regions
- Identify where various economic activities would occur in Canada
- Identify a region as an area with similar characteristics
- Describe a region based on its human and physical characteristics and resources

GRADES
4th

TIME
3 days

REQUIRED MATERIALS
✓ Atlases
✓ Large map of Canada (posted or projected)
✓ Pictures of Canada's regions and pictures of economic activities
✓ Cards with terms
✓ Computer projector
✓ Computer Internet access for students (optional)
✓ Textbook or supplemental reading of Canada's regions (*Canada: Northern Neighbor*)
✓ Handouts: "Comparing U.S. and Canada Regions"; "Identify Feature Activity"; "Canada's Physical Regions"; "Canada's Physical Regions Overview"

MINNESOTA SOCIAL STUDIES STANDARDS & BENCHMARKS

Standard 10. The meaning, use, distribution and importance of resources changes over time.
4.3.4.10.1 Describe how the location of resources and the distribution of people and their various economic activities has created different regions in the United States and Canada.

SUGGESTED PROCEDURE

This is an adapted lesson from *Canada: Northern Neighbor*. You may access this lesson from K-12 Study Canada at http://www.k12studycanada.org/resources_northern_neighbor.html as well as order the textbook, *Canada: Northern Neighbor*.

Days #1-#2: Identify regions and their physical and human characteristics
1. Regions: The teacher uses an atlas showing North America's topography to begin an examination of regions.   Students identify the Rocky Mountains and trace the mountains south to north. Ask students if the mountains would be similar height south to north. Do the same with the Appalachian Mountains. Ask: Do the mountains stop at the U.S.-Canada border? Students should then trace the plains south to north. Ask students if the plains would be similar height south to north? Do the plains stop at the U.S.-Canada border? Students recognize that elevations would be

the same, although climate would make the vegetation different. (The teacher may want to explain that within each North America region there are differences in part because of the climate, which is based on latitude—the further north or south you go, the more the temperature and precipitation change. That is, it is hotter and wetter at the Equator and progressively colder and drier as you move toward the poles.)

Next, students examine a regions map of North America, "Physical Regions of North America", http://myriverside.sd43.bc.ca/kaitlynr-2013/2014/02/20/physical-regions-of-north-america/ or similar map found in their textbook. Ask: Do the regions continue from the U.S. to Canada and Canada to the U.S.? Review the names of the regions and discuss possible physical characteristics. (See the handout, "Comparing U.S. and Canada Regions", for an explanation of U.S. and Canada regions.)

2. Canada Regions: Students will investigate the regions of Canada by examining a regions map of Canada, such as "Canada's Physical Regions", from Halifax Regional School Board at http://hrsbstaff.ednet.ns.ca/phillie/InternationalExchange/Canada/Physical%20Regions/Physical_Regions/, and compare it with a population distribution map of Canada, "Population Distribution by Census Division, 2011" at http://www.statcan.gc.ca/pub/91-214-x/2010000/m003-eng.htm. What region is the largest? What region is the smallest? What region has the most people? Why do you think many people would be located there? (Identify reasons including plains for agriculture, transportation, and cities, water for agriculture, manufacturing, and household use, mild climate, and proximity to others for trade).

Next, students identify the 4 largest cities of Canada: Toronto (Ontario), Montreal (Quebec); Vancouver (British Columbia) and Ottawa (Ontario-Quebec border), Canada's capital. Discuss why these cities would be the largest (note the location, landforms, water, and climate) and identify their region. Ask: What would people do in these cities? What sorts of jobs might they have?

3. Investigate Canada's Regions: Show the brief video of Canada's regions, "Six Natural Regions" from "The Regions" at Canadian Atlas http://www.canadiangeographic.ca/atlas/intro.aspx?lang=En# (go to any region and click "Basic"). Next, show the videos and maps of each region by clicking "Introduction" instead of "Six Natural Regions" for each region. Note: The 3-4 videos and maps for each region change, so return to the site to see them all. (The teacher may choose to have student groups watch their individual region's videos.)

Students investigate regions and their characteristics by working with a partner or in small groups by focusing on a single Canada region. Students read the textbook or supplemental reading of Canada's regions (*Canada: Northern Neighbor*) to identify and record physical and human characteristics of the selected region using the handout, "Canada's Physical Regions". (The teacher should reference the chart, "Canada's Physical Regions Overview", for summary information on each region's physical and human characteristics and economic activities.) Student groups share their results.

4. Visualize Canada's regions: The teacher provides pictures of Canada for the class with 2-3 pictures reflecting each region. (Pictures should show the physical landscape including mountains, forests, prairies, coastlines and the human features including major cities, public transportation, railroads, and museums.) Students find pictures that show their region and place them on a large map of Canada. Students then report to the class why the pictures represent their region. (Alternatively, students can use a computer to make place marks that name their region, list brief characteristics of their region, and add a picture that represents their region.)

Day #3: Identify economic activities by region
1. Resources: Review the regions of Canada and their physical and human characteristics using the posted pictures from the previous day. Explain to students that natural resources are things that people can use, such as minerals and forests. Ask: Where are many of the minerals of Canada located that can be used for energy or to make things? Where is the rich soil located where people could farm or raise animals? Where are the forests located that people could use to build houses or make paper? Students respond to the questions with names of the regions and identify them on the map.

Explain to students the types of economic activities that could occur based on resources. Differentiate the types including:
- Forestry—pine trees vs. aspen
- Mining—oil vs. iron ore and coal
- Fishing—walleye vs. lobster
- Farming (crops)—wheat vs. fruits and vegetables
- Farming (livestock)—beef cattle vs. dairy cows and chickens
- Population centers—major cities vs. small towns
- Factories—automobile factory vs. lumber mill
- Tourism—sports (downhill skiing vs. baseball game); fine arts (history museum vs. music concert) wildlife viewing (polar bears vs. beavers)

2. Economic Resource Activity: Students will identify the Canada region in which economic activities occur and reasons why the economic activity would occur in that region by completing the handout, "Identify Feature Activity". Students work with a partner or in small groups to determine the location of each feature and provide two reasons why it should be placed there. Answers will vary, but students should identify factors of resource, climate, topography, population, and transportation. Alternatively, students may be given a picture of the feature and place it on the large map of Canada with tape (or a small magnet if using a white board) and provide oral reasons to the class.

3. Venn Diagram Activity: Students will compare and contrast Canada and the U.S. using a Venn diagram or card sort. Give students cards with terms associated with Canada, the U.S., and both Canada and the U.S. such as the listed terms. Students work in pairs or small groups to complete a card sort identifying the terms that are unique to Canada, unique to the U.S., and common to both Canada and the U.S. Discuss the results. (Optional: Students work in small groups to create cards and exchange sets of cards with another group to sort.)

Great Lakes	Appalachian Mountains	Rich Soils	Hudson Bay	States	Provinces
Canadian Shield	Prairies	Atlantic Ocean	Rocky Mountains	Huge Cities	Mineral Wealth
Oil Resources	Factories	Lobsters	Logging	Wheat Farming	Mississippi River

Answers
- Canada Only: Hudson Bay, Provinces
- U.S. Only: States, Mississippi River
- Both Canada and the U.S.: Great Lakes, Appalachian Mountains, Rich Soils, Canadian Shield, Prairies, Atlantic Ocean, Rocky Mountains, Huge Cities, Mineral Wealth, Oil Resources, Factories, Lobsters, Logging, Wheat Farming

4. Conclusion: Conclude the lesson by discussing how regions are formed. Students will explain that a region is an area that has similar physical and human characteristics and resources that are different from other areas.

Extensions
1. Identify the regions of the U.S. and Mexico by describing the physical and human characteristics and where various economic activities would occur using the textbook and maps in an atlas or one of the maps listed under Additional Website Resources.

2. Students complete a regional map of North America by drawing the physical regions of the U.S. on a blank outline map of North America with regions of the U.S. extending into Canada and Mexico. Use "Physical Regions of the United States" (located under "Maps of the United States and Its Neighbors") and a blank North America map located at Arizona Geographic Alliance to draw the regions. These two maps and reference maps are listed under Additional Website Resources.

3. Students examine a North America regions map found in their atlas (or reference the map and information at http://myriverside.sd43.bc.ca/kaitlynr-2013/2014/02/20/physical-regions-of-north-america/) and label a blank map with the regions. Students identify and label the seven major cities of North America including:
    1. Mexico City (Mexico—Mexico Federal District)
    2. New York City (U.S.—New York)
    3. Los Angeles (U.S.—California)
    4. Toronto (Canada—Ontario)
    5. Chicago (U.S.—Illinois)
    6. Houston (U.S.—Texas)
    7. Montreal (Canada—Quebec)
The teacher may show the video, "Top 10 Largest Cities in North America", located at https://www.youtube.com/watch?v=xM_9qGz28OU to aid student understanding of the names and locations of the cities. In addition, the teacher may show the video, "Top 15 Biggest Cities in the

USA 2013", located at https://www.youtube.com/watch?v=GfNRFErJg8k because it begins with Minneapolis (as number 15) and counts down to number one, New York City.

4. Students work in groups to construct their own map with words describing characteristics of each region to complete a map of Canada. An example is "Canada Infographic" from Funny Stuff for Your Day at http://funnystuffforyourday.blogspot.com/2013/01/canada-infographic.html

Assessments
"Canada's Physical Regions" Handout
Class Discussion
Economic Resource Activity
Venn Diagram Activity

WEBSITE RESOURCES

"Northern Neighbor" lessons found at K-12 Study Canada
http://www.k12studycanada.org/resources_northern_neighbor.html
This website contains the lesson and supplemental reading for this lesson

"Physical Regions of North America" from Kaitlyn's Blog (EduBlogs; 9th Grade Social)
http://myriverside.sd43.bc.ca/kaitlynr-2013/2014/02/20/physical-regions-of-north-america/
This website provides a clear, simplified map of North America's regions with bulleted descriptions

"Canada's Physical Regions" at Halifax Regional School Board
http://hrsbstaff.ednet.ns.ca/phillie/InternationalExchange/Canada/Physical%20Regions/Physical_Regions/
This site provides a simplified map of Canada's regions

"The Regions" at Canadian Atlas
http://www.canadiangeographic.ca/atlas/intro.aspx?lang=En#
This site explains each of Canada's six regions based on its landforms and ecosystems and provides videos showing each region.

Population Distribution by Census Division, 2011
http://www.statcan.gc.ca/pub/91-214-x/2010000/m003-eng.htm
This links shows population distribution with provinces and census divisions outlined and cities labeled

Additional Website Resources
"Ecoregions of North America: Level I Ecoregions" from U.S. Environmental Protection Agency
http://www.epa.gov/wed/pages/ecoregions/na_eco.htm
This link provides a detailed map of North America regions and a link to detailed descriptions of each ecoregion.

"North America Physiographic Regions Map" from Geography: USA at "Geography USA: A Free Online Textbook", Alan A. Lew, Northern Arizona University
http://www.geog.nau.edu/courses/alew/gsp220/text/chapters/ch2.html
This link provides a sketch map of North America's regions with detailed explanations of the regions and other geography information.

"Physical Regions of the United States" and "North America" at Arizona Geographic Alliance
http://alliance.la.asu.edu/maps/maps.htm
This site contains a map of U.S. regions and a blank North America map as well as other maps and resources

"Capital City Locations and Names of Canada" at Natural Resources Canada
http://atlas.nrcan.gc.ca/site/english/maps/reference/outlinecanada/canada08
This link has a blank outline map of Canada's capitals and provinces

"This is How Empty Canada Really Is (Photos)" at Huffington Post
http://www.huffingtonpost.ca/2014/04/17/canada-empty-maps_n_5169055.html
This link includes maps of Canada for teacher use.

Comparing U.S. and Canada Regions

Depending on the physical regions map that you chose to use, the following chart illustrates the similarity of the two countries' regions, although the numbers and names of regions differ depending on the reference maps that you select. Notice that the U.S. has three additional regions (Great Basins, Hawaii, and the Atlantic & Gulf Coastal Plains) while Canada has one additional region (The North). The Canadian Shield is found in both countries as it extends into northeast Minnesota, northern Wisconsin and the Upper Peninsula of Michigan, although most U.S. regions maps do not include the Canadian Shield because of its small size in the U.S.

U.S. Regions	Canada Regions
Pacific Coast	West/Pacific
Great Basins	
Rocky Mountains	Canadian Rockies/Western Cordillera
Great Plains	Interior Plains
Canadian Shield	Canadian Shield
Central Plains	Great Lakes/St. Lawrence Lowlands
Appalachian Mountains	Appalachian Highlands
Atlantic & Gulf Coastal Plains	
	The North/Arctic Lands
Hawaii	

Minnesota Alliance for Geographic Education – Trygestad, J.

Identify Feature Activity

Feature	Region	Reason for Location	Reason for Location
Wheat farm			
Mining center			
Lumber mill			
Vegetable & fruit farming			
Lobster fishing			
Ski lodge			
Automobile factory			
Game fishing camp			
History museum			
Tourist site to photograph polar bears			

Canada's Physical Regions

Region	Provinces	Major Cities	Physical Characteristics	Human Characteristics
Atlantic – Appalachian				
St. Lawrence Lowlands				
Canadian Shield				
Prairie – Plains				

The West				
The North				

Canada's Physical Regions Overview

Region	Provinces	Major Cities	Physical Characteristics	Human Characteristics
Atlantic - Appalachian	• Nova Scotia • New Brunswick • Prince Edward Island • Newfoundland and Labrador	• Halifax (Nova Scotia)	• Appalachian Mountains—low rounded mountains with narrow river valleys • Rugged terrain • Numerous islands • Rocky, shallow soils • Mixed forest • Cool summers & wet winters	•Fishing: cod, flounder, haddock, •Lobsters •Small cities & towns •Mining: coal, ores (not iron) •Tourism: seacoast, lighthouses, whale watching
St. Lawrence Lowlands	• Quebec • Ontario	• Toronto (Ontario); largest city • Montreal (Quebec); 2nd largest city • Ottawa, (Ontario-Quebec border); 4th largest city & capital	• Located along St. Lawrence River • "Heartland" • Smallest region • Borders the Great Lakes • Flat to gently rolling • Fertile soil • Moderate climate with long growing season—hot summers & cold winters	•Most populated •Capital—Parliament buildings •Agriculture: fruits, vegetables, dairy •Manufacturing center especially automobile industry •Entertainment center •Tourism: Niagara Falls, festivals, museums, fine arts
Canadian Shield	• Quebec • Ontario • Manitoba		• Surrounds Hudson Bay • "Mineral Storehouse" • Largest region • Glaciers scoured land—shallow soils & exposed rock • Mixed & coniferous forests • Northern continental climate with hot short summers & long cold winters • Includes northern MN, WI and MI	•Forestry •Mining: copper, nickel, gold •Hydroelectric power plants •Fur industry •Sport fishing •Wilderness areas • North Shore of Lake Superior •Tourism: canoeing, hiking
Prairie - Plains	• Manitoba • Saskatchewan • Alberta	• Winnipeg (Manitoba) • Calgary (Alberta) • Edmonton (Alberta)	• Flat to gently rolling • Oil & gas deposits • Continental climate with hot summers, cold winters & moderate to low rainfall	•Agriculture: wheat, cattle raising •Mining: oil, natural gas, potash •Wind farms •Tourism: Winnipeg Folklorama, Calgary Stampede, Edmonton Mall

The West	• British Columbia	• Vancouver (British Columbia); 3rd largest city	• Rockies—rugged mountains with glaciers • Fertile river valleys • Coniferous forests • Warm & wet on coast; cold & dry in interior	•Shipping •Fishing: salmon •Forestry •Mining: ores •Tourism: skiing, hiking, totem poles
The North	• Yukon Territory • Northwest Territories • Nunavut Territory		• Coastal low areas; plateaus and mountains • Numerous islands • Glaciers and permanently frozen ground (permafrost) • Polar desert with low precipitation and extreme Arctic conditions	•Mining: diamonds, oil, nickel, copper, cobalt •Defense systems •Fur industry •Tourism: gold rush sites, sport hunting and fishing