



Grade 4 - Regions of Alberta



4.1 Alberta: A Sense of the Land

General Outcome

Students will demonstrate an understanding and appreciation of how elements of physical geography, climate, geology and paleontology are integral to the landscapes and environment of Alberta.

Specific Outcomes

Values and Attitudes

Students will:

4.1.1 Value Alberta's physical geography and natural environment:

- appreciate the diversity of elements pertaining to geography, climate, geology and paleontology in Alberta (LPP)
- appreciate how Alberta's fossil heritage contributes to the province's unique character (LPP)
- appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
- appreciate the environmental significance of national and provincial parks and protected areas in Alberta (ER, LPP)
- appreciate how land sustains communities and quality of life (ER, LPP)
- demonstrate care and concern for the environment through their choices and actions (LPP)

Knowledge and Understanding

Students will:

4.1.2 Examine, critically, the physical geography of Alberta by exploring and reflecting upon the following questions and issues:

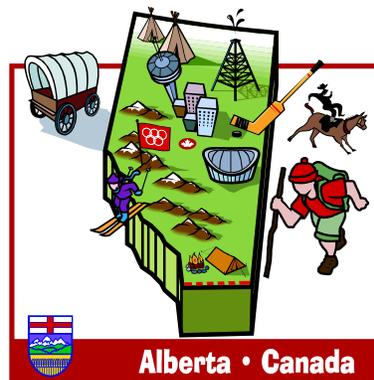
- Where is Alberta located in relation to the other provinces and territories of Canada? (LPP)
- What are the major geographical and natural vegetation regions, landforms and bodies of water in Alberta (e.g., prairie region, forests, rivers, hoodoos, Rocky Mountains, oil sands)? (LPP)
- What are the factors that determine climate in the diverse regions of Alberta (e.g., latitude, mountains)? (LPP)
- What are the significant natural resources in Alberta, and where are they located (e.g., mineral deposits, coal, natural gas and oil, forests)? (ER, LPP)
- How are Alberta's provincial parks and protected areas and the national parks in Alberta important to the sustainability of Alberta's natural environment? (ER, LPP)

4.1.3 Examine, critically, how geology and paleontology contribute to knowledge of Alberta's physical geography by exploring and reflecting upon the following questions and issues:

- What geological features make Alberta unique (e.g., hoodoos, Rocky Mountains, foothills, oil sands)? (LPP, ER)

4.1.4 Analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:

- In what ways do the physical geography and natural resources of a region determine the establishment of communities? (LPP)
- How are natural resources used by Albertans (i.e., agriculture, oil and natural gas, forests, coal)? (ER, LPP)
- How do Albertans deal with competing demands on land use (e.g., conservation, solar and wind power, recreation, agriculture, oil exploration, forestry)? (ER, LPP)
- Whose responsibility should it be to ensure the preservation of national parks, provincial parks and protected areas in Alberta? (C, LPP, PADM)



Regions of Alberta

Alberta is a big province.

It has six natural regions.
Can you find the six regions on
the map?

Use the legend to color your map.



http://aet.alberta.ca/englishexpress/articles/pdf/ra11_09_13.pdf

Zooming In...Alberta's Regions – (Learn Alberta) <http://www.learnalberta.ca/content/sszi/en/index.html>

Canadian Shield

In Alberta, the Canadian Shield covers the far northeast corner of the province. It spreads into a large part of Canada.

Hundreds of years ago glaciers shaped the land.

Fort Chipewyan, commonly referred to as Fort Chip, is a hamlet in this region.

**What other regions
in Alberta have been
shaped by glaciers?
Where could you
find glaciers now?**



http://fr.wikipedia.org/wiki/Fort_Chipewyan



<http://en.wikipedia.org/wiki/Athabasca>

Canadian Shield

Land

- There are a lot of rocks, lakes and spruce trees in this region.
- There are also low, rocky hills, forests, long, sandy beaches and swampy areas.
- West of Fort Chipewyan, a **delta** has been formed by three rivers – the Athabasca, Peace and Birch. These rivers settled out and collected over the years. The water spreads out to form marshes lakes and mud flats. This is one of the largest fresh water deltas in the world. **What is a delta?**
- **Red granite bluffs** overlook Lake Athabasca. **What are these bluffs?**



<http://www.worsleyschool.net/socialarts/shield/canadianshield.html>



<http://www.pc.gc.ca/pnnp/nt/woodbuffalo/visit/visit4/visit4d.aspx>

Canadian Shield

Plants

- Vegetation varies depending on how much soil is in the area. Forests of spruce trees and jack pine can be found along the rocky shoreline of the lake. In marshy areas, black spruce and tamarack trees grow.
- Berry bushes grow where it is wet and there is less soil. Types of berries that grow here are Labrador tea, Blueberry, Saskatoon, Bear berry, Bog cranberry and Raspberry.
- Marsh grasses and reeds can be found in marches and by the rivers.
- **Reindeer lichen** often grown in the forest areas.



Have you tried any of these berries?



<http://www.gov.mb.ca/agriculture/crops/fruit/bld01s01.html>

http://www.shop.farmfreshliving.com/BLUEBERRY-PLANTS_c67.htm

http://northernbushcraft.com/topic.php?name=bearberry®ion=ab&ctgy=edible_berries

http://northernbushcraft.com/topic.php?name=cranberry®ion=ab&ctgy=edible_berries

http://northernbushcraft.com/topic.php?name=raspberry®ion=ab&ctgy=edible_berries

Canadian Shield

Animals

– bears, squirrels, caribou,
beavers, lynx, foxes, moose,
wolves, rabbits
Golden eagles, bald eagles,
loons, ducks, gulls



Which of these
animals have you
seen before?



<http://www.ualberta.ca/~gyates/projectlynx/>

Canadian Shield

Land Use (Natural Resources)

- Forests, lakes and wildlife
- Most people still hunt and trap food
- Fishing businesses are set up on Lake Athabasca and the fish is flown to Edmonton then to other parts of North America



Canadian Shield

Climate

- Short, dry summers
 - Warm temperatures
 - Rain falls usually between July and October
 - One of the coldest parts of Alberta, **Why do you think this is so?**
 - Long winters
 - Most winter days are around -20, but it can drop to -40
 - During the summer, it only gets dark for 4 hours – from 11:30 pm, to 3:30 am
 - In the winter, only a few hours of daylight
 - Northern lights are seen often
- In the winter, there is lots of snow



<http://psd-tutorial.com/25-nice-aurora-borealis-photos/>

Canadian Shield

Travel Alberta
Canada 100

- Your Town - Fort Chipewyan - Travel Alberta - Global News
<http://www.youtube.com/watch?v=DgyZ4cxpgpQ>
- Every winter, Fort Chipewyan holds a winter carnival
- There are many contests: nail pounding, moose calling, log sawing, chopping, dogsled racing and bannock baking.

What makes this region a unique part of Alberta?



<http://www.aquadam.net/Construction/Fort%20Chipewyan%20Canal/chipewyan-canal-1.html>

<http://rmwbculture.blogspot.com/2011/03/public-operations-is-on-facebook.html>

<http://www.canadianoutback.com/banff-snowmobile-tours.php>

Canadian Shield

Transportation

- It is difficult to get from one place to another
- Many people travel by boat in summer.
- There are **ice roads** for trucks and snowmobiles for the winter
- Airplanes fly people and goods into the area because there aren't roads into the region and not many roads within the region.



Discuss the advantages and disadvantages of building a road between Fort McMurray and Fort Chipewyan.



<http://northernplanes.com/showproduct.php?product=3>

Canadian Shield

Jobs –

What types of jobs do you think are available in this region?

