## Nature Mosaic Social Studies & Art

4th grade

The Meaning of the Land



## **WHY IS ALBERTA UNIQUE?**

It's geography, climate, geology, and paleontology

# Geography

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## GEOGRAPHY

- Geography is the study of Earth's landscapes, peoples, places, and environments.
- Alberta has 6 natural regions:
  - Grassland Region
  - Boreal Forest Region
  - Canadian Shield Region
  - Foothills Region
  - Rocky Mountain Region
  - Parkland Region
  - Which natural region is your city/town in?
- A natural region is made based on the natural vegetation and landforms that it has and its climate



## **Alberta's 6 Natural Regions**



- In the South
- Can be very dry
- Used for farming
- Also called the grassland prairies



- Takes up most of Northern Alberta
- Almost entirely covered with trees
- Has many rolling hills, plains, rivers and wetlands



- In the North
- Has many marshes and lakes
- Has very little
  soil
- Some plants can still grow here

## **Alberta's 6 Natural Regions**



### Foothills

- Made up of hills that lead to the Rocky Mountain
- In the far south, grasslands cover it: ranching area.
- Covered with trees when you go north

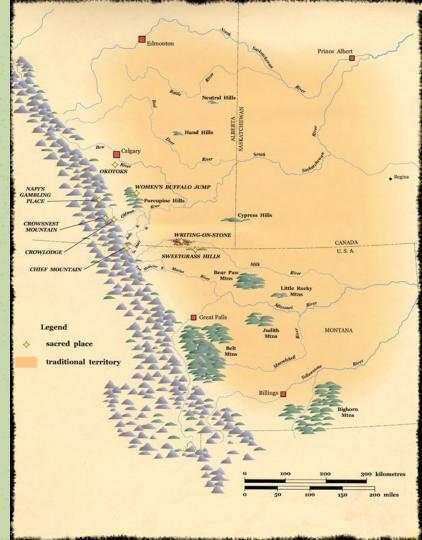


- The highest area in Alberta
- Deep valleys and rugged peaks
- Some glaciers are here
- Some trees and small plants grow here



- Was once an area of grass and trees, but these were cleared for farms
- Has rich soil
- Has rolling hills
- Sometimes called the parkland prairie

- The traditional territories of Alberta's Indigenous Peoples were marked by physical geography.
  - Treaty boundaries sever these traditional territories.





## GEOGRAPHY

# Case Study: Should City Grasslands be protected?: Nose Hill Park

- Nose Hill Park is a large park in Calgary that is mostly used for *recreation*
- It is also home to over 200 animal and plant species: some of which are hard to find anymore.
- Nose Hill Park contains significant archaeological sites which include stone Indigenous tipi rings and the Siksikaitsitapi medicine wheel.
- The park was a sacred place used for ceremonies and burials by Indigenous Peoples.



# Case Study: Should City Grasslands be protected?Nose Hill Park



- To protect sacred areas and the grasslands, the city of Calgary made a plan to keep people out of more than half of the park.
- This means that the number of trails that people could walk on would be cut back.
- Many people agreed with the plan, but some did not.
- Do you agree with protecting these natural areas? Why or why not?

# Climate

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## CLIMATE

- The typical weather of a place over a long period of time (usually 30 years or more)
- It includes:
  - **Temperature:** how hot or cold a place is
  - **Precipitation:** the amount of rain or snow or hail a place gets

## FACTORS THAT DETERMINE CLIMATE IN ALBERTA

### LATITUDE

- How far north or south a region is
- Areas that are further north get more snow
- The further north you go, the cooler it gets

### **ELEVATION**

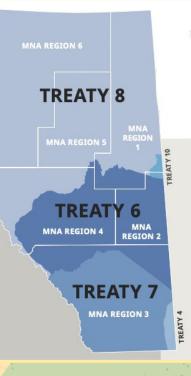
- If the region is high up in the mountains or low in the plains
- Areas that are higher up get more snow
- The higher up you go, the cooler it becomes

#### WINDS

- Alberta is famous for its chinook winds
- In the Siksika language, chinook means "snow eater". <u>Why do</u> you think that is?

## **CHINOOKS AND CLIMATE**

- <u>Chinooks or si'kssopo ("snow eater in</u> <u>Blackfoot) are dry, warm, west winds that</u> <u>come from the mountains</u>
- They bring warmer and dryer weather
- They can raise temperatures as much as 25° C
  - They are felt more in the SE (ex.Treaty 7 (includes Calgary)) than the North (Treaty 6 (includes Edmonton) & 8 (includes Fort McMurray and Grande Prairie)



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### **ELEVATION**

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#### WINDS

- Alberta is famous for its chinook winds
- Chinooks make the temperatures feel warmer
- Cold winds from the arctic also make temperatures drop



## GEOLOGY

- Geology is the **study of the land and rocks and how they formed**
- Alberta's land has gone through many changes which has given it unique landscapes (natural scenery) and landforms (ex. mountains)
  - As the glaciers melted, they left lakes, rivers and unique landforms
  - One of these landforms is the Big Rock
  - The Hoodoos are another landform in Alberta that were shaped by wind and water



## The Story of the Big Rock (in Okotoks)



# Paleontology

## PALEONTOLOGY

- Paleontology is the **study of plants and animals that lived millions of years ago.** 
  - This includes studying **fossils** (remains of the past)
- Alberta is filled with fossils!
  - Many dinosaur and plant fossils
  - Most are found in the badlands
  - First Nation Peoples knew that fossils were in the land from the dawn of time:
    - Called them: iinisskimm or "buffalo stones"
      - They called the animals that they came from "grandfather of the buffalo"
    - The fossils are considered sacred



## Thinking time

## Do you think the fossils that are found in Alberta should be protected?

Ex. Stored in museums or so that the public can't keep them

Today we learned that there are different things that make Alberta's land unique!

Now it's time to think about what you love about the land we live on.



## **Nature Mosaic Project**

- 1. Think about all the things you love about the land you live on
  - a. This can be the weather, different activities, the food, etc.
- 2. **Find pictures and physical artefacts** that represent the different things that you love
  - a. Ex. you can find pictures of fish if you like fishing or use dirt if you like farming or you can gather leaves/ flowers
  - b. If you are taking an item from the land, please offer the land water as we do not take without giving back.
- 3. **Draw an outline** of one of the things you like about the land
  - a. Ex. you might draw an outline of a mountain or the sun
- 4. In that outline, **draw or glue the pictures and artefacts** that you gathered in an appealing design
- 5. Decorate your mosaic
- 6. Below your mosaic, **craft a thoughtful land acknowledgment** that shows gratitude to the land.

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