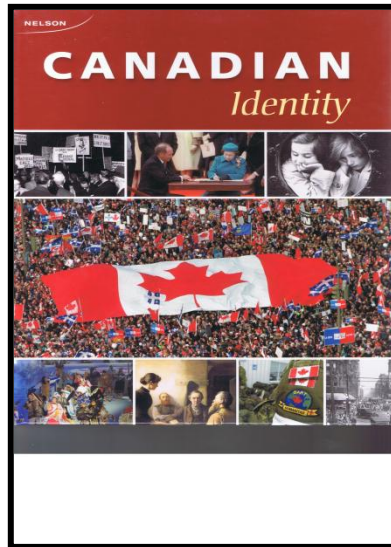


Grade 9 Social Studies
Canadian Identity



Chapter 2 Review
Canada's Physical Landscape



Name: _____

Unit 1: Empowerment

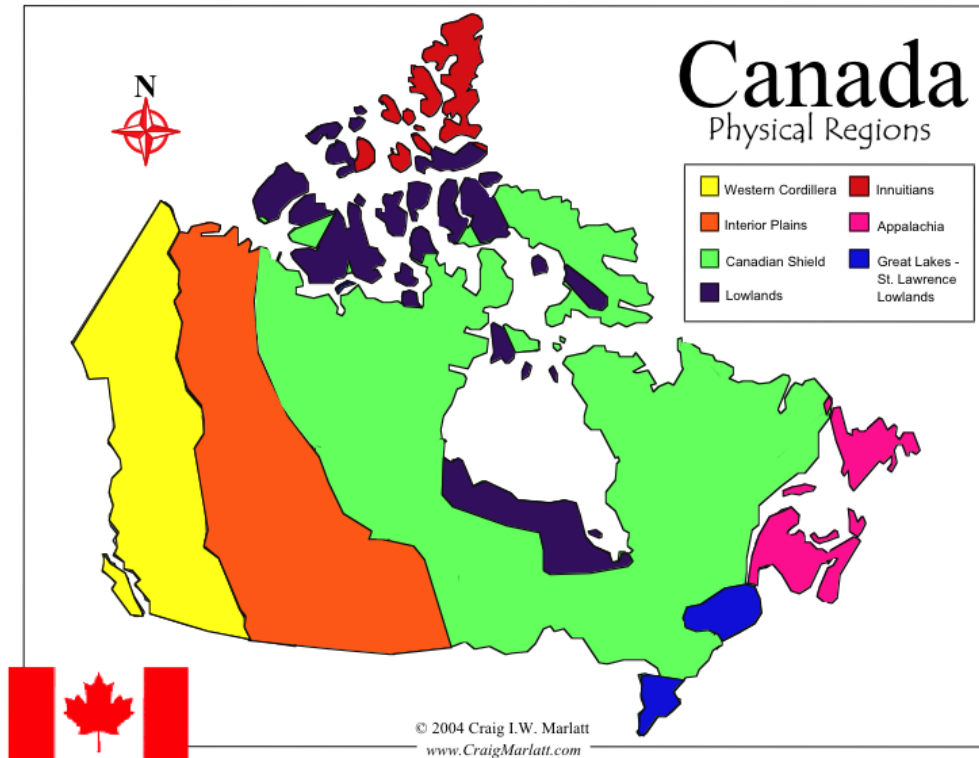
Terms (notes or textbook)

<ol style="list-style-type: none">1. Core2. Crust3. Mantle4. Magma5. Continental drift6. Plate tectonics7. Subduction zone8. Topography9. Landscape10. Elevation11. Relief12. Gradient13. Geology14. Convection Currents15. Lava16. Trenched	<ol style="list-style-type: none">17. Fault18. Weathering19. Erosion20. Deposition21. Plateau22. Podzols23. delta24. chernozem25. Meteorology26. Climate27. Jet Stream28. Dew Point29. Frontal Precipitation30. Convective Precipitation31. Front
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Questions

1. Who is Alfred Wagener? What evidence is there that his Theory of Continental Drift and Pangaea exist? (p. 21)
2. Review and Reflection Questions page 22
3. What is Topography? How are the following related? (p.23)
 - a) Elevation
 - b) Relief
 - c) Gradient
 - b) General Appearance
4. How are Landforms Built? (p. 23 -24)
5. Explain how each of the following help shape Landforms? (p.24-25)
 - a) mountain building
 - b) weathering
 - c) erosion
 - d) deposition

6. Know Canada's Landform Regions? (p. 26-31)



Appalachian Mountains
Arctic Lowlands
Canadian Shield
Great Lakes - St. Lawrence Lowlands
Hudson Bay Lowlands
Innuitian Mountains
Interior Plains
Western Cordillera

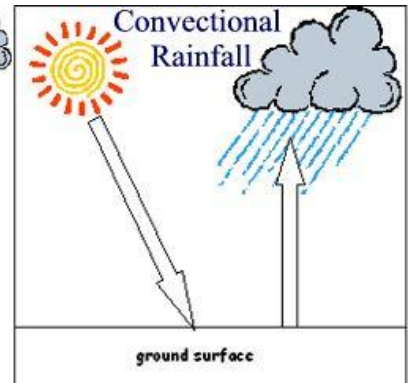
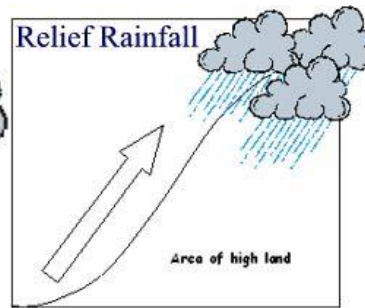
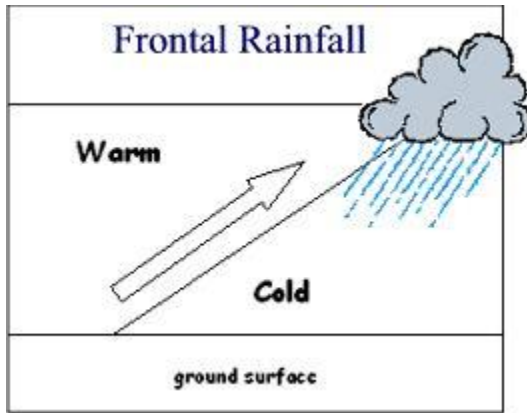
7. Determining Geographic Significance (p32)

8. a) What is the difference between Climate and weather? (Give an example of each) (p. 33)

b) How does each element of the following affect Climate? (p. 22-37)

- i) Latitude
- ii) Air Masses
 - Maritime Tropical
 - Maritime Polar
 - Continental Arctic
 - Continental Polar
- iii) Ocean Current

- iv) Clouds and Precipitation
- Three types of precipitation
- Frontal
 - Convective
 - Relief or Orographic

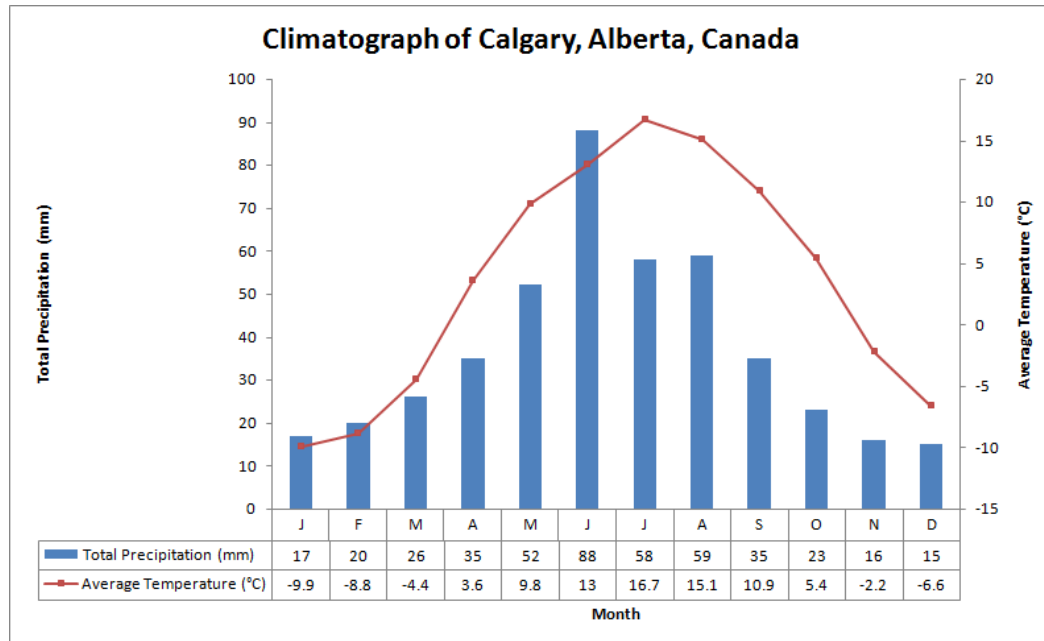


9. Know the Climate Regions of Canada and where they are located? (p. 38-39)
- a) Dry Climates
 - b) Warm Moist Climates
 - c) Cool Moist Climates
 - d) Polar Climates

10. Account for select Climate Conditions (p. 38-39)

Explain Climatic Conditions in Canada	
Condition	Explanation
In the Canadian Arctic, only the upper part of the ground thaws out in summer	
Cacti grow in the interior of British Columbia	
Vancouver receives more rain than Calgary	
Winnipeg has a wider range of temperature than Halifax	
St. John's has more periods of fog than Edmonton	
Prince Rupert is warmer than Rigolet, although they are the same distance from the equator	
Alert has very little precipitation each year	

11. Constructing and Analyzing Climate Graphs.



ADDITION NOTES:

Canada's Physical Geography

Canada Facts

1. Canada is the 2nd largest country in area
2. Canada borders 3 oceans
3. Extends over 6 time zones

Building Landforms

- Earth is made up of a variety of rocks
- Some of the rocks are as old as 4 billion years

Scientists believe the earth was formed in layers:

Core - the centre (It has 2 layers a hot solid inner layer and a liquid outer core)

Crust - the solid outer layer of the earth

Mantle - the middle layer of the earth

Magma - Molten rock within the earth

Planet Earth

Continental Drift - the theory that the earth's continental plates are moving

Plates - a section of the earth's crust

Pangaea - a super continent where all the continents were once joined

Plate Tectonics - the theory that the earth's plates interact to produce mountains and trenches, earthquakes, and volcanoes

Subduction zone - an area of the earth's crust where one plate slides beneath another

Alfred Wegener's was a German Scientist who believed that all the Earth's Continents were once joined together in one supercontinent, he called Pangaea

Evidence of Alfred Wegener's Theory

- the fit of the land masses
- presence of similar fossils in rocks separated by an ocean
- Matching rocks on the either side of the Atlantic
- Fossils of sea animals have been found high in the rocks of the Himalayas

What are Landforms?

Topography - The natural features of the earth's surface

Landscape - the shape of the land together with its cover of vegetation, water, ice, and rock

How can Landscape Effect People's Lives

- 1) what they eat
- 2) how they earn a living
- 3) who they do business with
- 4) other factors of their daily life

Topography can be described using the following

- 1) Elevation - height of the land form measured from sea level
- 2) Relief - is the difference in elevation between points on the earth's surface
- 3) Gradient - refers to the steepness of slopes
- 4) Geology - refers to the types of rocks and the history of those rocks
- 5) General Appearance - the general look of the area

How are Landforms Built

- 1) The heat of the earth's interior creates convection currents in the mantle
- 2) Causing Magma in the mantle to break through the crust as lava or volcanic ash
- 3) Moving Magma cause plates to separate or collide, moving the crust to cause mountains or trenches, or valleys

How are Land Forms Shaped

Topography is a result of 4 Forces

- 1) Mountain building - forces up
- 2) Weathering - wearing down from the exposure to atmosphere
- 3) Erosion - wearing down forces
- 4) Deposition - building up, eroded materials add new shape

Geological Facts of Earth

- 1) More than 4.5 billion years old
- 2) Some areas have been covered by glaciers and had tropical heat at other times

Canada's Landform Regions

Landforms regions are based on Characteristics of:

- 1) age of rock
- 2) type of rock
- 3) relief
- 4) gradient
- 5) process that has shaped the area

8 Major Landform Regions of Canada

- 1) **Canadian Shield** - is a big area that has the oldest rock in Canada, it has (podzols - thin acidic soil) not good for Agriculture.
Covers most of Central Canada, parts of Sask, Man, Ont, Que, Labrador, NWT, and Nunavut
- 2) **Appalachian Mountains** - most of Atlantic Canada
- 3) **Western Cordillera** - a series of parallel mountain ranges the Coast, Columbia, and Rocky Mountains. Parts are in BC, Yukon, And Alberta
- 4) **Inuitian Mountains** - Mountain areas of the Far North. Too cold for trees to survive
- 5) **Arctic Lowlands** - lowland areas with little vegetation near the areas of Nunavut.
- 6) **Interior Plains** - Contains good soil for growing wheat. Covers most of Alberta, Sask, Man, NWT
- 7) **Great Lakes- St. Lawrence Lowlands** - areas with Fertile Soil. Includes parts of Ontario and Quebec.
- 8) **Hudson Bay Lowlands** - low areas with lots of water and poor drainage. Located in Northern Ontario and Manitoba.

Climate and Weather - p.31-34

Climate - The average conditions of the Atmosphere over a long period of time.

Weather - is the day to day conditions in the atmosphere

Factors that Effect Climate

- 1) **Latitude** - how close the land is to the equator
- 2) **Air Masses and Wind** - different types of air masses have different qualities, and these air masses can change the weather and the climate
- 3) **Ocean Currents** - Air passing over an ocean current is effected by he water below.
- 4) **Altitude** - the height of land above sea level. Air temperature drops as altitude increases. The higher you go up the colder.
- 5) **Bodies of Water**- land water cools and heats slower than area, and surrounding areas can be effected by the difference between the air temperature and the water temperature.
- 6) **Mountain Ranges** - when winds carrying moisture hit the mountains they rise and cool.

Climate Region - an area that experiences similar weather conditions within it's boundaries throughout the year.

Koppen's Climate Types:

- a) Tropical
- b) Dry
- c) Warm
- d) Cool
- e) Polar

