Geography of Saskatchewan

This lesson will explore the geographical regions of Saskatchewan, identifying the different types of landforms and their resources. Students will reflect on settlement patterns.

Three 45 minute classes

Outcomes:
DR4.1 Correlate the impact of the land on the lifestyles and settlement patterns of the people of Saskatchewan.

RW4.3 Assess the impact of Saskatchewan resources and technological innovations on the provincial, national and global communities.

Indicators:
DR4.1 c. Make inferences about why people in Saskatchewan settled in particular locations, including settlement patterns before and after the coming together of First Nations and European peoples using a variety of maps (e.g., near waterways, sources of water, rail lines, natural resources, low population density in rural areas).
DR4.1 d. Identify the characteristics of the unique geographic regions in Saskatchewan.
DR4.1 f. Analyze the influence of geography on the lifestyle of people living in Saskatchewan (e.g., flora and fauna, pastimes, transportation, cost of food, type of food, occupations, availability of services such as education and health care).

RW4.3 a. Represent on a map the major resources in Saskatchewan (e.g., minerals, potash, oil, uranium, natural gas, lumber, water, crop and livestock production).
RW4.3.c. Identify the natural resources and industries found in the local community, and analyze their impact upon the community.

MATERIALS NEEDED:
* variety of Sk. maps (see suggestions in resource list)
* tape to attach ecozone cards
* Handouts 3.1 - 3.4

Questions to Guide Inquiry:
1. What does Saskatchewan look like?
2. What are some differences between northern and southern Saskatchewan?
3. What is meant by the term 'resources'?
4. What are the major resources in Saskatchewan?
5. How do the resources found in Saskatchewan have an effect on the way we live?

Teacher Background

Saskatchewan is made up of three natural geographical regions; the Arctic tundra in the north, the Canadian or Boreal Shield, and the Central Plains in the south. Within these regions, Saskatchewan is divided into four ecozones: the Taiga, the Boreal Shield, the Boreal Plains, and the Prairies. The Ecozones are further categorized into eleven ecoregions. For simplicity this lesson will focus on the four ecozones. See Teacher Information Sheet 3.2 and 3.3 for information on Saskatchewan's ecozones and Teacher Information Sheet 3.1 A & B as well as Student Handouts 3.1 and 3.4 for maps of Saskatchewan's ecozones and ecoregions.

Saskatchewan has almost half of the arable land in Canada.

An ecozone is an area that consists of biotic (living) and non-biotic (non-living) factors that make it unique. The ecozones have a large impact on the type of resources available in each area. The climate plays a large role in where we can live, with most of the population in Canada settling in a narrow band along the southern border. More than half of the agricultural land in Canada is located in southern Saskatchewan. Other industries in Saskatchewan include mining, forestry, and petroleum. Hydro electric dams on Saskatchewan's northern rivers provide electricity.

For an on-line map of Saskatchewan Ecozones go to http://atlas.nrcan.gc.ca/site/english/index.html.

1. In the Explore Our Maps menu, place your mouse over the topic Environment. A pop-out menu will appear. Move your mouse over Ecology and click. When the new page appears, look for the section called Ecological Framework and click on the link Terrestrial Ecozones Map.
2. You should see a Terrestrial Ecozones Map of Canada on your computer screen.
3. Above the map, click the Zoom in tool and then click once on the province of Saskatchewan on the map.
4. You should now see the province of Saskatchewan and the four ecozones.

Before Activity

Students are to imagine they are communicating with a child on the other side of the world describing what Saskatchewan looks like. Students are to write and/or otherwise represent their 'picture' of this province. They will create a draft and then share their writing/representing with a partner explaining their ideas.

During Activity

Activity One

Discuss some of the basics of Saskatchewan geography with students, including:

- A definition of an ecozone
- The names and locations of Saskatchewan's four ecozones
- The identification of their community's ecozone.

Draw students' attention to the map they created in the introductory lesson. (If a map was not created, then place a large map of Saskatchewan's ecozones on the wall or bulletin board. You could also draw a map from Handout 3.1 on a whiteboard using an overhead projector). Give each student one piece of information from Handout 3.3 on Saskatchewan ecozones. Have them attach the information card to the ecozone they feel the card belongs to. Once all the cards are in place discuss as a class adding information on each ecozone. Move notes as needed.

If you wish your students to study the ecozones more in-depth you may use teacher information sheet 3.2. Cut the information segments (climate, geography, soil, plants, wildlife, humans, and agriculture products) and give one to each student.

Activity Two

With students in pairs or small groups, study a map of Saskatchewan. Take some time to examine map features encountered such as legends and scale. This examination can be done using print resources (an atlas or a printed map such as Handout 3.1 and/or Handout 3.2) or online (see Natural Resources Canada website at http://atlas.nrcan.gc.ca).

Ask students to locate the largest towns and cities in Saskatchewan. Ask them to reflect on why these communities developed there. (Answers should include good farmland and access to water). Other reflective questions could include:

- How might the growth of cities and towns change agriculture?
- What do you think is Saskatchewan's most important resource? Why do you think that?

After Activity

Activity One

Teachers may want students to pull together information using Student Handout 3.4 Saskatchewan Ecozone Grid. Students can complete this grid either individually or with a partner. Use Teacher Information 3.4 for answers to the grid.

Activity Two

Students examine the draft letters composed earlier. They expand upon their letters explaining more about the landscape found in Saskatchewan. They are to comment on some of the elements discussed such as climate, geography, vegetation, resources, etc.

It is interesting to observe on a map the location of our large urban centres and note they are in the middle of the agricultural land.

Assessment

Collect the letters. Adapt the journal rubric to assess.
Teachers may also wish to use the grid to assess student learning.
Teacher Checklist

- √ Could students locate information?
- √ Did students fill out grid accurately?
- √ Could students suggest reasons for settlement patterns?

Lesson Resources

The Native Plants Society of Saskatchewan (www.npss.sk.ca) offers a variety of free copies of relevant information for this lesson. Of particular interest is an educational activity sheet which highlights native plants and drawings of plants native to four ecozones in the province.

Atlases, maps of Saskatchewan showing geographical areas, resources and political boundaries.

Printable maps:

- http://www.canadiangeographic.ca/atlas/
- http://atlas.nrcan.gc.ca

Pictures of Saskatchewan from books, magazines, online sources, calendars including:

- www.aitc.sk.ca
- www.canadiangeographic.ca
- www.esask.uregina.ca
- www.canadianbiodiversity.mcgill.ca/english/ecozones/prairies/prairies.htm

Ecozone and Ecoregion maps developed for The Encyclopedia of Saskatchewan (2005). Used with permission from Canadian Plains Research Center, University of Regina.

Cross Curricular Connections

Science
This lesson addresses outcome RM4.2 in the Grade 4 Science curriculum which calls for students to assess how humans use of rocks and minerals impacts self, society, and the environment as well as HC 4.3 which looks at the effects of human activities on communities.

Technology
This lesson uses the internet to find information on the geographic regions. Students could practise word processing skills to type the letter.

ELA
Students are drafting and writing letters with a definite audience and purpose. Words such as arable, boreal, arid, hydroelectric could be added to the word wall.

Math
Students could calculate the square area of Saskatchewan and estimate how much of the province each region takes up (using fractions or percentages).

Students could examine the concept of scale on maps. The following British site might be useful: www.bbc.co.uk/scotland/education/sysm/landscapes/highlands_islands/mapskills/index.shtml#focus

Arts Education
Students could produce landscape paintings (Group of Seven paintings may be used for inspiration). See www.groupofsevenart.com. Students could also use soil from different soil zones in the province to produce a soil painting. For more information on how to do this contact Agriculture in the Classroom.

For pictures of crops, animals, equipment and wildlife, check out the photo gallery at www.aitc.sk.ca

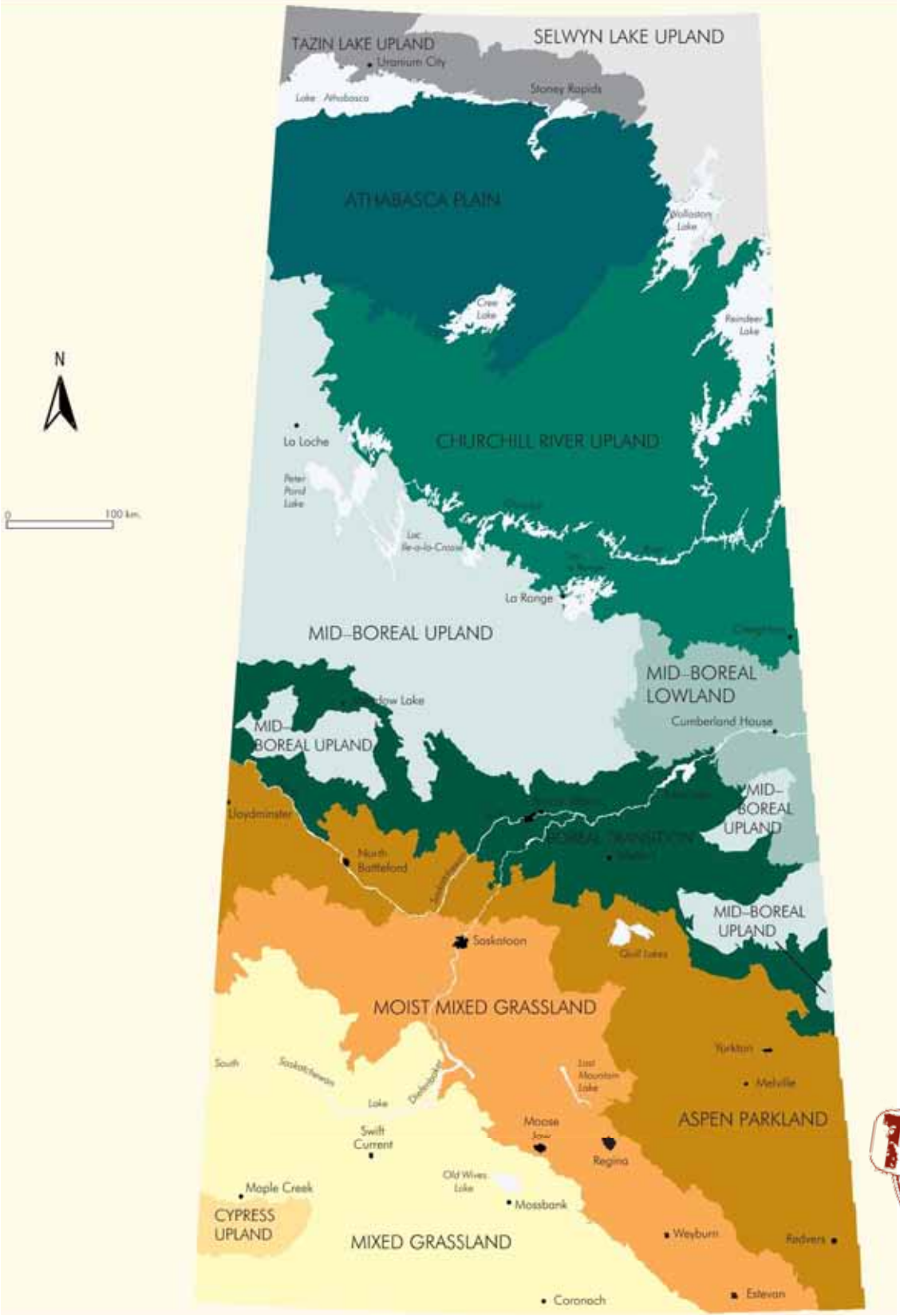
Further Investigation

Have the students imagine they are early settlers, coming to live in Saskatchewan. Have them choose and mark on their map where they would settle, then write a letter to the Canadian government asking for the rights to settle on that land, describing what they plan to do with the land (e.g. Hunting? Mining? Farming?).

Have students continue to collect pictures of Saskatchewan.

Have a wall dedicated to Saskatchewan. Have students colour the geographical regions on the large map of Saskatchewan. Students add resources and cities to the map. They post pictures, drawings, newspaper articles, and weather data around the map.

Ecozone and Ecoregion maps developed for The Encyclopedia of Saskatchewan (2005). Used with permission from Canadian Plains Research Center, University of Regina.



Ecozone and Ecoregion maps developed for The Encyclopedia of Saskatchewan (2005). Used with permission from Canadian Plains Research Center, University of Regina.

Taiga Shield

Climate

This ecozone has short summers with long days and cold, long winters with long nights. Average annual temperatures are just below freezing, and mean summer temperatures are at most 11°C. Precipitation is moderately high throughout the year with snow occurring during the winter months.

Geography

The terrain is either flat or rolling hills. Advancing and retreating glaciers have scraped the ground bare at several points in the past, and the millions of depressions that have been left are now lakes. Much of the flat lands are temporarily or permanently waterlogged. Permafrost exists over a large area.

Soil

As part of the Canadian Shield, the bedrock here is extremely old, and the region north of Great Slave Lake contains the oldest rock on the planet, over four billion years old. The soil is low in nutrients and high in acid. It is rocky and covered with undecayed leaf litter.

Plants

The most common type of tree is the coniferous trees (those that have cones). Four kinds of conifers common here are: spruce, fir, pine, and tamarack or larch.

A patchwork of wetlands, forests, meadows, and shrubs covers this area.

Lots of animals live in and around water

Wildlife

About fifty species of mammals are found in the Taiga Shield. They include:

- Herbivores – caribou, moose, beaver, chipmunks, squirrels, and moles.
- Carnivores – wolves, black and grizzly bears, lynx, coyote, fox, wolverine, weasel, mink, marten, muskrats.

Red fox

Many birds such as ducks, geese, loons, swans, osprey, bald eagle, northern shrike, raven, redwinged blackbird also live here.

Humans

The human population has always been low and the majority of the people living here are First Nations. Subsistence activities such as hunting, trapping, and fishing are still common.

Moose

Boreal Shield

Climate

Subarctic climate with long, very cold winters and short, cool summers. The winters last about seven months. Precipitation is variable and low (about 400 mm a year).

Geography

This may have once been a soaring mountain range but that was a billion years ago, and all that is left now is rolling hills. Glaciers swept over this area many times, and there are now millions of lakes, rivers, and wetlands. There are rock outcrops and poorly drained lowland areas.

Soil

There is no soil on bedrock outcrops of Canadian Shield. There are peat lands and sand.

Plants

The vegetation of much of the region is dense black spruce with moss ground cover. In more protected and open areas, there are birch and trembling and balsam poplar, as well as jack pine, and tamarack.

Bogs and other wetlands are some of the most diverse and productive areas and cover one-fifth of the land. Some of the other plants that grow here are sphagnum moss, willow, alder, Labrador tea, blueberry, bog rosemary, cottongrass, sedges, high

bush cranberry, baneberry, wild sarsaparilla, bunchberry, goldenrod, water lilies, and cattails.

Frogs are found throughout Saskatchewan

Wildlife

Animals in this ecozone include:

- Herbivores – caribou, white-tailed deer, moose, racoon, striped skunk, beaver, muskrat, porcupine, woodchuck, arctic hare.
- Carnivores – black bear, lynx, bobcats, wolves, marten, weasel, mink, river otter, coyote, and red fox.

Birds that live here include: raven, great horned and hawk owl, bald eagle, turkey vultures, blue jay, cardinal, wood thrush, grouse, loons, ducks, and geese.

Fish in this ecozone include: lake sturgeon, brook trout, lake trout, northern pike, muskellunge, largemouth bass, walleye, rainbow smelt, and yellow perch.

Fog rolling off of a small northern fishing lake

Many species of reptiles and amphibians live here also.

Humans

The extensive waterways were the roads of the fur trade. More recently, some rivers have been altered and degraded by mining, hydroelectric development, and logging practices, though many are still relatively unaffected. The population is sparse.

Boreal Plains

Climate

Warmer than ecozones to the North. Summers are short and warm and winters are snowy and cold. The Rocky Mountains block much of the moisture, and precipitation is variable and low. The average frost–free period across this ecozone is 103 days.

Geography

Flat or slightly rolling terrain is common here and thick soil deposits overlay Cretaceous shale bedrock.

Glaciers from many ice ages have flattened the landscape, and the large ancient lakes that resulted from their meltwater have left many dunes and are still present in many cases as smaller lakes. There are many rivers and valleys.

Soil

The soil type here is mainly grey. This soil is found where the native vegetation is less plentiful and the trees are mostly evergreen species. In the northern part of this ecozone there is extended peat and permanently frozen parts.

Plants

The warmer climate of the ecozone, in relation to those further north, supports a greater variety of vegetation. The forest is mixed hardwood and coniferous species that include white and black spruce,

jack pine, aspen, white birch, and balsam poplar. Lowlands near water may have American elm, green ash, and willows and sedges, along with a variety of flowering plants. The Saskatoon berry bush is one of the other plant species found here.

The northern lakes are a fisherman's delight

Wildlife

More than fifty of the province's seventy-two mammal species have been identified here, with most of the species in the southern areas of the zone.

- Herbivores – elk, moose, caribou, bison, deer, beaver, woodchuck, porcupine, squirrels, snowshoe hare.
- Carnivores – black bear, wolf, lynx, coyote, weasel, river otter, badger, striped skunk, muskrat.

There are approximately 300 species of birds including: great horned, boreal, and short-eared owl, turkey vulture, blue jay, crow, ruffed grouse, white pelican, mallard, and Canada goose.

There is high fish diversity including lake sturgeon, brown trout, lake trout, northern pike, and walleye. They prey on such species as cisco (lake herring), lake whitefish, goldeye, lake chub, emerald shiner, and yellow perch.

Mushrooms in Meadow Lake Provincial Park

Canada geese

Humans

When first settled, this zone was important for trading companies and the fur trade. For the past fifty years oil and gas have been the major economic focus. Other natural resources have been important as well, especially forestry. This ecozone is more populated than the northern ecozones. People who live in this ecozone are scattered in small communities rather than the larger urban concentrations found in the southern ecozones.

Major Agricultural Products

Activities in the region include forest-based hunting, fishing, trapping, and logging. Most of the pelts taken by trapping in the province are from this area. Approximately 16% of the land is devoted to agriculture along the southern margins; this includes grain production, as well as the raising of livestock.

Trophy White tail buck in velvet

Saskatchewan wildflower

Livestock awaiting their turn at the rodeo

Prairies

Climate

This ecozone is warmer and drier than the others in the province, although there are still long, cold winters and short, often hot summers.

The mountains to the west block much of the precipitation that would otherwise fall. That, and the high winds, make this ecozone very dry, although precipitation does generally increase towards the east. Temperatures are extreme due to the lack of access to the ocean's buffering. Winter temperatures average -10°C and summers average 15°C.

Geography

This is the Saskatchewan section of the great North American grasslands of the centre of the continent. The grasslands are separated from the boreal forest by a band of aspen parkland, with grasslands dotted by aspen bluffs. It is a zone of rolling plains with eroded uplands, with the Cypress Hills unglaciated uplands as a prominent feature in the southwest.

Glaciation has left its mark on the Prairies, flattening the landscape and leaving deposits from inland seas left behind by melting glaciers. These deposits are now the fertile plains that make up the Breadbasket of Canada. In years with a lot of rain many, small, temporary, wetlands form.

Soil

The soil in this ecozone ranges from brown to dark brown to black. It is these soils which made the area so attractive to grain farmers, especially the highly productive black soil.

Plants

The vegetation is mostly of grasses, with a number of flowering plants and shrubs found in the lower, moister areas.

Almost 95% of the Prairies have been converted into farmland, and natural vegetation is limited. Trees and shrubs are most commonly found in the eastern region. Trees found in the Prairies include white spruce, black spruce, balsam fir, wolf willow, lodgepole pine, bur oak, trembling aspen, and balsam poplar. Other plants that grow here are blue gamma grass, sagebrush, chokecherry, snowberry, wild barley, chickweed, and Saskatoon berry bush.

Winter wonderland

Grass overtaking plow near Biggar, SK.

Saskatchewan River by Saskatoon, SK.

Wildlife

The wildlife species of the region are fewer in number. This is due to fewer trees for nesting and shelter, hunting and change in natural habitat because of human activities.

- Carnivores - The only large carnivore in the Prairies is the black bear. Other carnivores include coyotes, foxes, and wolves.
- Herbivores - whitetail deer, mule deer, pronghorn antelope, elk, moose, mink, river otter, skunk, badger, ground squirrel, mice, and burrowing owl.

The Bison, once the dominant member of the natural ecosystem, has been to some extent replaced by domestic cattle, although these are not migratory and therefore do not have the same effects on the ecosystem.

Bird species include hawk, magpie, sparrow, hummingbird, piping plover and meadowlark.
The area has several species of snakes and lizards, including the plains garter snake, gopher snake, western rattlesnake, and short-horned lizard.

Predatory fish in the Prairie waterways include northern pike, carp, lake whitefish, emerald shiner, and yellow perch.

Badger

Gopher

Robin

Humans

The Prairies are the most altered of the ecozones. Agriculture covers almost all of the land and only small parts of the ecosystem is left. Mining for natural gas and oil is an important activity and employs many people in this ecozone.

This is the most heavily settled area: over 80% of the province's population lives in this zone. This combination of activities has resulted in the greatest amount of reduction of native vegetation. A number of protected areas, including the Grasslands National Park, have been developed by various conservation groups in an attempt to preserve what little native grasslands remain.

Major Agricultural Products

Agriculture is the major land use in this ecozone. The majority of the land is used to grow crops and raise livestock. Common crops grown are wheat, oats, barley, canola, flax, peas, and lentils. The crops grown depend on the type of soil and climate in the specific areas of the ecozone.

Livestock raised include beef cattle, sheep, pigs, bison, and elk. There are also many dairy and poultry farms in this area.

Wheat

Ladybug on oat plant

Bison

Ecozone Card Answer Key

Taiga Key Points

Saskatchewan's shortest summers and longest winters are found here.
Permafrost exists over a large area. The soil is almost always frozen here.
The ground is rocky and there is little soil.
A patchwork of wetlands, coniferous forests (the trees all have cones) and shrubs.
Wolves, grizzly bears, and moose all live here but very, very few people.
This is Saskatchewan's smallest ecozone.

Boreal Shield Key Points

The winters last about 7 months and the summers are cool with periods of daylight up to 18 1/2 hours long.
Glaciers formed many lakes where people travel by airplane for the incredible fishing.
Most of the region is dense black spruce with moss ground cover.
Population is sparse.
Jack pine, tamarack, and poplar are common as are water lilies and cattails around the many lakes.
Wild rice is a key industry.

Boreal Plains Key Points

There are many rivers and valleys and small lakes formed by glaciers.
Oil and gas are both industries found in this zone.
The soil here is mainly grey. Some grain production in the southern part of the zone.

Prairies Key Points

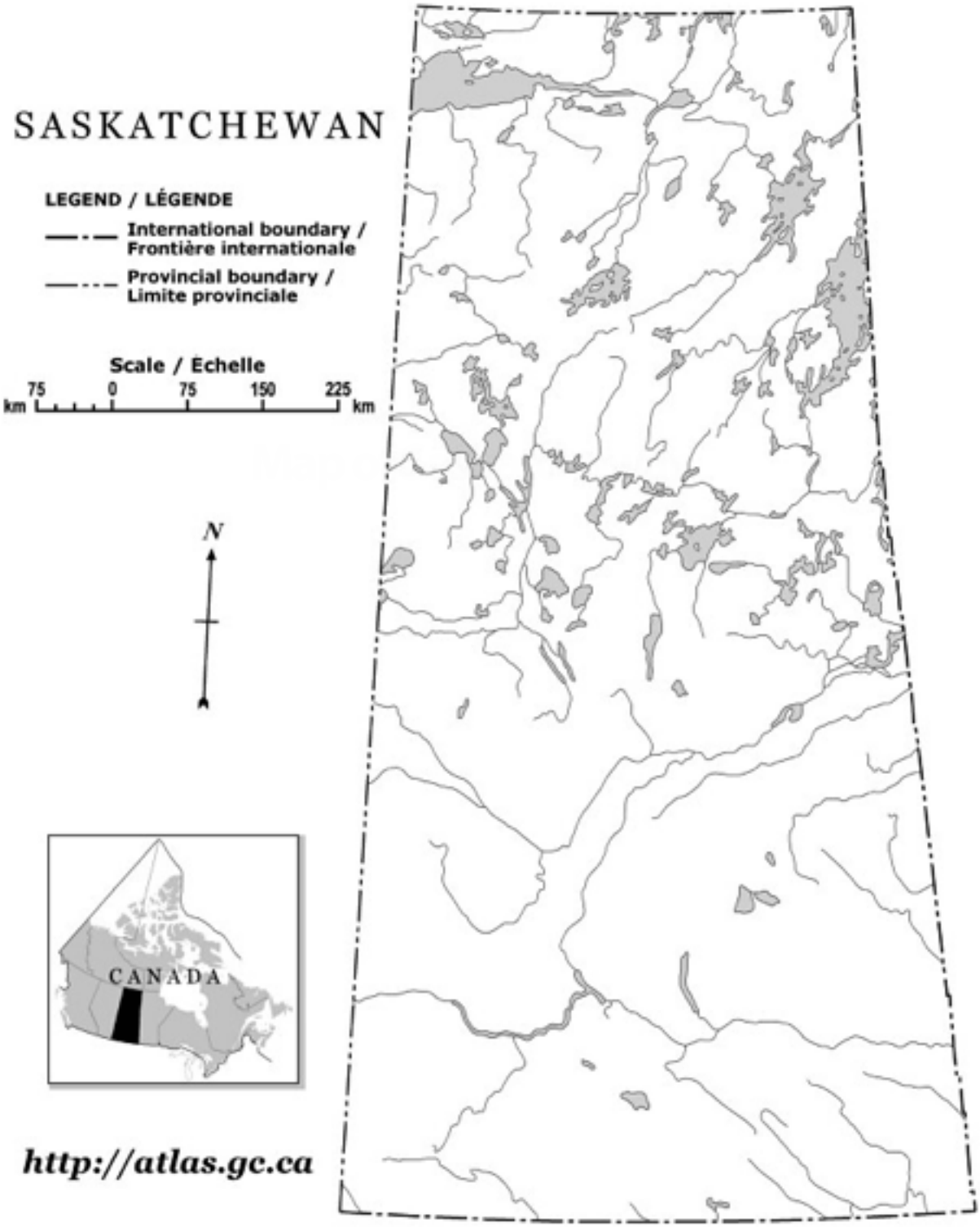
Warmest and driest ecozone in the province.
Land is generally flat or gently rolling because of glaciation.
The dark brown and black soil have caused this ecozone to be named, "The Breadbasket of Canada".
Most of this zone is farmland.
The natural vegetation is mostly grass.
The most populated ecozone in Saskatchewan.

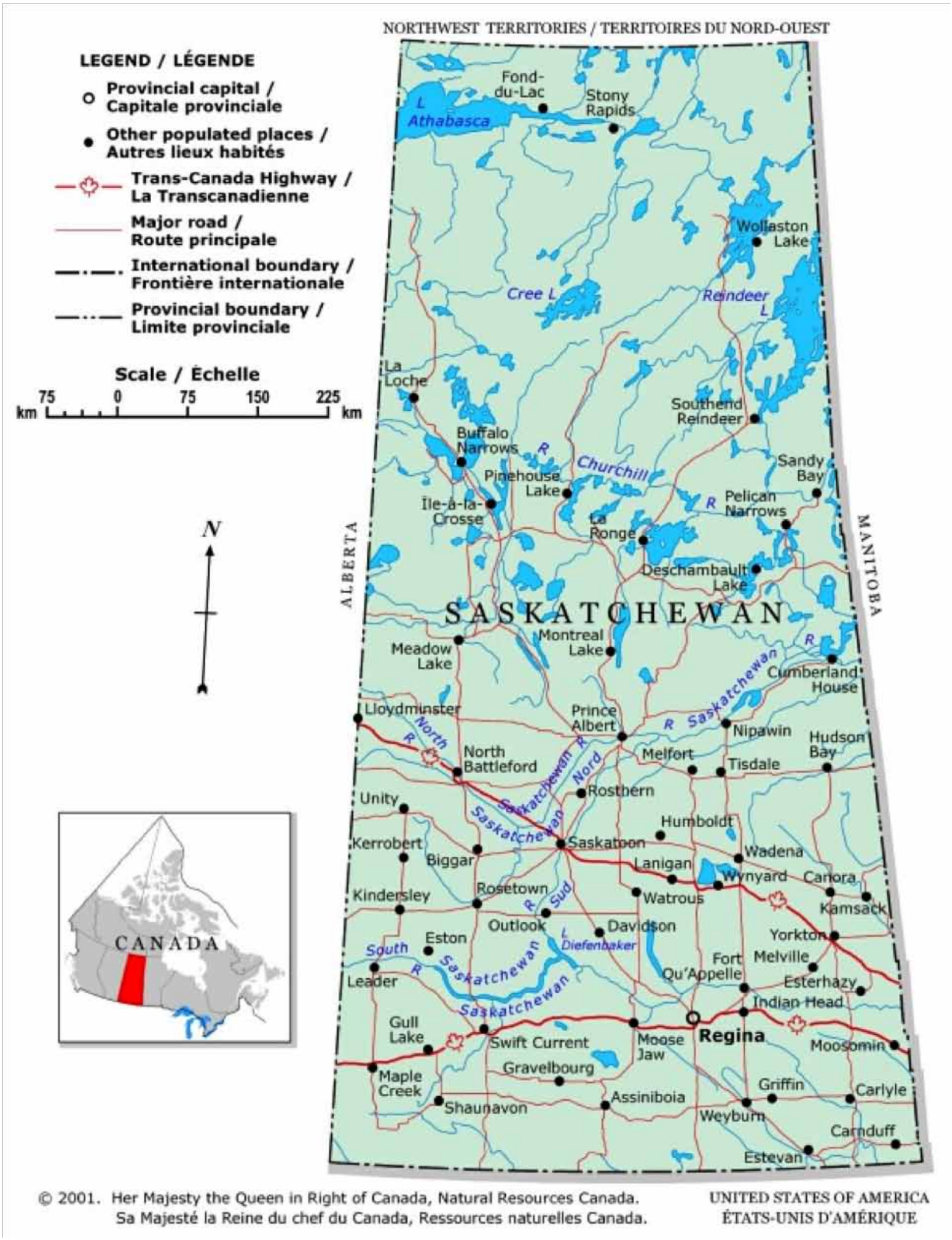
Saskatchewan Geographical Ecozones Grid - KEY

Region	Climate	Soil	Geography	Wildlife	Humans	Plants & Agriculture
TAIGA	Low average temperature. Short summers and long, bitterly cold winters. Most precipitation comes in the summer.	Part of Canadian Shield and therefore rocky with little soil cover.	Either flat or rolling. Glaciers have formed lakes. Lots of waterlogged areas. Permafrost.	Caribou, moose, beaver, chipmunks, squirrels, moles (herbivores). Wolves, black and grizzly bears, lynx, coyote, fox, wolverine, weasel, mink, marten, muskrats (carnivores). Ducks, loons, geese, bald eagles are some of the many birds.	Sparse population. Hunting, fishing and trapping activities.	Lichens and shrubs. Coniferous trees (those that have cones) including spruce, fir, pine, and tamarack. Forestry is a major industry.
BOREAL SHEILD	Short summers and winter for about seven months. Precipitation is low.	Bedrock where there is no soil. There is peat land and sand.	Hills and rocks. Many lakes, rivers and wetlands.	Caribou, white-tailed deer, moose, racoon, striped skunk, beaver, muskrat, porcupine, woodchuck, arctic hare (herbivores). Black bear, lynx, bobcats, wolves, marten, weasel, mink, river otter, coyote, and red fox (carnivores). Ravens, bald eagles, blue jays, grouse, loons, ducks, and geese are some of the many birds. Fish include: lake sturgeon, brook trout, lake trout, northern pike, walleye, rainbow smelt, and yellow perch.	Population is sparse. There was fur trading at one time. More recently, there has been mining, hydroelectric development, and logging.	Dense black spruce over much of the area. Also birch, poplar, jack pine and tamarack trees. Sphagnum moss, blueberry, high bush cranberry, water lilies and cattails are common. Wild rice is harvested in woodland lakes. Otherwise, agriculture is limited.

Region	Climate	Soil	Geography	Wildlife	Humans	Plants & Agriculture
BOREAL PLAINS	Warmer than ecozones to the north. Summers are short and warm; winters are snowy and cold. The Rocky Mountains block much of the moisture, and precipitation is variable and low. The average frost free period across this ecozone is 103 days.	There is soil, but mostly grey. The northern part of the ecozone has peat and permanently frozen areas.	Flat or slightly rolling. Many rivers and valleys. Glaciers have left numerous lakes.	Elk, moose, caribou, bison, deer, beaver, woodchuck, porcupine, squirrels, snowshoe hares (herbivores) Black bear, wolf, lynx, coyote, weasel, river otter, badger, striped skunk, muskrat (carnivores). Blue jays, crows, white pelicans, mallard ducks, and geese are included in the approximately 300 bird species in this zone. Lake sturgeon, northern pike, whitefish, and yellow perch are some of this ecozones many species of fish.	More populated than in ecozones to the north. People are scattered in small communities. Many people here are engaged in the oil, gas, and forestry industries.	Greater varieties of vegetation than in those areas further north. Mixed hardwood and coniferous species including white and black spruce, jack pine, aspen, white birch, and balsam poplar. Lowlands near water may have American elm, green ash, willows, and flowering plants. The Saskatoon berry bush is found here. There is hunting, trapping, and fishing as well as some grain production and livestock operations in the south part of the area.

Region	Climate	Soil	Geography	Wildlife	Humans	Plants & Agriculture
PRAIRIES	Although warmer and drier than other ecozones, there are still long, cold winters and short, hot summers.	Rich soil that produces good crops. Soils range from brown to dark brown and black.	Grasslands and rolling plains. This area is called the "Breadbasket of Canada".	Whitetail deer, mule deer, pronghorn antelope, elk, moose, coyote, badger, red fox, mink, river otter, skunk, badger, ground squirrel, mice, and burrowing owl. (herbivores). The black bear is the prairie's largest carnivore. Hawks, magpies, sparrows, hummingbirds, and meadowlarks are common bird species. There are a number of snake species including garter snakes and western rattlesnakes. There are northern pike, carp, and whitefish in this zone.	Most heavily settled area (over 80% of the population lives in this ecozone). The higher population has altered this ecozone more than any other zone in Saskatchewan.	Almost 95% of the prairies is farmland, and natural vegetation is limited. Trees include white spruce, black spruce, balsam fir, wolf willow, lodgepole pine, bur oak, trembling aspen, and balsam poplar. Other natural plants are sagebrush, chokecherry, snowberry, wild barley, chickweed, and Saskatoon berry bush. Common crops are wheat, oats, barley, canola, flax, peas, and lentils. Livestock includes beef and dairy cattle, hogs, poultry, sheep, and bison.





Ecozones Cards

Saskatchewan's shortest summers and longest winters are found here.	Warmest and driest ecozone in the province.	Land is generally flat or gently rolling because of glaciation.
This is Saskatchewan's smallest ecozone.	The dark brown and black soil have caused this ecozone to be named, "The Breadbasket of Canada".	The soil here is mainly grey. Some grain production in the southern part of the zone.
Glaciers have left lots of lakes were people fly to and go fishing.	There are many rivers and valleys and small lakes formed by glaciers.	Most of the region is dense black spruce with moss ground cover.
Permafrost exists over a large area. The soil is almost always frozen here.	Oil and gas are both industries found in this zone.	The ground is rocky and there is little soil.
Population is sparse.	Most of this ecozone is farmland.	Wild rice is a key industry.
The natural vegetation is mostly grass.	Wolves, grizzly bears, and moose all live here but very, very few people.	The most populated ecozone in Saskatchewan.
A patchwork of wetlands, coniferous forests (the treees all have cones) and shrubs.	The winters last about 7 months and the summers are cool with periods of daylight up to 18 1/2 hours long.	Jack pine, tamarack, and poplar are common as are water lilies and cattails around the many lakes.

Name: _____

Handout 3.4

Saskatchewan Geographical Ecozones Grid

Region	Climate	Soil	Geography	Wildlife	Humans	Plants & Agriculture