

The Saskatchewan Challenge



Saskatchewan Challenge – Land of Living Skies

Questions

♥ **What do the colours and symbols on our flag mean?**

♥ **Find out what crops are grown on a large scale in our province.**

Saskatchewan is known around the world for our high agricultural population. Flat golden fields are a common sight to any traveler in the Southern half of the province. You can choose specialty crops or cereal crops or both.

1. ☺ **Why is Cypress Hills unique?**

www.cypresshills.com

www.virtualsk.com/current_issue/lodgepole_legacy.html

http://atlas.nrcan.gc.ca/site/english/maps/reference/provinceterritoriesrelief/sask_relief/referencemap_image_view

2. ☺ **Find the names of three towns/cities in Saskatchewan that reflect the landscape or features within it.** (e.g, Redberry)

3. ☺ **What resources does Saskatchewan have? Find out the location and uses of the most common ones.**

4. ☺ **Have your Guider read this paragraph to you and answer the questions:**

Saskatchewan has a unique geological history. The rock underlying the province formed in two very different environments. The Northern portion of the province is underlain by a large area called the Canadian Shield that was formed in the Precambrian Era (600 to 3500 million years ago). The Canadian Shield covers a large amount of Canada and is located in a giant U-shape around Hudson Bay. The lower half of the province (the area associated with agriculture) is part of the Interior Plains, which stretches through The Northwest Territories, Alberta, Saskatchewan and southwestern Manitoba. The Interior Plains formed in the Mesozoic Era (100 to 250 million years ago). While the Canadian Shield is rugged rock with many mineral and metal deposits, the Interior Plains is a flat basin filled with sedimentary rock and underlain by fuel resources such as oil and gas. The Interior Plains sedimentary basin was formed over a long time, using weathered rock from the Cordillera (i.e. Rocky Mountains). This type of sedimentary rock provides nutrients that make agriculture possible and profitable.

i. **What are the names of the rock that underlies the north and south of the province?**

ii. **Over how many provinces or territories do the Interior Plains reach?**

iii. **Where are mineral and metal deposits found in Saskatchewan?**

iv. **Where are oil and gas deposits found?**

v. **Where does the Canadian Shield extend?**

5. ☺ **What are the official names for the eco-zone, eco-region and climate zone that exist in Saskatchewan and the town in which you live?**

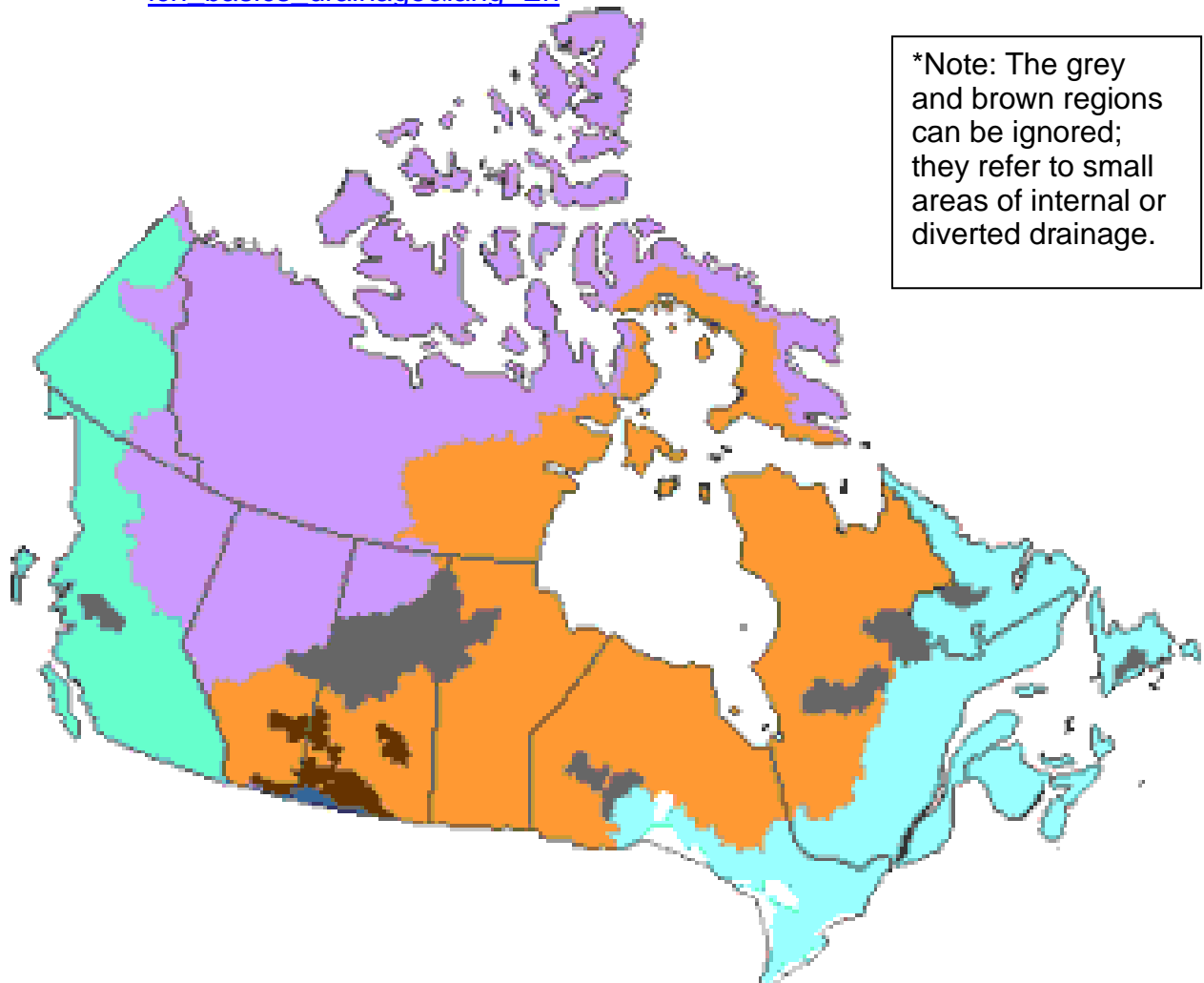
6. ☺ **Look at the map and figure out where each of the drainage basins leads to.**

Drainage basins are the regions in which a stream or river receives water.

Ridges or areas of higher elevation usually divide them. Canada has five major drainage basins. The following website has an excellent animated visual of

Canada's drainage basins.

http://www.canadiangeographic.ca/atlas/themes.aspx?id=waterrich&sub=waterrich_basics_drainage&lang=En



7. ☹️ **Find the eight largest cities in Saskatchewan** (by population).
You can use the Statistics Canada website or an atlas to answer these.
☺️ For older girls, get them to try and put them in order of population size.
8. ☹️ **Find the sunniest, wettest, coldest and warmest cities on record for Saskatchewan.**
Look for any other unique features that you would like.
9. ☹️ **Two truths and a lie: Which is Which?**
 - a. Saskatchewan has almost 1 million residents.
 - b. Saskatchewan has the smallest population of all the provinces.
 - c. Saskatchewan has more people than all of the territories combined.

10. 🍌 Find the *italicized* areas on a globe.

Latitudes are the parallel circles that encompass the globe horizontally but don't meet, such as the *Equator, Arctic and Antarctic Circles and the Tropics of Cancer and Capricorn*. Longitudes are the lines that meet at the poles; they are vertical on the globe. Examples are the *International Date Line and the Prime Meridian*.

11. 🍌 Determine the latitude and longitude of our provincial boundaries.

Use the definitions in question 10 to help you.

12. 🍌 Look up the definition for a river delta and try to find pictures of one.

13. 🍌 Open up a road map of Saskatchewan and point to the city you live in.

14. 🍌 Find out what a rain shadow is and where in Canada it occurs.

15. 🍌 Use a field guide, website or personal experiences to come up with a list of animals that live in the boreal forest.

16. 🍌 Use a field guide, website or personal experiences to come up with a list of trees that exist in the boreal forest.

17. 🍌 Use a field guide, website or personal experiences to come up with a list of plants that grow in the boreal forest.

Activities

♥ Create a thinking game.

You could scramble the letters for town names, eco-zones or Saskatchewan flora or fauna and get the other girls to unscramble them. The number and difficulty of the words will depend on age. Try one of your own games.

1. 🍌 Create a Saskatchewan or environmental word game.

Go online and search for a web page that allows you to make your own crossword or word search for free. Once again, the number of words and the difficulty are dependent on age.

2. 🍌 Build a model of a river.

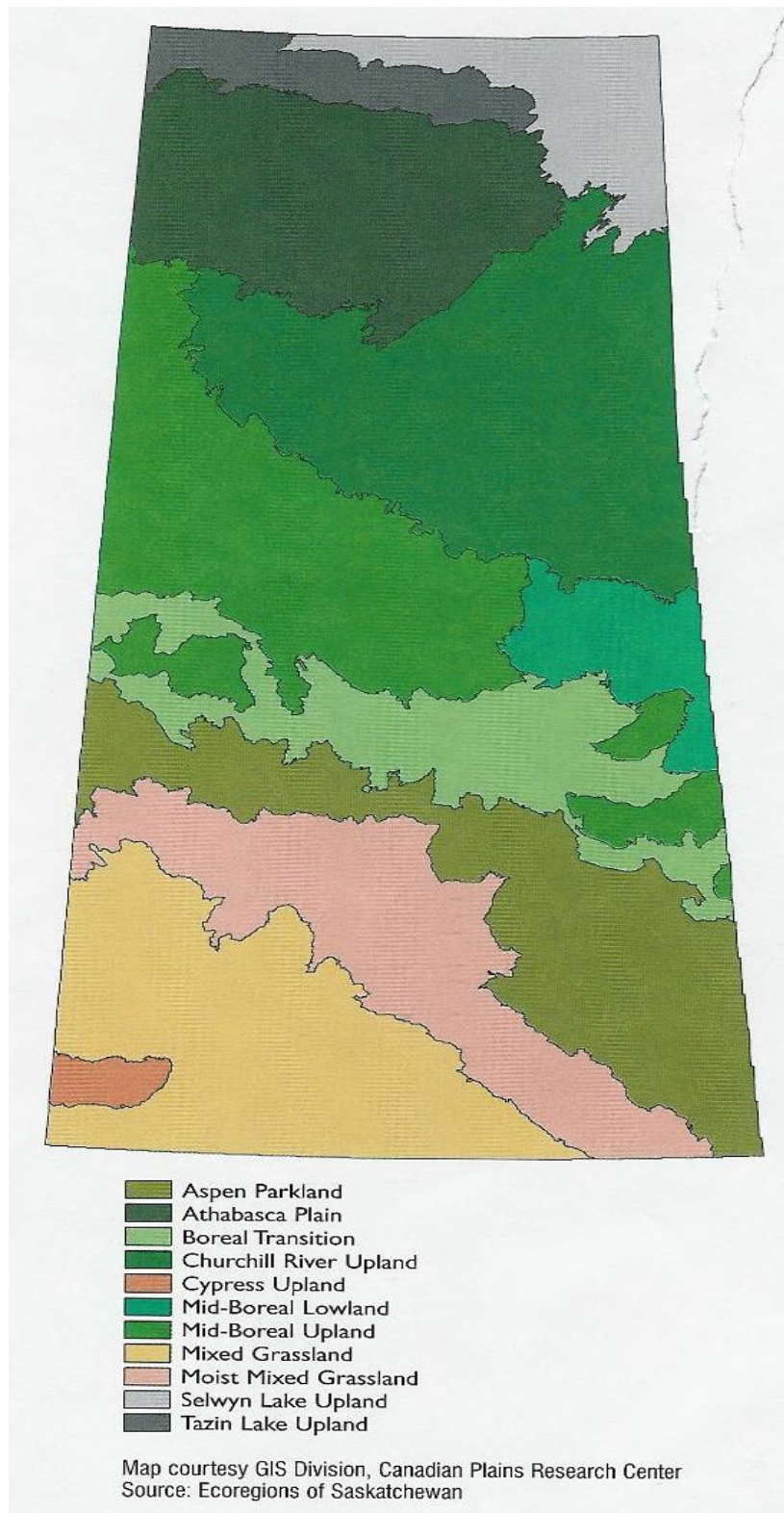
As we all know, water and rivers are very important to Saskatchewan, which is well known for its numerous rivers.

- Divide the girls into groups of about six and give each group a bag of as many empty toilet paper and paper towel rolls as you can muster.
- Each group needs a bucket half filled with water and an empty bucket (ice cream pails or larger).
- In a set length of time the girls must construct a continuous tube of paper rolls that will transport water from one pail to the other.
- To make it easier, you can provide tape and scissors.
- The girls could get very wet, so choose your location and date wisely.
- The girls will need to use gravity, so be sure to provide tables or chairs.
- See who builds the most elaborate river and who transports the most water.

3. 🍌 Build terrariums.

Save some clear 2L pop bottles. Once rinsed, cut off the top 1/3 or so, to use as a lid. Place some sand/gravel in the bottom (about an inch or two) and place soil on top. You can plant cuttings or start seeds. The following is a list of plants that do well in confined spaces:

- Marigolds
- Herbs like sage, mint, lavender, basil, rosemary, chives or parsley
- Any other small growing plant



4. 🟡 Make a puzzle.
Depending on the difficulty you want, cut the picture into pieces. This

can be done randomly or based on the lines of the eco-regions.

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Answers

♥ What do the colours and symbols on our flag mean?

The green on the top half of the flag represents our northern forests, and the gold on the bottom represents the croplands in the south. The shield in the top left represents the queen and our heritage and resources, and the lily, our provincial flower, is along the right.

♥ Find out what crops are grown on a large scale in our province.

In Saskatchewan, we grow *specialty crops* including chick peas, canary seed, mustard, lentils, peas and sunflowers and *cereal crops* including wheat, durum, barley, flax, oats, etc.

1. ☺ Why is Cypress Hills unique?

Cypress Hills is the highest point in elevation between the Rocky Mountains (to the west) and Labrador (to the east). It is the only location in Canada that was not covered in ice during the last ice age. It has unique vegetation and a different climate than the rest of the Prairies. The region experiences frequent Chinooks (unseasonably warm winds) making the winters much more bearable. It is home to uncommon vegetation for southern Saskatchewan, such as lodgepole pine, and animal species, such as bobcats, moose, elk, foxes and pronghorn antelope. The hilly terrain creates a vacation destination that is very different from the rest of the Prairies.

2. ☺ Find the names of three towns/cities in Saskatchewan that reflect the landscape or features within it. (e.g., Redberry)

To name a few more, Rosetown, Swift Current, Moose Jaw, Stony Rapids, Maple Creek, Porcupine Plain, Duck Lake.... The list goes on, use your own judgment.

3. ☺ What resources does Saskatchewan have? Find out the location and uses of the most common ones.

Mineral Resources: Clays, Potash, Salt, Silica, Diamonds

Metals: Copper, Zinc, Lead, Nickel, Gold, Iron, Uranium

Fuel Resources: Coal, Oil, Natural Gas

Saskatchewan produces about one-third of the world's supply of both potash and uranium, and extensive reserves for future production have been identified. With the discovery of one of the largest clusters of kimberlite bodies in the world, the province could also become a significant diamond producer.

[Agriculture, Natural Resources and Industry | Information for Saskatchewan Businesses and Industry | Government of Saskatchewan](#)

The principal mineral resources of Saskatchewan are petroleum, natural gas, potash, and coal, all of which are found in the sedimentary rocks of the south; and uranium, copper, zinc, gold, silver, and other metallic minerals found in the Canadian Shield region. The province of Saskatchewan is Canada's second largest producer of crude oil, after the province of Alberta, and has abundant coal suitable for thermal power generation. Potash from south central Saskatchewan has contributed a substantial share of the province's total mineral production in recent decades.

4. ☺ Have your Guider read this paragraph to you and answer the questions:

i. What are the names of the rock that underlies the north and south of the province?

They are the Canadian Shield and the Interior Plains.

ii. Over how many provinces or territories do the Interior Plains reach?

They reach across four – the Northwest Territories, Manitoba, Saskatchewan, and Alberta.

iii. Where are mineral and metal deposits found in Saskatchewan?

Mineral and metal deposits are found in northern Saskatchewan.

iv. Where are oil and gas deposits found?

Oil and gas deposits are found in southern and central Saskatchewan.

v. Where does the Canadian Shield extend?

The Canadian Shield is in a U around Hudson Bay (covering most of Ontario, Quebec, Labrador, Nunavut, Northern Manitoba, Saskatchewan and Eastern Northwest Territories).

5. 🟡 **What are the official names for the eco-zone, eco-region and climate zone that exist in Saskatchewan and the town in which you live?**

Saskatchewan Eco-zones are Taiga Shield, Boreal Shield, Boreal Plain and Prairie. Eco-regions – from south to north are as follows: Cypress Upland, Mixed Grassland, Moist-Mixed Grassland, Aspen Parkland, Boreal Transition, Mid-Boreal Lowland, Mid-Boreal Upland, Churchill River Upland, Athabasca Plain, Tazin Lake Upland, Selwyn Lake Upland.

6. 🟡 **Look at the map and figure out where each of the drainage basins leads to.**

Drainage Basins:

- a. Arctic Ocean – drains into the Beaufort Sea. Water is received from Northern Alberta, Saskatchewan, British Columbia and The Territories. The largest river is the Mackenzie and the most important tributaries include the Peace River and Athabasca River
- b. Pacific Ocean – The largest water output of any basin in Canada. (due to the Rocky Mountains) The largest rivers in this system are the Fraser River and the Columbia River.
- c. Atlantic Ocean via St Lawrence River – This basin is dominated by the Great lakes and is mostly fed by small streams and rivers. The Ottawa and Niagara Rivers are the major ones in this system
- d. Hudson Bay – includes most of Saskatchewan, all of Manitoba, Southern Alberta, and some of Ontario. The Nelson River, Churchill River, Bow River, Saskatchewan River and Red River are all major rivers that feed this basin
- e. Gulf of Mexico – A very small portion of Southern Saskatchewan drains all the way into the Gulf of Mexico, this is due to the unique elevation of Cypress hills. The Milk River is a tributary stream for this system.

7. 🟡 **Find the eight largest cities in Saskatchewan (by population).**

In order of population size, they are Saskatoon, Regina, Prince Albert, Moose Jaw, Yorkton, Swift Current, North Battleford and Estevan.

8. 🟡 **Find the sunniest, wettest, coldest and warmest cities on record.**

Estevan is the sunniest (ranked 2nd nationally). Yorkton is the wettest (ranked 82nd nationally) and the coldest (ranked 11th nationally). Moose Jaw is the warmest (ranked 65th nationally).

9. 🟡 **Two truths and a lie: Which is Which?**

b. Saskatchewan has the smallest population of all the provinces is a lie. New Brunswick, Newfoundland, and Prince Edward Island all have lower populations than Saskatchewan.

10. 🟡 **Find the *italicized* areas on a globe.**

11. 🟡 **Determine the latitude and longitude of our provincial boundaries.**

The western border is at approximately 110°, the eastern at approximately 108°. The northern border is 60°N, the southern at 49°N.

12. 🟡 **Look up the definition for a river delta and try to find pictures of one.**

A river delta is the place where a river meets an ocean, sea, or lake. The mouth of the river grows outwards due to the sediment that the river carries. Over time they can build to be quite elevated and often look braided.

13. 🟡 **Open up a road map of Saskatchewan and point to the city you live in.**

14. 🟡 **Find out what a rainshadow is and where in Canada it occurs.**

A rainshadow is a dry region on the leeward side of a mountain (the side opposite the prevailing wind). A rainshadow occurs because as moist air is forced to rise over a mountain it cools and precipitation forms. Rain often is heavy on the windward side of the mountains leaving no water in the clouds as they pass over the mountain. The best example of this is BC's coast. Heavy rains are common in Western BC but as the wind moves over the mountain ranges, the air dries out creating a rainshadow over much of Alberta and Saskatchewan. This is also the source of Chinook winds in winter.

15. 🟡 **Use a field guide, website or personal experiences to come up with a list of animals that live in the boreal forest.**

This list is by no means exhaustive, use your judgment: moose, deer, elk, bears, wolves, foxes, squirrels, skunks, beavers, mice, raccoons, bats, loons, grebes, geese, ducks, gulls, hawks, eagles, falcons, owls, kingfishers, woodpeckers, larks, swallows, shrikes, jays, finches....

16. 😊 Use a field guide, website or personal experiences to come up with a list of trees that exist in the boreal forest.

This list is by no means exhaustive, use your judgment: pine, fir, spruce, maple, birch, oak, elm, willow, cypress....

17. 😊 Use a field guide, website or personal experiences to come up with a list of plants that grow in the boreal forest.

The list on this website is by no means exhaustive, use your judgment:

http://www.borealforest.org/world/herbs_shrubs.htm

This is a very open list, try to encourage the girls to name plants they have seen.

Activities

♥ Create a thinking game.

1. 😊 Create a Saskatchewan or environmental word game.
2. 😊 Build a model of a river.
3. 😊 Build terrariums.
4. 🌸 Make a puzzle.