

## Climate of Canada

Canada has several kinds of climate. Remember that climate deals with temperature, wind, and precipitation. However, because of its northern location, it does not have any kind of tropical climate. The location of a region does affect the type of climate it receives. As you read this information, take a look at your Atlas Buddy AB on page vii to help you understand the climate of Canada. Here are some highlights of Canada's climate.

- ❖ Continental climate deals with extreme temperatures. Generally, the southern areas of Canada have warm summers, and cold winters. The northern areas have very long, colder winters and very short summers.
- ❖ In the Pacific and Atlantic Oceans areas, winters are cooler and milder than summers. This is known as a maritime climate, or a temperate climate. Remember that maritime means that the ocean influences the type of weather an area receives. Large bodies of water do not warm up nearly as much as the land in the summer. Oceans, seas, and lakes keep land areas cooler in the summer and warmer in the winter (unless you are in the Arctic Ocean). For example, Calgary in Alberta is colder in winter and warmer in summer than Vancouver in British Columbia.
- ❖ Canada has no deserts. However, drier air can be found in the southern prairie provinces. The Interior Plains get about 20 inches of moisture a year.
- ❖ More precipitation occurs in the mountains of western Canada where the winds blow clouds with heavy amounts of moisture from the ocean. (Reminder - warmer air holds more moisture. As air rises, it becomes cooler and cannot hold the moisture. It falls as rain.) This area can receive nearly 200 inches of precipitation in a year. You have heard of warm tropical rainforests. Well, this area has a cold rainforest!
- ❖ Except for the western coastal region, most of the winter precipitation is in the form of snow.
- ❖ The lightly settled northern areas of Canada have a subarctic and arctic climate called a polar climate. It is also called the tundra where the soil remains frozen the year round (permafrost). Polar climate has long, bitterly cold winters and short summers that do not reach above 50 degrees. Subarctic climate also has long, very cold winters and very short summer seasons. Winter begins in August!
- ❖ Similar to the United States, western Canada has large mountain ranges. You have learned they are called the Rocky Mountains and the Coast Ranges. Mountains are also referred to as a highland climate. In higher elevations on a summer day, you can get freezing temperatures and snow.

## ***Activity 1: (Climate of Canada)***

Use your Atlas Buddy on pp. vii and x, answer these questions on Canada's climate.

1. In what two cardinal directions do the continental and polar climates travel in Canada?

\_\_\_\_\_ and \_\_\_\_\_

2. Does any part of Canada have an ice cap? \_\_\_\_\_

3. The continental climate with very short, cool summers stretches between a territory and province. Name them. \_\_\_\_\_ and \_\_\_\_\_

4. Name three prairie cities that are quite dry. \_\_\_\_\_

\_\_\_\_\_, and \_\_\_\_\_

5. In what two cardinal directions does the highland (mountain) climate run?

\_\_\_\_\_, and \_\_\_\_\_

6. Which part of Canada has a greater variety of climate types? eastern, central, or western

\_\_\_\_\_

7. How would one describe the summer climate of Victoria and Vancouver?

\_\_\_\_\_

8. The capital of Canada, Ottawa, has what type of climate? \_\_\_\_\_

9. Most of the Great Lakes are in what type of climate zone? \_\_\_\_\_

10. All of the Arctic Islands have what climate type? \_\_\_\_\_

11. What part of Canada is the driest? \_\_\_\_\_

## ***Activity 2:***

Use the information on the previous page to answer the following questions:

1. What kind of rainforest does Canada have? \_\_\_\_\_

2. What region of Canada does not have much snow? \_\_\_\_\_

3. What is the region of Canada called where the soil remains frozen the entire year?

\_\_\_\_\_

4. In what month does winter begin in northern Canada? \_\_\_\_\_

5. About how many feet of rain do the western mountains of Canada receive per year?