

The Fields of Geography

In the previous section on definitions, you learned that geography is made up of physical and human elements. These elements are sometimes called the **fields** of geography.

Physical Geography



Physical geography refers to features that make up the natural **environment** or exist within it. Examples include landforms, natural vegetation, soils, weather, climate, rivers, lakes, and natural resources. These features exist without human presence.

Human Geography

Human geography refers to features created by people. These include settlements, farms, transportation networks, stores, schools, and many other human-made things.

Methods and Tools



Sometimes, a third field of geography is identified—that of the methods and tools of the geographer. This includes the development of maps, air photos, and satellite images. Geographers also make use of technology, like computers and **Global Positioning Systems (GPS)**, as well as software such as **Geographic Information Systems (GIS)** to do their work. The development and use of instruments to measure weather and climate, or the strength of earthquakes, is also part of this field. Many of these tools and methods are used to study aspects of both physical and human geography.

The Relationship between Physical and Human Elements

The relationship between physical and human geography helps explain the “why there” part of the definition of geography. Physical geography has a big influence on human geography. It influences where people live, what they do for a living, and what changes they make to the landscape. For example, much of the Canadian prairie is used for agriculture because it has good soils, warm summers, and appropriate amounts of rainfall—all aspects of the physical environment. Farming, however, is not possible in mountainous or cold regions because of the physical conditions. The discovery of a mineral resource, such as a large nickel deposit (physical factor), may attract people to open a mine and perhaps start a settlement (human factor) in a northern location. Mining communities, such as Flin Flon and Thompson, are examples. In a similar way, the physical environment may determine where a building or road is constructed in your community. It may also determine the kind of house you have or the kinds of clothes you wear. As these examples show, the physical environment has a big influence on human activities.



Learning Activity 1.2

Sorting the Fields of Geography



1. How well do you know the fields of geography?
 - a) Using the terms in the provided word bank, sort the terms into the three labelled columns provided in the following chart. Some terms may fit in more than one column.
 - b) There are two terms that do not correspond to any of the three categories provided. Identify these terms and place them in the fourth column. Be sure to give this column an appropriate title.

Word Bank				
landforms settlements map-making earthquakes	urban studies GIS software rock types GPS units	transportation networks natural resources land use planning air photo interpretation	satellite images population study natural vegetation changes over time	soils industry spreadsheets past events

Physical Geography	Human Geography	Methods and Tools	

Our Mental Maps



Knowing the locations of features is an important part of geography. You know the locations of familiar places in your neighbourhood or in the region where you live. You have fairly accurate **mental maps** that direct you to these locations or help you describe where they are situated. You may have general ideas of the locations of major features in Canada or North America, depending on your travel experiences or general knowledge from previous learning. Your mental maps about the location, size, or shape of features further away from home may not be very accurate and you might have trouble describing them to your friends or locating them on a map. In this case, you rely on an atlas, a road map, or perhaps a globe to locate and describe the locations of features that are not familiar to you.



Learning Activity 1.3

Mapping Canada



1. Without looking at a map or a globe, draw your mental map of Canada on a sheet of paper labelled "My Mental Map of Canada." Your map should include the following:
 - an outline of Canada and the provincial and territorial boundaries
 - the major water bodies and physical features
 - the provincial and territorial capital cities as well as the capital city of Canada
 - a title (My Mental Map of Canada)

Learning Activity 1.3: Mapping Canada (continued)

Don't feel bad if you have some trouble, but give it a try!

2. Use the outline map of Canada on the following page to improve your knowledge of places and locations. Refer to an atlas or a map on the Internet to help you locate and label the following:
 - Locate the *capital cities* of all the Canadian provinces and territories. Clearly identify the location with a large dot. Then, using uniform, small-size letters, print the city name beside each dot.
 - Locate and label the *national capital*.
 - Label all the *provinces and territories*, using larger letters.
 - Label the *Pacific, Atlantic, and Arctic Oceans*, as well as *Hudson Bay*.
 - Below is a list of all the provinces, territories, capital cities, and bodies of water that you will need to identify. Please note that the following is a list of all the terms you need to label. They are not organized into categories. They are only there to help you get started.



Northwest Territories	Quebec City	British Columbia	Saskatchewan
Charlottetown	Winnipeg	Ottawa	Halifax
Alberta	Victoria	Pacific Ocean	New Brunswick
Yukon	Iqaluit	Ontario	Edmonton
Regina	Newfoundland/ Labrador	Hudson Bay	Nova Scotia
Manitoba	St. John's	Fredericton	Whitehorse
Atlantic Ocean	Yellowknife	Quebec	Arctic Ocean
Nunavut	Prince Edward Island	Toronto	

Political Map of Canada



Canada and North America

You are probably able to recognize Canada on a map of North America or of the world. You know its approximate shape as well as where it is located. You are probably also able to recognize the provinces and territories that make up the country. Likewise, you might also know the location of North America and its approximate shape. Canada occupies the northern part of North America. But how far south does North America extend? Where is the southern boundary of North America? What countries are included in North America? Does North America include any islands?

Political Divisions

Many students think that North America has only three countries: Canada, the United States of America, and Mexico. Some think that Central America, the countries from Mexico to Panama, is also part of North America. Others think that the island nations of the Caribbean are also part of North America. What do you think?

If you are in the last group, you are correct. North America stretches from Canada to Panama and includes the island nations in the Caribbean Sea. There are 23 countries in North America, in addition to a number of overseas territories of European countries.

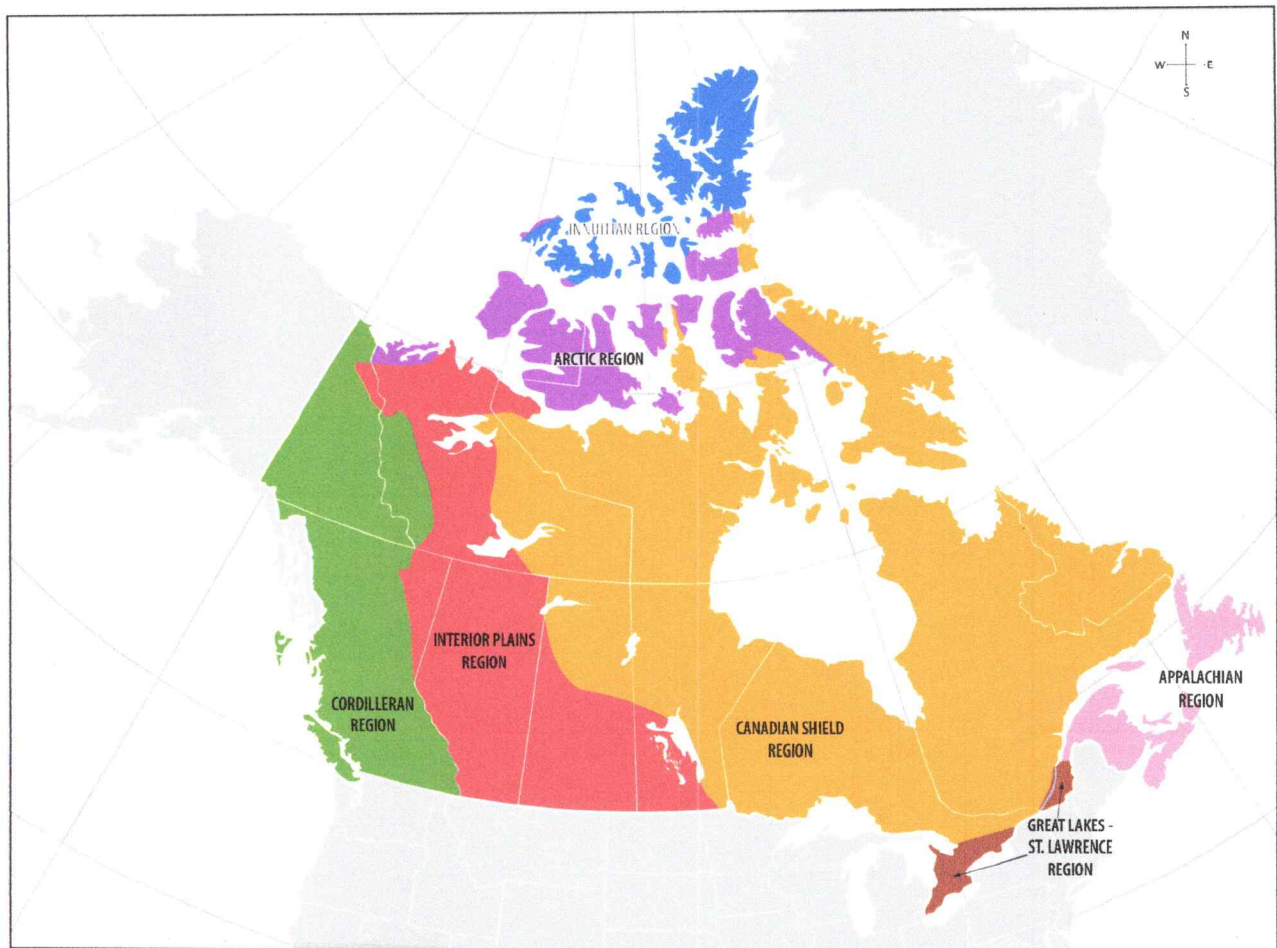
Many Canadians would be surprised to learn that the closest foreign territory to Canada, other than the United States of America, is France. The islands of St. Pierre and Miquelon belong to France and are only 20 kilometres off the southern shore of Newfoundland! Greenland, a territory of Denmark, is less than 50 kilometres from Canada's Ellesmere Island in the Arctic.

As you probably know, the boundary between Canada and the United States of America is mainly along the 49th parallel (line of latitude) in western Canada and the Great Lakes in eastern Canada. In a few locations, the boundary follows rivers, other lines of latitude, or topographical features. Much of the boundary between the United States of America and Mexico follows the Rio Grande River flowing into the Gulf of Mexico.

Physical Features

In addition to the political divisions, you also need to know the major physical features of North America and their locations. These include major landform regions, lakes and rivers, as well as major seas, bays, and oceans. You may be familiar with the major landform regions of Canada including the Cordilleran Region (also known as the Western Cordillera), Interior Plains, Canadian Shield (also known as the Precambrian Shield), Great Lakes-St. Lawrence Lowlands, Appalachian Region, Arctic Region, and Innuition Region.

Major Landform Regions in Canada



A number of these regions extend across the boundary into the United States of America. One of these regions, the Cordilleran Region, goes all the way through Mexico and Central America. In Central America, the Cordilleran Region is known as the Central American Highlands. The Interior Plains extend southward to the Texas-Mexico border. The Appalachians extend to the southeastern states of Alabama and Georgia. Even the Canadian Shield, properly known as the Precambrian Shield, extends across the border into the northern states of Minnesota, Wisconsin, Michigan, and a small part of upper New York State.

A number of the North American landform regions do not extend into Canada at all. The eastern Coastal Lowlands extend from the original New England states (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut) south around the Gulf of Mexico into Central America. The Caribbean Islands are a separate physical region by the same name. They consist of volcanic mountains, plateaus, hills, and small areas of coastal lowlands.