

# UNIT 1

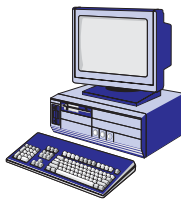
## PHYSICAL SETTING

### INTRODUCTION

Together the four Atlantic provinces form one of Canada's unique regions. They share a similar rugged landscape, with numerous bays and inlets along the coast. The people who live here come from all over the world and have helped to make the region an exciting and vibrant place to live.

#### WEB SITES

There is more information available on the internet on physical settings. Use your search engine (Yahoo, alta vista, hot bot). Try these words to find more information: topographical maps, global positioning system, Environment Canada, Titanic.



### ASSIGNMENT 1: FINDING YOUR WAY USING MAPS

If you want to learn more about Atlantic Canada, looking at maps is an excellent place to begin. A world map will show you where Atlantic Canada is located in relation to other countries, a provincial map will help you find the highways and back roads, and a street map will show you around unfamiliar towns and cities.

#### PERSONAL ACCOUNT:

DO PEOPLE LIVING IN ATLANTIC CANADA  
NEED TO USE MAPS?

Recently, I met a woman who got lost in the Nova Scotia bush with her family. It was about 5 o'clock one spring afternoon when she and her husband decided to pack their two small children in the van and go exploring. They used to live in Toronto and everything in Nova Scotia seemed so open by comparison. They turned off the main highway and onto a dirt road. There was a fork in the road: they guessed and took the one going left. Another fork, they turned right. There was no pattern to their choices. They assumed they were on provincial roads and eventually they would come to one that was marked. However, they were actually on logging roads, and there were no markings.

Within an hour they were lost. She said it was like being in a maze: everytime they turned they'd been there before or they came to a dead end. Just as it was starting to get dark, they found themselves on a road they didn't recognize. Before they'd gone very far, the van became bogged in the mud.

The husband could see the lights of a farmhouse in the distance and decided the only thing to do was to leave his wife and children, ages two and four, in the van while he went for help. He was gone for three hours. She sat in the van, occasionally starting the engine and turning the heater on. But she was worried about using all the gas, so she never left the engine running for very long.

Finally the husband returned with a farmer on a tractor. They decided not to even try to get the van out, but to leave it until the morning. The whole family climbed on the tractor and got a ride to the farm. Then, they were driven home. It turned out they were only three kilometres from the main highway and then a 15-minute drive to their house.

The family was lucky it wasn't really cold or snowing. The next day they were able to get a tow truck to get the van out. After that, the woman bought a number of maps showing provincial highways and byways so this kind of adventure would not happen to them again.

1. a) How are lines of latitude and lines of longitude different?  
b) Copy the following degrees. Beside each degree state whether it represents latitude or longitude: 85°W, 85°S, 20°N, 20°E.
2. a) What is absolute location?  
b) What is relative location?  
c) Which example below shows relative location and which shows absolute location?

Example 1: 42°N 50°W

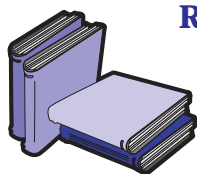
Example 2: 3 km south of the bridge

3. What does GPS stand for? How does it work?
4. a) What are the differences between physical features and cultural features?  
b) Copy the following locations and state whether they represent a physical or a cultural feature:

Lake Melville, Labrador; St. Anthony, Newfoundland; Folly Mountain, Nova Scotia; Moncton, New Brunswick; Stanhope Beach, Prince Edward Island.

5. a) I am going on a hike in Gros Morne National Park in Newfoundland. What kind of map should I use? Why?  
b) I am going to take the ferry from Nova Scotia to Prince Edward Island. What kind of map should I use? Why?  
c) I need to go to the Micmac Mall in Dartmouth. What kind of map should I use? Why?

## EXERCISE 1: CHAPTER REVIEW



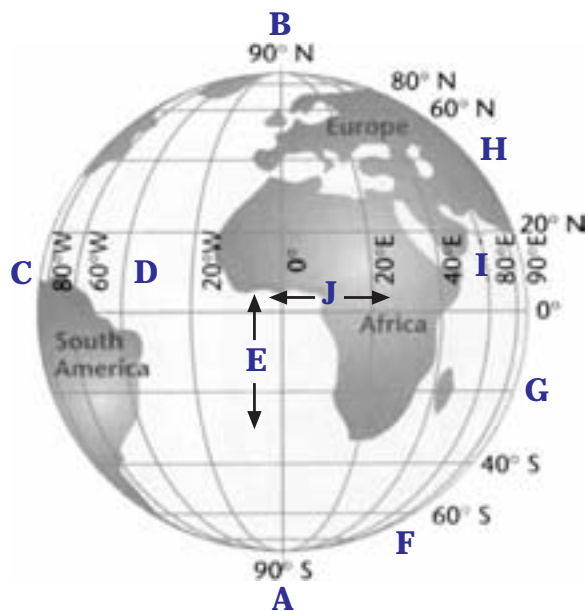
**Read** Chapter 1, pages 2-16 in your text and answer the following questions. If you need to check out the meaning of any words, look in the glossary on pages 291-294 of your text.



## EXERCISE 2: LATITUDE AND LONGITUDE



- Identify what the letters A - J represent on the map below. Use Figure 1.3 on page 3 in your text to help you.



- The following absolute locations are found on the world map on page 9 of this manual. Latitude is listed first. Identify the countries found at these locations.

- |               |               |
|---------------|---------------|
| a) 20°N 100°W | b) 22°N 79°W  |
| c) 8°S 145°E  | d) 53°N 2°W   |
| e) 23°S 135°E | f) 36°N 136°E |
| g) 30°N 110°E | h) 37°N 96°W  |
| i) 60°N 95°W  | j) 35°S 66°W  |

- The following absolute locations are found in Atlantic Canada. Using the map on page 4 of your text, identify the place that is nearest each location and give the name of the province.

- |              |              |
|--------------|--------------|
| a) 3°N 64°W  | b) 55°N 67°W |
| c) 51°N 55°W | d) 49°N 58°W |
| e) 46°N 60°W | f) 4°N 66°W  |
| g) 45°N 63°W | h) 46°N 66°W |
| i) 47°N 68°W | j) 46°N 63°W |

## EXERCISE 3: RELATIVE LOCATION

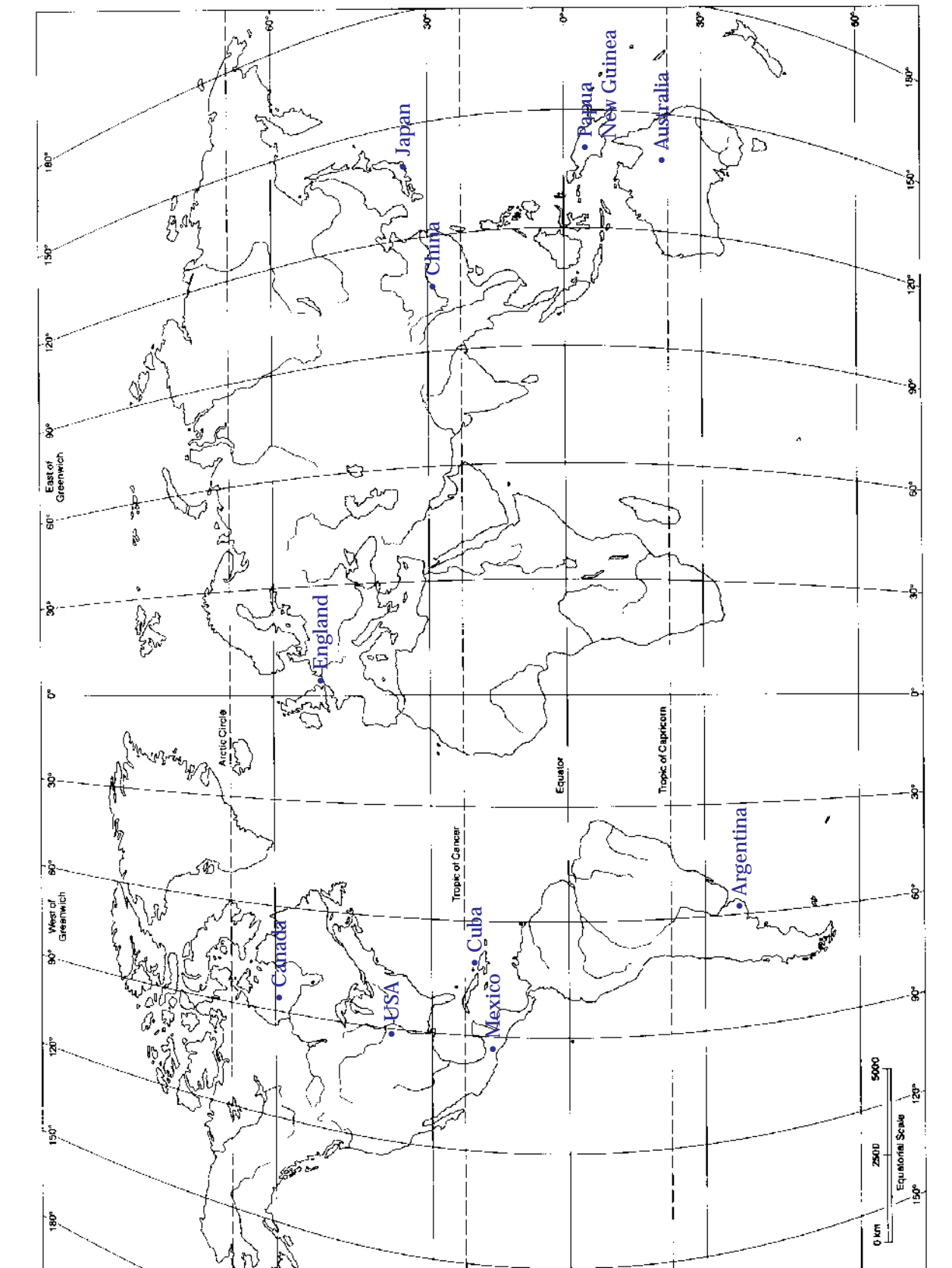


Using the map of North America on page 10 of this manual give a relative location for each of the following places.

- Mexico
- Bering Strait
- Baffin Island
- Cuba
- Gulf of St. Lawrence



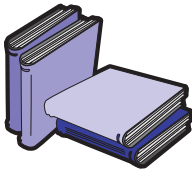
# ASSIGNMENT 1: EXERCISE 2.2—LATITUDE AND LONGITUDE



## ASSIGNMENT 1: EXERCISE 3: RELATIVE LOCATION



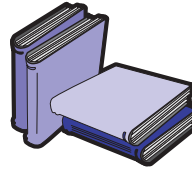
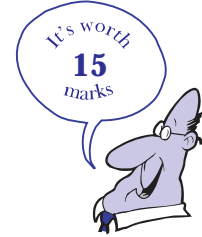
## EXERCISE 4: FINDING YOUR WAY WITH A TOPOGRAPHICAL MAP



**Read** pages 10-11 in your text. Using the topographical map on page 10 of the text, answer the following questions.

- Name or describe the physical feature at each of the following locations.
  - 900400
  - 920377
  - 873405
  - 884413
- Name or describe the cultural feature at each of the following locations.
  - 944399
  - 912393
  - 904364
  - 867388
- You are travelling by road from the crossroads at 903363 to Stanhope Beach at 923406. In which general direction would you travel?
  - If you travel the shortest possible route from the crossroads to Stanhope Beach, list **two** cultural features and **two** physical features you would see.
  - What is the name of the body of water beyond Stanhope Beach?
  - Give the 6-digit location number for the nearest campsite on the Stanhope Beach.

## EXERCISE 5: FINDING YOUR WAY USING STREET MAPS



**Read** pages 12-13 in your text. Using the street map of downtown Fredericton on page 12, answer the following questions.

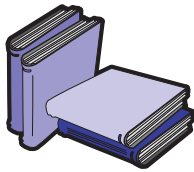
- You are staying at the University of New Brunswick Tourist Hotel. According to the street map what is the grid location (grid reference) for this hotel?
  - Write a statement to describe the relative location of this hotel.
- You are meeting a friend who is staying at the Carriage House Inn. Which street would you take to get to this hotel?
  - You wish to relax on “The Green” for an hour or so at the street map reference 7D. Where is this location on “The Green” relative to the Carriage House Inn and the St. John River?
  - If you were to look east across the river from this point, which park would you see?
- You then walk to the building designated on the street map by “C.” What is the name of this flat-roofed building?
  - Find this building on the photograph (page 13, Figure 1.17). What is the grid location on the photograph?
- From here you get a cab and go to Brunswick Street and then go along

Brunswick to the church at grid reference 14F in the photograph on page 13.

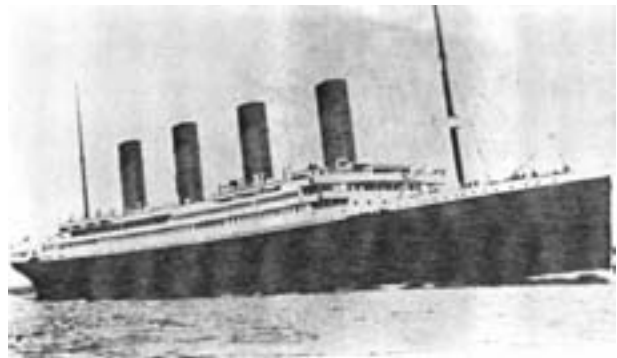
- a) What is the name of this church?
- b) What is its grid location on the street map?
- c) You then proceed towards Waterloo Row. What is the grid reference on the street map of the railway bridge in the photograph?
- d) The cab then takes a right on University to take you to your hotel. In which direction are you travelling now?

1. What part did technology play in locating and exploring the sunken Titanic?
2. Give the last known absolute position of the Titanic before it sank.
3. Describe the relative location of the Titanic after it sank.
4. The new technology can locate all kinds of things under the water.
  - a) What things do you think people are interested in finding?
  - b) What do people want to do with things that they find?
5. Write a 100-word letter to the editor of your daily newspaper. In the first paragraph, explain the problems you see with this new technology. In a second paragraph, discuss what controls, if any, should be placed on the technology and explain why.

## EXERCISE 6: FOCUS ON AN ISSUE: THE TITANIC



**Read** the case study, “Finding a Sunken Ship,” on pages 13-15 of your text and the article, “Undersea Scavengers,” on page 13 of this manual which discusses the ethics of underwater scavenging. Answer the following questions based on your reading.



**UNDERSEA SCAVENGERS  
A THREAT TO HISTORIC WRECKS**

by Stephen Thorne

RCMP in Nova Scotia are launching a campaign to deter divers from plundering shipwrecks after museum officials complained the province's underwater heritage is fast disappearing.

Police say the coastal-watch and public-information program could expand into a countrywide effort aimed at enforcing laws that have until now been largely ignored by officers and treasure-hunters alike.

"There's an escalation here and it's something that needs to be addressed," said RCMP Sgt. Wendel Ackerson. "That's what we're trying to do."

Museum officials estimate there are between 5,000 and 10,000 shipwrecks off Nova Scotia's coast, some predating the 1492 arrival of Christopher Columbus in America. Only about 200 have been plotted, many more are known to divers and dive groups who make a business plundering them.

More reliable gear, better search tools and the sheer number of divers have overrun dwindling government resources, turning coastal waters into scavengers' playgrounds, suggests Pierre Laframboise, a coast guard policy superintendent.

"The problem is getting bigger and bigger because technology is making everything accessible," said Laframboise, whose office determined the Titanic is not within Canada's jurisdiction. "Depth is not a limit any more."

Dive groups out of the United States in particular have even advertised scavenging opportunities off Nova Scotia, said RCMP Cpl. Phil Barrett.

Nova Scotia Museum officials went to the RCMP after a group called the Jersey Wreck Divers scavenged one of the last known marine casualties of the Second World War—a merchant vessel off Halifax called British Freedom.

They are believed to have taken the stern gun along with portholes and other artifacts from the torpedoed ship, which still stands upright in about 70 metres of water.

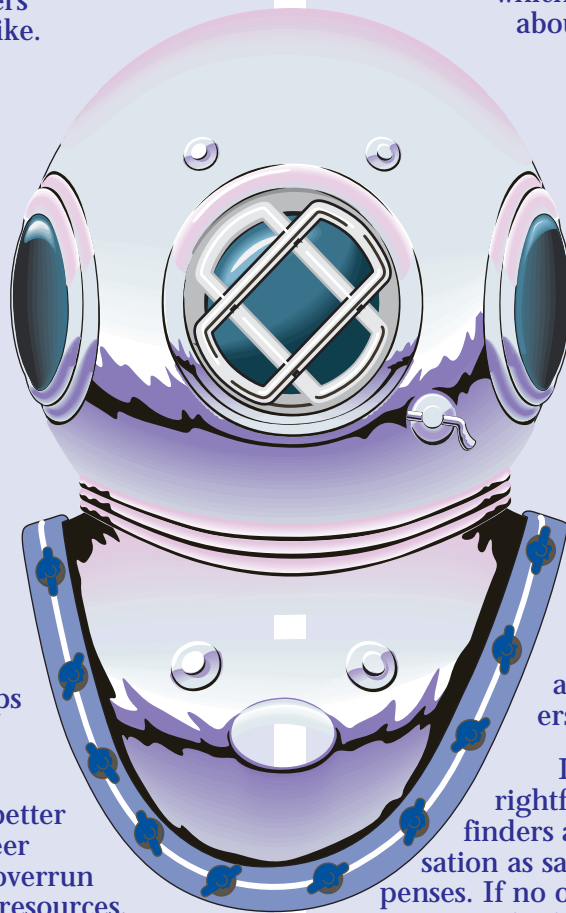
"I would have to say this was the straw that broke the camel's back," said Bob Ogilvie, the museum's special-places curator.

The law says such sites are not to be touched. If they are, anything—coins, cannonballs, crockpots—must be turned over to the coast guard's receiver of wrecks who determines ownership or whether they're of historical interest. There are about a dozen receivers in Canada.

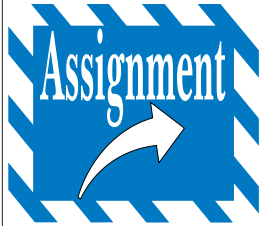
In cases where the rightful owners are found, finders are eligible for compensation as salvors, usually for expenses. If no owners are found after a year, non-antiquities like rowboats, may be destroyed or returned to the finder.

Items of historical or archeological interest may be turned over to Heritage Canada, which determines their monetary or other value. Countries of origin can have claims to such items and must compensate finders for expenses only.

Source: Courtesy of the Chronicle Herald and The Mail Star.







You can send Assignment 1 to your marker as soon as you are finished. For Assignment 1, send the following to your marker:

- Student Background Sheet
- Introductory exercise
- Exercise 1 - Chapter review
- Exercise 2 - Latitude and longitude
- Exercise 3 - Relative location
- Exercise 4 - Finding your way with a topographical map
- Exercise 5 - Finding your way using street maps
- Exercise 6 - Focus on an issue: The Titanic

**You can start Assignment 2 right away.**

## ASSIGNMENT 2: OUR NATURAL ENVIRONMENT

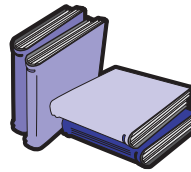
The land and the water have made the Atlantic provinces what they are today. When people first settled in the region, they couldn't change the land or the water. They had to work with them.

### PERSONAL ACCOUNT: THE THREE-HOUR CRUISE

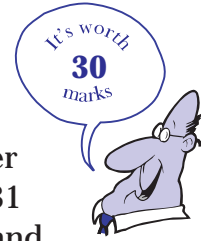
People have to respect the land and the water. Weather can change quickly and disasters don't take long to happen. A teacher tells the following story. He and his wife and another couple set out for a 'three hour sail' in a borrowed sailboat. They had done this many times before. On this particular occasion, the couples had arranged babysitters, driven to where the sailboat was anchored, and set sail. At the half-way point, they wanted to turn back, but the wind had picked up and changed direction. They found themselves going further and further from land.

After five hours, the babysitters became worried. Luckily, one of them happened to be the daughter of an RCMP officer. Once he found out where the sailboat had gone, he contacted the Canadian Coast Guard. The Coast Guard was able to find the sailboat and tow it back to where it had started, 12 hours late.

## EXERCISE 1: CHAPTER REVIEW



**Read** Chapter 2, pages 18-31 in your text and answer the following questions. If you need to check out the meaning of any words, look in the glossary on pages 291-294 of your text.



- Define these words:
  - region
  - physical distance
  - time distance
  - mountain
  - folding
  - fiord
- How large is Canada exactly?
  - How large are each of the Atlantic provinces exactly?
- Give **three** reasons why New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador are grouped together as Atlantic provinces.
- Who was Sir Sandford Fleming? What did he do that made him famous?
- What part of the Atlantic provinces is part of the Canadian Shield?
- Copy the chart on page 16 of this manual and define each of the terms.

<b>Waterforms in Atlantic Canada</b>	
<b>Water form</b>	<b>Definition</b>
river	
lake	
pond	
wetlands	
bogs	
fens	
swamps	
ocean	
gulf	
bay	

**EXERCISE 2:**  
**PHYSICAL FEATURES**



On the blank map of the Atlantic provinces on page 17 of this manual, locate and name the following physical features. Use the map on page 19 of your text to help you. There are more detailed maps of each of the provinces on pages 287-290 of your text, if you need them. You may need to draw

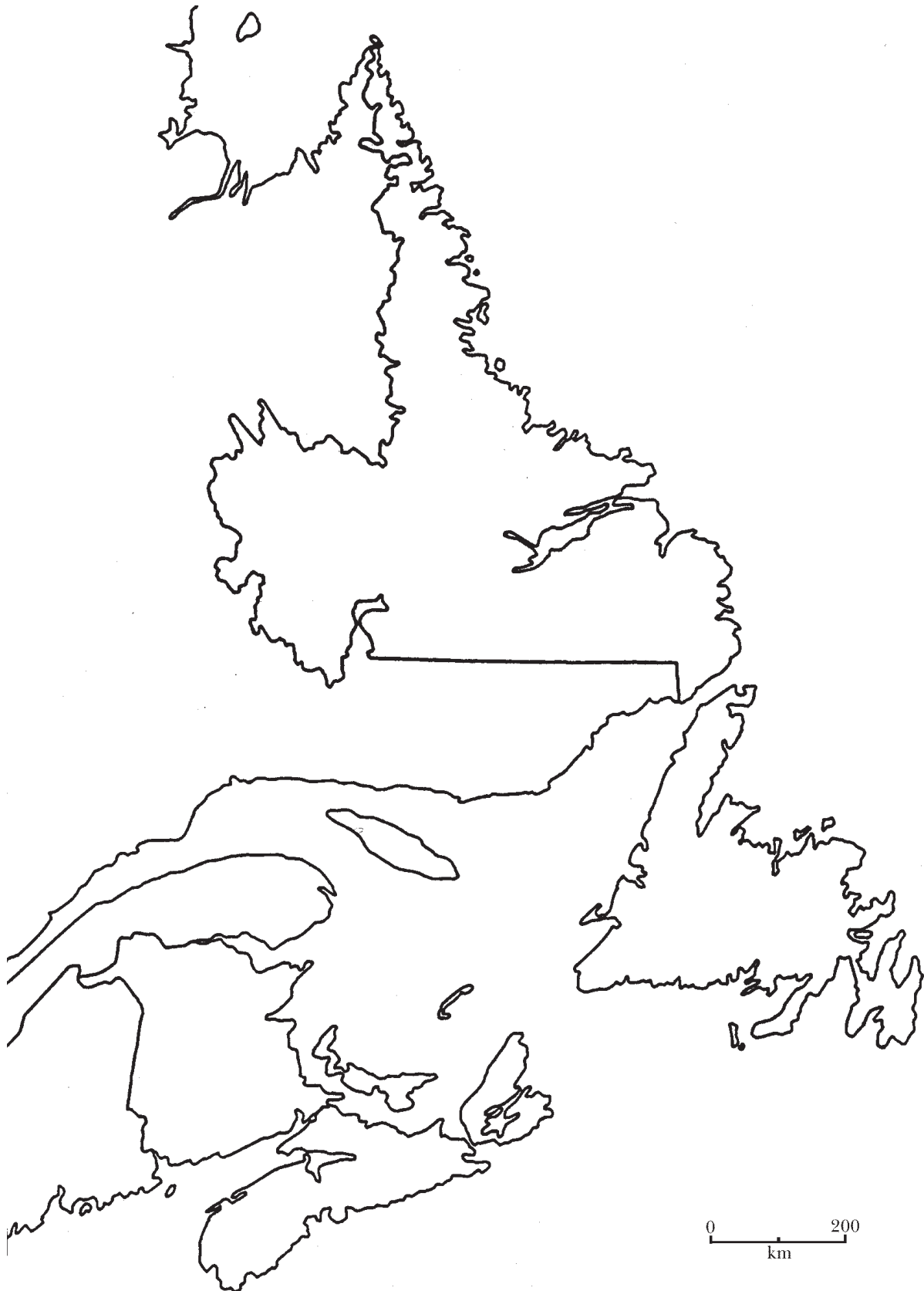
arrows to the locations if you don't have enough space to write the name.

- Cape Breton Highlands, Nova Scotia
- Lewis Hill, Newfoundland
- Mount Caubvick, Labrador
- Minas Basin, Nova Scotia
- Bay of Fundy, Nova Scotia
- Strait of Belle Isle



ASSIGNMENT 2: EXERCISE 2—PHYSICAL FEATURES

Tear out and send to your marker with Assignment 2





Chaleur Bay, New Brunswick  
 Lake Melville, Labrador  
 Malpeque Bay, Prince Edward Island  
 Northumberland Strait  
 Smallwood Reservoir, Labrador  
 Hillsborough Bay,  
 Prince Edward Island  
 Cabot Strait  
 Labrador Sea  
 Atlantic Ocean  
 Gulf of St. Lawrence  
 Mt. Carleton, New Brunswick  
 Miramichi Bay, New Brunswick  
 Egmont Bay, Prince Edward Island  
 Chignecto Bay

- Fredericton, New Brunswick to New Glasgow, Nova Scotia
- Liverpool, Nova Scotia to Corner Brook, Newfoundland

#### FOLLOW THESE INSTRUCTIONS:

Use a ruler to measure (in cm) the distance between the two points. Use the scale to calculate the distance in kilometres.

Eg. St. John's, Newfoundland to Sydney, Nova Scotia

measurement: 5cm, therefore distance  
 $= 5 \times 100 \text{ km} = 500 \text{ km}$

The distance from St. John's, Newfoundland to Sydney, Nova Scotia is 500 km approximately.

### EXERCISE 3: DISTANCES ON THE GROUND



The scale on the map on page 4 of your text shows that 1 cm on the map equals 100 km on the surface of the earth. Calculate the distance (in kilometres) between the following places:

- Labrador City, Newfoundland to Halifax, Nova Scotia
- Gander, Newfoundland to Corner Brook, Newfoundland
- Yarmouth, Nova Scotia to Summerside, Prince Edward Island

### EXERCISE 4: DISTANCE AND TIME



The earth is divided into 24 time zones based on the fact that the earth takes 24 hours to complete one full rotation on its axis. Since there are 360 degrees in a circle, the sun moves through 15 degrees of longitude in one hour. Therefore, each time zone is 15 degrees of longitude wide and extends from the north to the south poles.

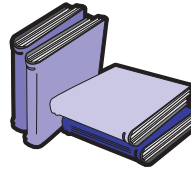
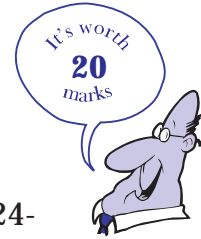
The time zone to the east of where you live is one hour ahead of your time, while the zone to the west is one hour behind. While time zones roughly follow lines of longitude, they sometimes make zigzags if it is more convenient to give a country,

province or city a common time. In a sense, a time zone map uses a grid pattern but only in one direction, namely East-West.

Look at the Time Zone Map of North America on page 21 of this manual and answer the following questions. You may have to look back to the map of North America on page 10 of this manual if you are not sure where some of the places are.

1. If it is 9:00 a.m. in Halifax, what time is it in:
  - a) Edmonton
  - b) Whitehorse
  - c) New York City
  - d) San Francisco
2. How many time zones are there in Canada?
3. Why is there a half hour time difference between Newfoundland and the Atlantic Time Zone when there is a full hour difference with other adjacent time zones?
4. Why were time zones invented?
5. When you travel 3500 kilometres from Halifax to Winnipeg, you pass through three time zones. When you travel a similar 3500 kilometres from Halifax to Havana, Cuba you change one time zone. Why is this so?

## EXERCISE 5: LANDFORMS IN ATLANTIC CANADA



**Read** pages 24-25 in your text

and the information on “The Appalachian Mountains” and “The Canadian

Shield” on page 22 of this manual. Answer the following questions.

1. Why are the Appalachian Mountains generally rounded in appearance?
2. a) According to Table 2.1 on page 24, which province has the highest point of land?  
b) Using the absolute location given in Table 2.1, locate this point on the map on page 19 in your text. Describe the relative location of the highest point of land given in Table 2.1.
3. Use the map on page 19 of your text to answer the following questions.
  - a) Lowlands are large low-lying areas of flat or gently rolling land. Describe the relative location of such an area in New Brunswick and Nova Scotia.
  - b) Which province in Atlantic Canada has the largest share of its area in the form of lowlands?
  - c) What is the elevation of the highest point of land in this province? (Refer to Table 2.1.)
4. a) On the blank map of Atlantic Canada on page 23 of this manual, shade in the area of Atlantic Canada that is part of the Canadian Shield

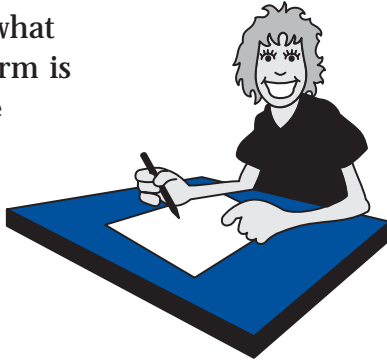
ASSIGNMENT 2: EXERCISE 4—DISTANCE AND TIME





with one colour and the area that is part of the Appalachian Mountains with another colour.

b) Using words, pictures and symbols on the map, show what each landform is like. Put the pictures or symbols on the correct location of the map. Put the words in the correct box on the reverse side.



### The Appalachian Mountains

The Appalachian Mountains stretch along the eastern side of North America. They run from the southern United States to Newfoundland. Millions of years ago, this was a mountain region. The mountains were formed by giant folds in the crust of the earth. Running water, winds, and glaciers scraped and wore down these mountains. The landscape gradually sank in places. Today, a series of flat uplands and low mountains are left.

Between these uplands are plains which were covered with glacial lakes at one time. These lakes left behind the rich soil found in areas such as Prince Edward Island and the Annapolis Valley in Nova Scotia.

In low areas, ocean water filled the deep grooves made by the glaciers. Ocean water also filled some lowlands between old mountain ranges. The Bay of Fundy and hundreds of inlets in Newfoundland were formed this way.

### The Canadian Shield

The Canadian Shield is the largest landform in Canada. It occupies most of the eastern parts of the northern half of North America. Labrador is the only part of Atlantic Canada that belongs to the Canadian Shield. The shield rocks were once mountains that existed many millions of years ago. These mountains were eroded by streams and rivers to form lowlands. Then the climate became colder and giant glaciers spread across the Canadian Shield. They covered much of North America.

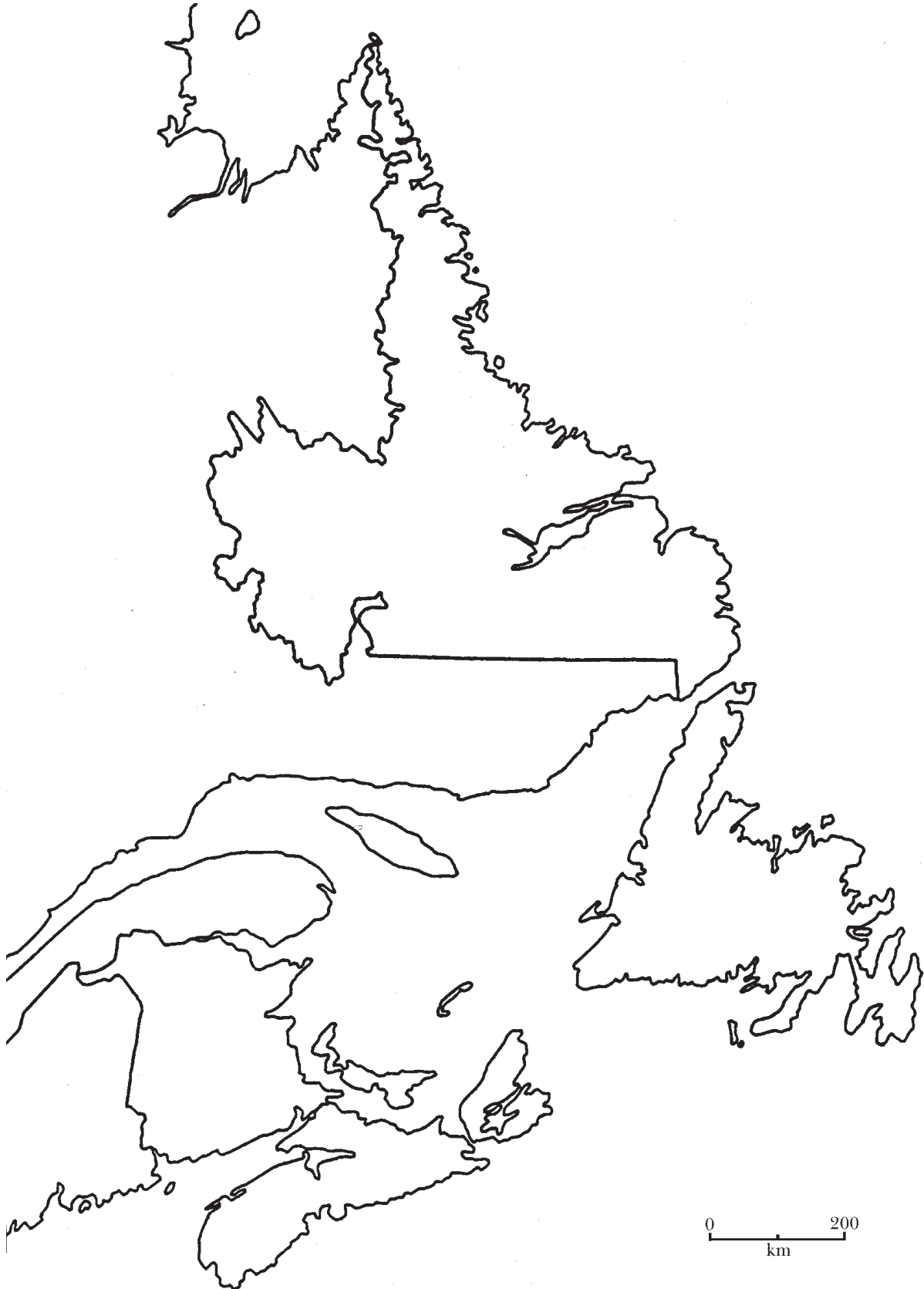
As the glaciers moved, they melted. They shaped the landscape. The glaciers wore down part of the land much like sandpaper on rough wood. Large areas of the landscape were covered with a thin layer of mud and rocks that the glaciers left behind. As the glaciers melted, water under them and in front of them carved valleys.

The action of the ice can be easily seen in some parts of the Canadian Shield. From the air you can see long, narrow lakes and ridges that show the direction that the ice once took. The soil is very thin, but some plants grow well here, such as fir and spruce.

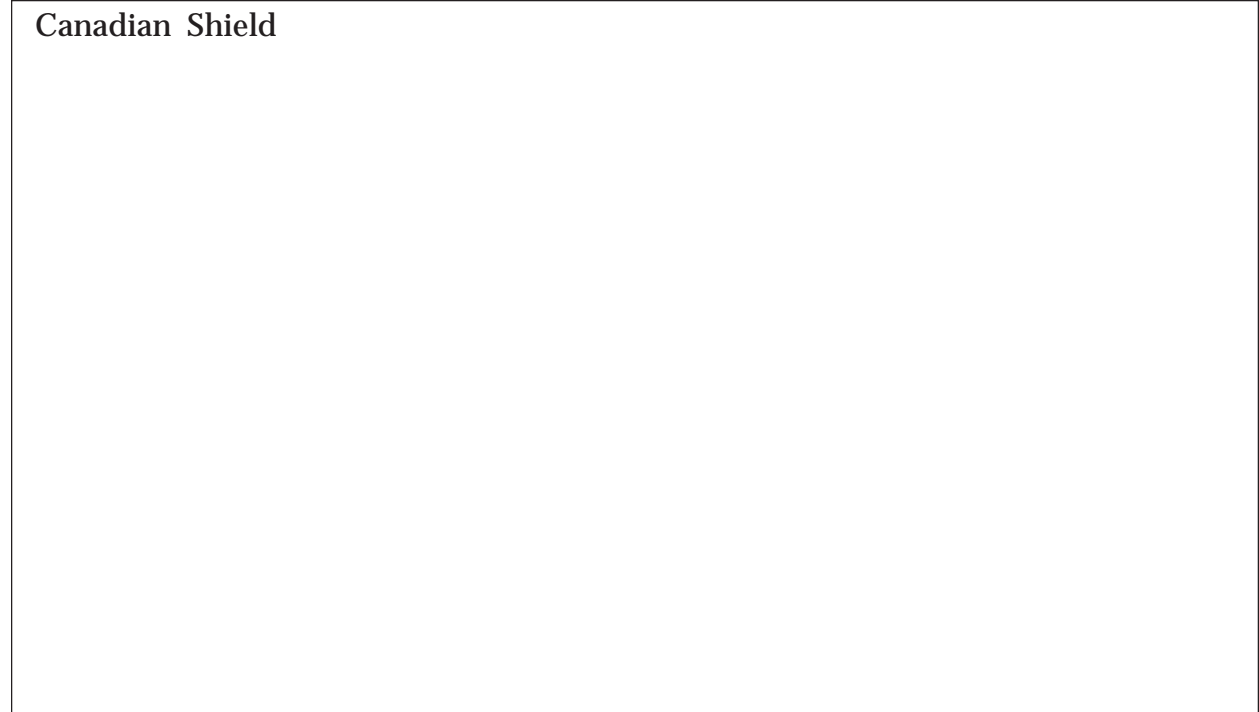
The Canadian Shield has thousands of lakes of different sizes and shapes. These lakes fill hollows carved in the rock by ice and melt water. The hollow now filled by Lake Ontario is about 230 metres deep. In the shallow lakes, plants have grown on the bottom, turning them into swamps. Streams and rivers twist and turn along valleys that were shaped by ice and melt-water. There are also many rapids and waterfalls.

ASSIGNMENT 2: EXERCISE 5—LANDFORMS IN ATLANTIC CANADA

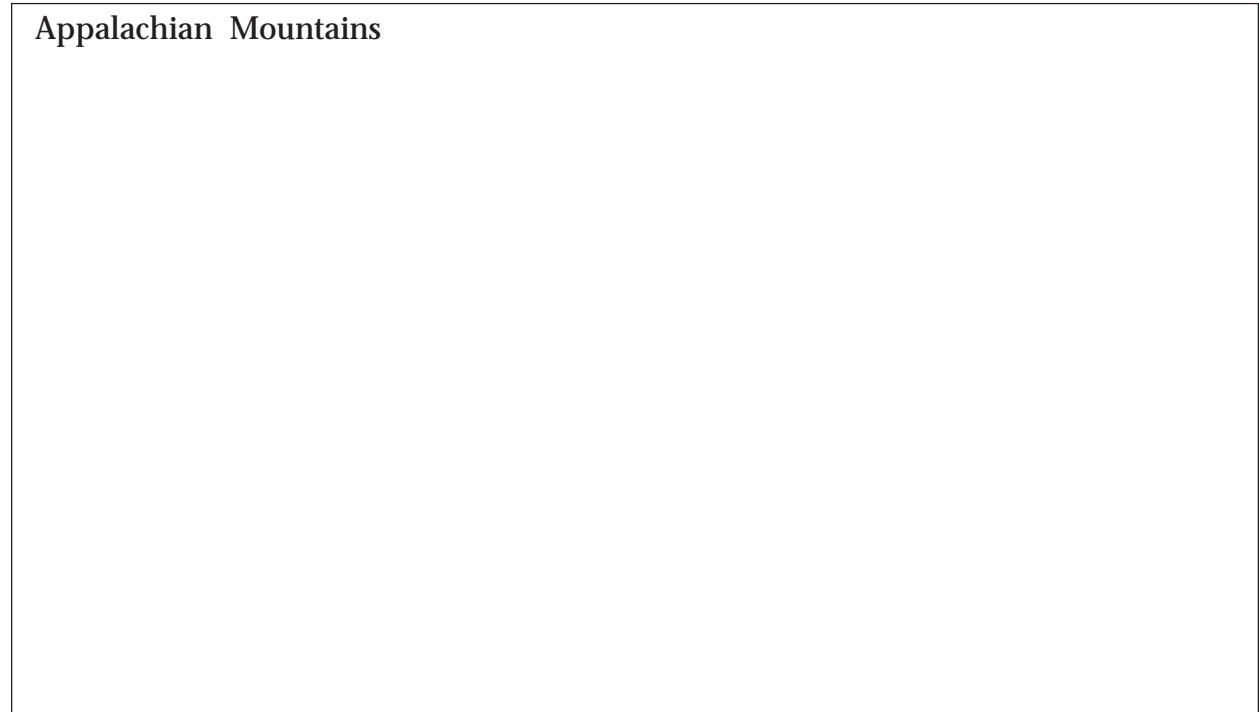
Tear out and send to your marker with Assignment 2



Canadian Shield



Appalachian Mountains



## EXERCISE 6: PEOPLE IN THEIR ENVIRONMENT

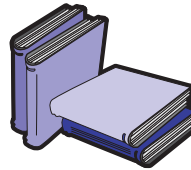


The natural environment has always influenced where people live, how they live, and what they do in an area. The natural environment includes mineral resources, landforms, water forms, soil, vegetation and climate.

Traditional cultures, in particular, are influenced by their natural environment. Look at the chart on page 30 of your text which shows the yearly activities of the people from Makkovik, Labrador. From the chart you can see that the Makkovik people spend their year in activities that relate to the seasonal weather and to the resources that are available from the land and sea.

Modern cultures too are influenced by their environments, but they have more technology to utilize the resources that are available. Halifax harbour is an example. Halifax is located on one of the world's best natural deep-sea harbours. The harbour is ice-free year round. It is 21 kilometres to the ocean, and closer to Europe than any other port on mainland North America.

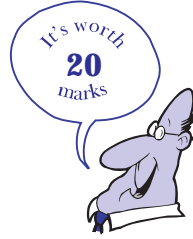
Halifax has developed its port facilities to take advantage of the natural assets of its harbour. The port has storage areas for cargo that is being loaded onto trucks and trains for markets in North America. It can also handle large container ships from all over the world. Container ships put all their cargo in large metal boxes called containers. Some of the containers are refrigerated so that frozen food can be transported. Over 2,000 ships call annually in the port of Halifax and it provides a significant economic boost to the area.



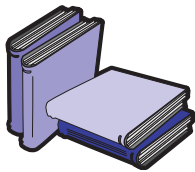
**Read** pages 30-31 in your text and answer the following questions.

1. Draw a pie (circular) chart that shows your family's annual cycle of activities. You may find it easier to divide the circle into four parts, one part for each season, rather than monthly.
2. How do your family's activities today differ from the traditional activities of a Makkovik family?
3. What does your chart reveal about your family's relationship with the natural environment?
4. Describe a natural resource in your area that has been developed so that it has a modern use. Draw a picture showing what the natural resource is and how it is being used now. If possible, send in a brochure or photograph which shows the resource.

## EXERCISE 7: FOCUS ON AN ISSUE— THE WETLANDS



Many environmentalists believe that wetlands should be protected by government legislation. Others believe that wetlands provide many economic opportunities and, if used properly, should regenerate themselves.



**Read** page 27 in your text and the article, “Wetlands” on pages 26-28 of this manual.

Assume that traces of gold have been found in a wetland area near your community. Mining engineers want to explore the area to see if there is enough gold to mine.

1. You want to support the plan, but environmentalists from all over the province oppose it. What arguments would you use to try to convince the environmentalists that the engineers should go ahead?
2. As an opponent to the plan, what steps could you take to encourage protection of the wetland?

### WETLANDS

Canada is famous for its many lakes and rivers, but travel folders seldom mention its marshes, swamps, and bogs or the many small ponds or sloughs that dot large areas of the country. These are called wetlands—a precious but threatened part of our heritage.

A wetland is simply any area of land that is covered with water for a part of the day or year. There are two classes of wetlands: freshwater and saltwater. The limits of freshwater wetlands are usually established in the spring, when water levels are highest because of melting snow and flooding. Summer droughts, evaporation, and nearby land absorbing the water, will gradually cause the areas to dry up, sometimes completely. But even if the area is wet for only a short time each year, it is still considered a wetland.

Saltwater wetlands, on the other hand, are usually caused by ocean tides. Some are flooded and dry up twice each day. Others are flooded only by particularly high tides that occur at less regular intervals.

#### WHAT GOOD ARE WETLANDS?

It’s easy to regard wetlands as mere wastelands, of little or no value. We don’t build houses or factories in swamps, bogs, or marshes, and we don’t plant wheat or many other crops on land submerged in water. Wetlands are generally unsuitable for boating, swimming—in fact, for most human activities.

So it’s not surprising that many people “reclaim” our wetlands, by draining them or filling them in. To do so is a serious mistake.

Wetlands act like giant sponges, soaking up rain and snowmelt and slowly releasing water in drier seasons. Thus,

they help to reduce floods and to ease the worst effects of drought. Draining ponds, sloughs, and marshes often lowers the water table and dries up wells. Wetlands also reduce soil erosion by checking or slowing the runoff from storms and thaws.

Without wetlands we would no longer have a ready supply of fresh drinking water. Much like our kidneys, wetlands filter the waters of our lakes, rivers, and streams, reducing pollution. The vegetation in wetlands removes phosphates and other plant nutrients washed in from the surrounding soil, thereby slowing down the growth of algae and aquatic weeds. This growth is a serious problem in some of Canada's major waterways where dead and decaying algae rob the deeper waters of their oxygen.

Wetlands are also the homes for at least some part of the year for many fish, birds, and other animals, meeting essential breeding, nesting, nursery, and feeding needs. Without wetlands, some wildlife species would disappear.

Wetlands contribute to the growth and economy of the country. Some of the smaller mammals, such as the beaver and muskrat, that dwell in wetlands are important to the fur trade, and the millions of game birds and fish reared in and around our wetlands support a growing recreation and tourist industry.

#### CREATURES LARGE AND SMALL

A wetland Who's Who would list many creatures, ranging in size from the micro-

scopic one-celled protozoa to the massive moose. Some are born and live out their entire lives in wetlands; others spend only part of each day or a part of their life there.

Wetlands are the whole world for many salamanders, snakes, turtles, and aquatic insects. On the other hand, many of our frogs, toads, and tree frogs breed in temporary ponds and marshes, but spend much of their adult life on the surrounding dry land. Fish, such as stickleback and pike, come to marshes to spawn and feed in the shallow waters.

Among the smaller mammals living around the marsh are shrews, lemmings, voles, muskrats, and beavers. Predators include mink, otters, bobcats, and the elusive cougar and grey fox.

But wetlands are especially a boon for birds. More than 100 species inhabit or make use of Canada's marshes, swamps, and sloughs. Some, like the Swamp Sparrow and Marsh Wren, nest there almost exclusively. Many millions of ducks, geese, gulls, and other waterfowl also nest, breed, and feed there along with numerous waders and shorebirds—herons, bitterns, rails, and sandpipers.

Kingfishers, owls, ospreys, and other predators feed in wetlands. Birds such as mallards and teals use wetlands while moulting because marshy areas provide excellent escape cover. Sandhill cranes, geese, and tundra swans stop over in marshes during migration, to rest and feed and to regain their strength.



## A THREATENED RESOURCE

The natural, reversible changes in wetlands may be almost insignificant compared with the disruption caused by human interference. Dredging a pond can make it unsuitable for birds that require shallow water. Draining or filling in wetlands permanently destroys entire communities of plants and wildlife. Burning off or cutting down surrounding weeds, brush, or other vegetation eliminates, at least temporarily, vital nesting places and escape cover. Building a highway through a coastal marsh or erecting a small dock at the marshy edge of a lake where you moor your rowboat is also damaging.

Air and water pollution are serious problems. Insecticides, weed killers, and industrial wastes take a heavy toll on plants, fish, and other wildlife.

This destruction is happening all across the country, as industry, commerce,

agriculture, and our appetite for “the good life” continue to swallow up our wetlands. When prospectors were interested in a northern Cape Breton wetland, Jim Campbells Barren, the struggle was between the mining companies and the environmentalists. In southwestern Ontario, the marshes bordering Lake St. Clair have shrunk to only a fraction of what they were. On the prairies, millions of hectares have been drained and put to the plough—not only destroying wildlife habitat, but frequently also lowering the water table. Everywhere bogs and other wetlands are being used as dumping sites for garbage and other refuse.

Naturalists, ecologists, and many other people are concerned about this trend. And millions more are realizing that this kind of “progress” threatens our world with impoverishment. Could we enjoy the truly good life in a land without wild places and without wildlife?

Source: <http://www.ec.gc.ca/cws-scf/hww-fap/wetlands/wetlands.html>



You can send Assignment 2 to your marker as soon as you are finished. For Assignment 2, send the following to your marker:

- Exercise 1 - Chapter review
- Exercise 2 - Physical features
- Exercise 3 - Distances on the ground
- Exercise 4 - Distance and time
- Exercise 5 - Landforms in Atlantic Canada
- Exercise 6 - People in their environment
- Exercise 7 - Focus on an issue: The Wetlands

**You can start Assignment 3 right away.**

## ASSIGNMENT 3: THE CHANGING WEATHER



Canadians often think and talk about the Atlantic provinces as if they all have the same weather. There are, however, some differences.

Everyone in Prince Edward Island lives within 20 kilometres of the ocean. The island is low and winds and storms move easily across the land. The province has some of the most changeable daily weather in the country.

In Newfoundland everyone lives within 100 kilometres of the ocean. The ocean waters keep temperatures mild. This means spring and summers are cool, and winters can be warm. The climate, however, is arctic-like in Labrador. Labrador is in the northern part of the province.

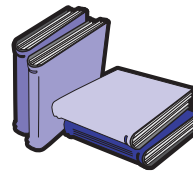
Nova Scotia is a peninsula that is almost surrounded by water. Temperatures in southern Nova Scotia can be the warmest in the region. The ocean affects the weather the same way in Nova Scotia as in Newfoundland.

Everyone in New Brunswick lives within 200 kilometres of the ocean. The climate, however, is different depending on where you live in the province. Air from central Canada blows over the northwest and central part of New Brunswick. Summers here are warm, and winters are cold. Yet the coasts of New Brunswick have mild temperatures like Nova Scotia.

The Atlantic provinces have heavy precipitation near their coasts. Precipita-

tion is lighter farther inland. Some of the foggiest parts of Canada are found in the Appalachian region. Fog is cloud at ground level. It is made up of tiny water drops.

### EXERCISE 1: CHAPTER REVIEW



**Read** Chapter 3, pages 33-47 in your text and answer the following questions. If you need to check out the

meaning of any words, look in the glossary on pages 291-294 of your text.

- What is condensation?
  - Describe **three** conditions that lead to condensation.
- What is the difference between high pressure and low pressure?
- What is the difference between climate and weather?
- Name **five** factors that influence the climate of Atlantic Canada and briefly explain how each factor affects climate.
- What weather instruments are used in each of the following locations: on land and sea? from the air? from space?
- Explain what a radiosonde is. How does it help weather experts?



## EXERCISE 2: FACTORS AFFECTING THE CLIMATE OF ATLANTIC CANADA



Different places in Atlantic Canada can have completely different weather on the same day. In January in Nova Scotia it can be sunny and above zero, while in Labrador it can be cloudy and -40 C. There are five main factors that affect climate in Atlantic Canada. Using the information on pages 38-40 in your text and the article “Sable Island” on pages 30-31 of this manual, compare the effects that the five climate factors have on the Labrador Coast and on Sable Island. Create a chart like the one below to organize your information.

Climate Factor	Labrador Coast	Sable Island
Latitude		
Air Masses		
Ocean Currents		
Proximity to Water		
Elevation		

### Sable Island

#### LOCATION

Not many people visit Sable Island, but it is known worldwide because of its unique geography and climate. Sable Island is a narrow, crescent-shaped, sandy island in the Atlantic Ocean. It lies 285 km offshore from Halifax. Its main features are two sand dune ridges that run parallel to each other more or less the length of the island (38 km). Lake Wallace occupies part of the low ground between the ridges. The island is only 1.5 km across at its widest point.

#### OCEAN CURRENTS AND SHIPPING

In the past and even today, many ships pass close to Sable Island, either on their way to the fishing banks in the area, or en route to Europe or North America. Elements of geography and climate have combined to make Sable Island a death-trap for ships for close to three centuries. More than 500 ships have gone aground on the island over the years, and it became known as the ‘graveyard of the Atlantic.’

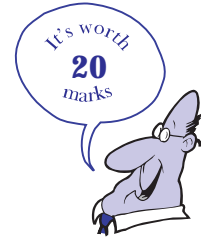
At Sable Island, the icy northern waters meet the warm Gulf Stream to produce swirling currents. Sable is in the centre of a whirlpool of currents as the Gulf Stream passes the island on its easterly course; when the great Arctic current reaches the Grand Banks it is deflected to the west. These conflicting currents are always present and are strong enough to carry a ship forward so swiftly that, before anyone is aware, it is upon the island. In the past, navigational miscalculations also contributed to the number of shipwrecks on Sable; for centuries the location of the island was inaccurately charted on the maps used by mariners.

At Sable Island, the movement of ocean currents not only distributes the heat received in any one place, it also brings together different types of water. Water may be fresh or salty; it may be cold or warm; it may be rich in nutrients; it may be polluted.

Off the Maritime coasts all these types of water are being mixed together. The St. Lawrence River dumps relatively cold, fresh, somewhat polluted water into the shallow Gulf of St. Lawrence. The Labrador current brings cold, clean, not very salty water from the northern latitudes. The Gulf Stream brings warm, salty and nutrient-rich water from its source in the Caribbean. In addition, nutrients are carried from the land by Maritime rivers and are added to the sea. These waters come together creating a unique environment which supports a varied and prolific fish stock.



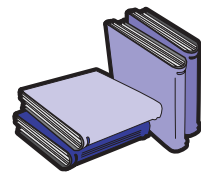
### EXERCISE 3: WORLD CLIMATE CHANGE



Most of us know something about the increasing threat of global warming, that our planet is getting warmer because more greenhouse gases are being released into our atmosphere. Greenhouse gases come mainly from our modern industrial practices: carbon dioxide is given off when we burn fossil fuels like coal, oil and natural gas, and when we cut and burn the rainforests; chlorofluocarbons (CFCs) are given off in the manufacture of refrigerants, cleaning solvents and plastic foam; and nitrous oxide is given off when fertilizers are overused in agriculture.

Canada is the world's second-highest greenhouse gas emitter on a per capita basis, partly because it is a large, sparsely populated cold-weather country. Not only do we burn fuel to stay warm, Canadians use a lot of fuel to transport people and goods.

In our own homes we all contribute to global warming in different ways through our waste of energy and our consumption of non-disposable products. Divide a piece of paper in half. On one half of the paper, make a poster or a collage showing how all of us contribute to global warming. On the other half of the paper, show what we can do to prevent global warming. **Read** page 41 in your text and take the "How Green are You?" test on pages 32 and 33 of this manual. It may give you some ideas for the exercise.





There's more to being green than recycling your newspapers and using unleaded fuel. Here's your chance to test your ecological intelligence. The answers

are at the end of the test. Do not send the quiz to your marker.

1. Which uses the most energy?
  - a) fridge
  - b) stove
  - c) washing machine
2. Which uses the most water in your home?
  - a) toilet
  - b) bath
  - c) washing machine
  - d) dishwasher
3. Which of these statements about 'ozone-friendly' (non-CFC) aerosol cans is true?
  - a) they contain no ozone-damaging propellants
  - b) they are biodegradable
  - c) they are an energy-intensive form of packaging
  - d) they are recyclable
4. Only one of the following is **not** associated with the destruction of the Amazon rainforest. Which is it?
  - a) greedy Brazilian land barons
  - b) paper consumption in the West
  - c) soft drink cans
  - d) the greenhouse effect
5. Which is the best way of improving the quality of drinking water?
  - a) buying bottled water
  - b) collecting water in a barrel
  - c) lobbying for a dual water supply system
  - d) boiling tap water
6. Which of the following statements about disposable diapers is true?
  - a) they damage the ozone layer during production
  - b) they are biodegradable
  - c) they are the US's second biggest refuse problem
7. Which is the best way to dispose of waste?
  - a) burning waste in incinerators to generate energy
  - b) recycling
  - c) composting
8. Which is the most environmentally-friendly form of energy?
  - a) nuclear power
  - b) coal
  - c) gas
  - d) oil
9. Which of the following does **not** pose a risk to wildlife?
  - a) discarded condoms
  - b) railways
  - c) tourist souvenirs
  - d) acid rain
10. Which one of these statements about plastic food wrap is **not** true?
  - a) it may cause cancer
  - b) it soaks into fatty foods like cheese and meat
  - c) it is less harmful at lower temperatures
  - d) it contains bacteria which can cause salmonella

## ANSWERS

1. b) The stove is one of the most energy-hungry machines in the house but gas is more efficient than electricity. Ask about the energy consumption of gadgets when you buy them.

2. a) The toilet uses 32% of the total water used in an average house. Baths and showers use 17% and dishwashers and washing machines use 12%.

3. c) Some non-CFC aerosol propellants still damage the ozone layer. The manufacture of aerosols consumes considerable resources. Refillable pump-action containers are preferable.

4. b) Only a negligible amount of paper used in the West comes from Amazon trees. But vast areas of tropical forest are destroyed to create grazing for cattle. Tropical forests are also destroyed to make way for hydro-electric plants to smelt bauxite—used in aluminum cans. The burning of wood contributes to the greenhouse effect.

5. c) Relying on bottled water encourages a wasteful trade. Besides the cost of fuel for transport there is the expense of packaging. There is no way of checking that bottled water is any cleaner than tap water. Rain is often too polluted to drink. Boiling tap water does nothing to remove harmful pesticide traces. But a dual water supply would mean that poorer quality water would be used for wasteful practices like using garden sprinklers and washing the car.

6. c) Even disposable diapers which claim to be biodegradable are virtually indestructible. It is increasingly difficult to find sufficient land to bury them. Unbleached diapers should not be called ozone-friendly as bleached diapers do not damage the ozone layer either. A growing trend in North America is a laundry

service that washes and dries cloth diapers daily.

7. b) Incinerators sound like a good option but they release highly toxic gases. If the temperature is below 900 degrees centigrade—as it often is—plastics, pesticides and wood preservatives can give off dioxins which are among the most poisonous substances known. Composting is good, though it's a lot of work because the rubbish has to be sorted manually into biodegradable and non-biodegradable material. But recycling at least saves on raw material.

8. c) Gas appliances are usually more energy efficient and cheaper to run than electric ones. Gas also produces less pollutants than oil or coal—which generate large amounts of sulphur and nitrogen dioxide: these end up as acid rain. Nuclear power carries the risk of accidents and produces radioactive waste which will pollute the environment for centuries. There is no totally green energy source. If we want to help the environment we must be sparing with what we use and campaign for renewable energy sources—like wave, wind and solar power—to be invested in and taken more seriously.

9. b) The increased use of condoms due to the spread of AIDS is causing farmers to worry that discarded condoms could choke their grazing bulls. Tourist souvenirs like furs, ivory, animal skins, coral necklaces and shells can devastate wildlife. Acid rain is killing the fish in lakes across the world. While trains kill some creatures that cross the line, they preserve a wild habitat for many more creatures in the area surrounding the tracks and help minimize the much greater destruction caused by cars and roads.

10. d) Plastic food wrap does not cause salmonella.

Source: The New Internationalist, January 1990.

## EXERCISE 4: FOCUS ON AN ISSUE: THE FUTURE OF SABLE ISLAND



Different groups have different ideas about how Sable Island should develop. Read the articles, “Plans for Sable Island” and “Wild Horses of Sable Island” on pages 34 through 36 of this manual. Consider everything you have read in this unit about Sable Island when you answer the following questions.

1. In approximately 100-150 words discuss how you see the future of Sable Island. Would it be a good tourist destination? (Remember to consider the climatic features you identified in Exercise 2 and the fact that Sable Island gets approximately 115 days of fog per year and that hurricanes periodically pass through the area.) Do you think the island should be left alone? What effects will tourism and resource development have on the wildlife? Can tourism be controlled?
2. Draw a picture or create a collage, showing your vision of Sable Island 50 years from now.



### Plans for Sable Island

Today the island is closed to the public. Animal life includes fish, seals, whales, seabirds, and other marine life. Sable Island is the only place in the world where the Ipswich Sparrow builds its nest. The island is most famous for its herd of wild horses, which has roamed the sandy shores for 250 years.

Oil and natural gas have been discovered off Sable Island and an offshore drilling project and underwater pipeline are underway. There has been a lot of public concern expressed over what environmental effects the drilling and pipeline project will have on the fishing industry and the marine life in the area.

The only people who presently live on the island year round are those who work at a weather station. The Canadian government is planning to close the weather station in the near future, and replace it with an automated station. Many people want to keep the weather station open. They are concerned that there may be technical problems with the automated system and that the many mariners who frequent the area will not be able to rely on the weather data. As a result, people are trying to keep the manned weather station open.

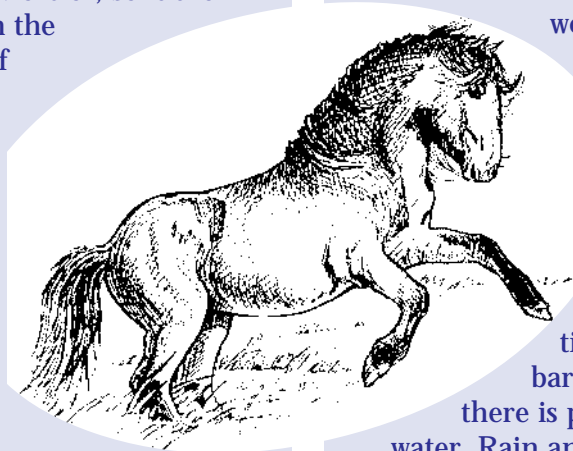
There has also been talk that Sable Island should be open for tourists who will have to pay to visit. They will only be allowed in certain areas, under supervision, and for short periods of time. The tourists would have to come and go by boat.

### The Wild Horses of Sable Island

Sable Island is renowned for its shipwrecks and wild horses. About 200 wild horses roam the island, free as the wind.

#### HOW THE HORSES CAME TO SABLE - THE TRUE STORY

There is no evidence for the popular belief that Sable's horses arrived as survivors of a shipwreck. A Boston clergyman, the Reverend Andrew Le Mercier, sent the first horses to graze on the island in 1737. Most of them were probably stolen by privateers and fishermen. Then about 1760, Boston merchant and shipowner Thomas Hancock shipped 60 horses to Sable. These horses survived and became wild.



But whose horses were they? Between 1755 and 1763, Acadians were deported from Nova Scotia by British authorities. Hancock was paid to transport Acadians to the American colonies. The Acadians were forced to abandon all their livestock. It appears that Hancock helped himself to some of their horses and put them to pasture on Sable Island.

#### WHAT KIND OF HORSE?

The first horses brought to Acadia in 1632 came from France. These animals were a mixture of several breeds. They were interbred with stallions such as Fresians and Andalusians from the New England colonies. Then during the deportation of the Acadians, some of their horses were shipped to Sable Island and became wild. They are horses, not ponies.

From 1801-1940, Sable horses were regularly rounded up and sold in Halifax, but prices were low. A variety of stallions were sent to breed with the wild horses, in hopes of increasing the price—Morgan Horses and Canadians for example. The most 'improved' horses tended to be the ones chosen for the round-up, so the horses left on the island were more like the original stock. Sable Island horses still look like the horses of the early Acadian settlers. They are rugged animals well suited to life on the island.

#### SURVIVING SAND AND WIND

#### FOOD AND WATER

Despite harsh conditions caused by wind, sand, waves and isolation, Sable Island is not barren. Most of the time there is plenty of food and fresh water. Rain and snow seeping into the sand form an underground reservoir. Small ponds appear at a few sites between stable sand dunes. The dunes give enough shelter from the wind for a thick green carpet of Marram (Beach Grass) to grow, along with scattered areas of heath.

The horses grow fat grazing on lush summer plants. Summer fat is the key to surviving hard winters, because the dried winter leaves of Marram are not very nourishing. In some seasons the horses must struggle to find a source of drinking water. Horses can sense where to dig for water in a dry season.

#### TEETH AND SAND

Imagine chewing sand every day. The horses take in a lot of sand as they graze. The hard quartz sand grains wear down their teeth. Horse teeth keep growing for about six years, so tooth wear is not a

problem at first. But older horses may starve when their worn teeth cannot grind the tough Marram.

#### SOCIAL BEHAVIOR

Sable's horses were once domestic. As they became wild, they went back to their natural social system of small herds, each defended by a stallion.

A herd consists of about six animals—one stallion, several mares and their young. Bachelor males sometimes tag along, or may form their own herds. Each herd has a home range of about three square km. Family herds avoid each other, even at shared water holes. There are 40 to 50 herds on the island.

One of the mares, older and more experienced, usually leads the herd to good food or shelter. Stallions must constantly defend their mares and their breeding rights by threatening other mares. This may lead to fierce fights. Most young are born in May or June, after nearly a year in the womb, and will nurse for 10 months.

When bad winters bring snow and freezing rain, the senior mare huddles the herd close together for warmth. The horses grow thick woolly coats and find some protection in the hollows between the sand dunes.

#### DEATH

Death from natural causes prevents the island from becoming over-populated. The pattern of population change tends to be rapid growth interrupted by periodic crashes. After several mild winters, the population increases, but many of the old, weak or very young animals will die during the next hard winter. Nutrients from the dead horses enrich the soil, encouraging a lush grow of Marram.

#### THE HORSES WERE SAVED BY CHILDREN

*Daily News*      *May 1960*

#### Sable Island Ponies Destined for Dog Food

In May 1960 headlines like this startled Canadians. The government's Crown Assets Disposal Corporation had offered all the Sable Island horses for sale. At the time, people misunderstood the natural population cycles and appearance of the rugged little horses. They were believed to be "stunted" from inbreeding and lack of good grass—this was wrong. For a while, hay was air-dropped on the island but the horses did not eat much of it. So it was thought the best thing to do was to sell the horses to someone who would take them off the island before they all starved to death, and use them for something functional like dog food or glue.

Many children wrote letters to the Prime Minister. Because of these letters, the horses were saved. On June 2, 1960, Prime Minister Diefenbaker intervened and protected the horses from all human interference. Children all over North America thanked him for allowing the horses to be "free as the wind."

The horses are still protected. By the Sable Island Regulations, part of the Canada Shipping Act, written permission is required for anyone "feeding, interfering with, or otherwise having anything to do with the horses on the island." The wild horses of Sable Island survive without human help, as they have for the last 230 years.

Source: Nova Scotia Museum, Department of Education and Culture.



You can send Assignment 3 to your marker as soon as you are finished. For Assignment 3, send the following to your marker:

- Exercise 1 - Chapter review
- Exercise 2 - Factors affecting the climate of Atlantic Canada
- Exercise 3 - World climate change
- Exercise 4 - Focus on an issue: The future of Sable Island

**You can start Assignment 4 right away.**

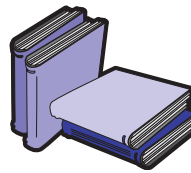


## ASSIGNMENT 4: A PLACE TO LIVE

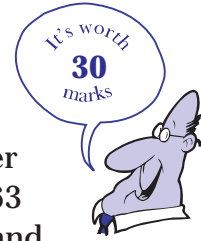
On page 49 of your text there is a picture showing what Atlantic Canada would look like if you were an astronaut looking down from space on a clear night. As you can see, most of the people of Atlantic Canada live around the coast, with smaller numbers living inland.

People choose to live in Atlantic Canada for a variety of reasons. For some, their roots are here as their parents, grandparents and great-grandparents have always been here. Others come for the scenery and the slower pace of living. Still others come for specific jobs, then grow to love the area and they stay on making it their home. Many Atlantic Canadians find they have to leave to look for work. But every holiday and family occasion, they are back, enjoying their families, the lifestyle and the scenery.

## EXERCISE 1: CHAPTER REVIEW

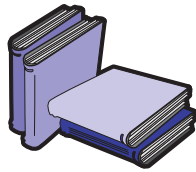


**Read** Chapter 4, pages 49-63 in your text and answer the following questions. If you need to check out the meaning of any words, look in the glossary on pages 291-294 of your text.



1. Explain population density.
2. How has rural push and urban pull affected the rural areas?
3. Define outmigration.
4. a) There are **two** theories about the origin of Aboriginal people in Atlantic Canada. Briefly explain both theories.  
b) Often early explorers and settlers refused to learn survival skills from the native people. Why?
5. When did England gain control of the Atlantic region? Who did she take it from?
6. Why did the British tell the Acadians to take an oath of allegiance to Britain in 1749?
7. Give **three** reasons why immigrants from England, Scotland, Wales and Ireland came to Canada.
8. Wave 3 of the migration of people of African descent happened in the early 1800s. Describe why people of African descent came to Canada at this time.

## EXERCISE 2: POPULATION PATTERNS



**Read** pages 50-52 in your text and answer the following questions.

1. Copy Table 4.1 on page 50. Add a third column which shows the physical area of each province in km<sup>2</sup> (Figure 2.3, page 21). Underneath the chart, list **two** facts that surprised you about the population patterns of the Atlantic provinces.
2. Table 4.2 on page 51 shows the urban-rural population in Atlantic Canada in 1991.
  - a) Rank the four Atlantic provinces according to **percentage** of urban population from highest population to lowest.
3.
  - a) Copy and complete the chart below (Provinces of Destination), showing the first three provinces to which the most Atlantic Canadians move.
  - b) Did the first choice surprise you? Why or why not?
4. Interview an older couple to find out where their children and grandchildren live. In 50 words, explain where the older couple lives, where their children live and why each lives where they do.

<b>Provinces of Destination</b>			
	First Choice	Second Choice	Third Choice
Newfoundland & Labrador			
Prince Edward Island			
Nova Scotia			
New Brunswick			

### EXERCISE 3: URBANIZATION



Throughout Canada and other parts of the world, large numbers of people have been leaving rural areas and going to urban centres. Urbanization and rural depopulation has been happening for different reasons. There are usually more work opportunities in urban centres, and people move from rural areas looking for work. Many people want to live closer to schools, hospitals, stores, and cultural and recreational facilities.

There are serious consequences when large numbers of people move from one area to another. In rural areas, when people start to leave, schools, stores and hospitals are forced to close. If businesses are no longer there, local governments can't collect as much tax. They then can't afford to keep libraries and recreational programs going, or maintain roads, sewage and other services. As services deteriorate, more people and businesses decide to leave, house prices go down, and even more services are cut: the rural area suffers more and more.

On the other side, as cities grow larger, so do the problems. If there is not enough housing for people, or if the housing is too expensive, then more people share what is available causing overcrowding. Some people find themselves living on the streets because they are unable to afford what is available.

There are also problems with garbage and waste disposal, and other services such as roads and public transportation. City planners design services for the number of people they think will live there. When those numbers increase rapidly, then the systems cannot handle the increase.

Unfortunately, not all the people who go to the cities find work. There might not be jobs, or they might not have the skills needed for the available jobs. When this happens, people find themselves with few options. Some return to their rural homes if they can; others stay in the cities, accepting social services and handouts from food banks and hoping that things will get better; still others resort to crime.

1. What are the advantages and disadvantages of living in an urban community?
2. If you live in a rural community: Would you like to live in a large city? What changes in your life would be necessary? If you live in an urban community: Would you like to live in a rural community? What changes in your life would be necessary?



**PERSONAL ACCOUNT:**  
LIVING IN THE COUNTRY

When we first moved to Atlantic Canada, we had to decide whether we wanted to live in the country or in the city. For us, it was not a difficult decision. Houses in the city were expensive, and the ones we liked, we couldn't afford. So we found what we liked in the country. It takes about 15 minutes to drive to town. Most of the people who live in our area work in town so there's always a ride if you need one.

However, we are experiencing some of the problems of country living. Our teenage children are heavily involved in town activities. We need two cars. They are expensive to run. The roads are treacherous in the winter. Our television reception consists of two fuzzy channels. In the summer it sometimes feels like our place turns into a hotel, with non-stop visitors from away wanting to come for the quiet and the ocean.

But we have adapted. We have studded tires and we encourage our children to get their driver's licences as soon as possible so they can drive themselves. The garden is lovely; we have two dogs who can explore freely; we are minutes away from the beach where we can walk for miles.

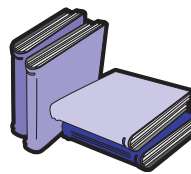


## EXERCISE 4: ROOTS OF OUR POPULATION

### ABORIGINAL PEOPLES

Native peoples such as the Mi'kmaq, Maliseet and Beothuk lived in Atlantic Canada before the Europeans arrived. These Native peoples fished and hunted deer, bears, moose, caribou, seals, porpoises and whales. They hunted with tools such as bows, arrows, traps and snares. They fished using hooks, nets and snares. The Maliseet also grew some crops.

Throughout the year, the Native peoples in the region moved to where the animals could be found. They travelled using birchbark canoes in the summer, and snowshoes, sleds and toboggans in the winter. The size of their villages changed with the seasons. The villages were usually largest in the summer.



**Read** pages 55-56 in your text and answer the following questions.

- Copy and complete the following sentences using information from your text. All the words are found at the end of the exercise.



Early settlement by Aboriginal people took place in the following areas:

- the most southerly part of the Atlantic region by the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

- North of the St. Lawrence River in the barren lands of the Quebec/Labrador peninsula by the \_\_\_\_\_.
- the island of Newfoundland by the \_\_\_\_\_.

These areas were settled first after the great ice sheets \_\_\_\_\_ and \_\_\_\_\_ re-established itself. These areas had a more favourable \_\_\_\_\_ and vegetation as well as abundant \_\_\_\_\_ resources, supporting more people than areas farther \_\_\_\_\_.

Settlement of the \_\_\_\_\_ coast and movement to the south occurred among people of the \_\_\_\_\_ culture who are the \_\_\_\_\_ of today's Labrador \_\_\_\_\_.

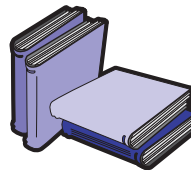
Settlement occurred along \_\_\_\_\_ and \_\_\_\_\_. When \_\_\_\_\_ was made with the Europeans, many First Nations people were exposed to European \_\_\_\_\_ and died. The Beothuk people became \_\_\_\_\_.

Today, many First Nations' people live on \_\_\_\_\_ which are usually found on their traditional areas of settlement.

Words to be used:

Thule	Innu
rivers	climate
Labrador	coasts
Mi'kmaq	contact
fish	reserves
ancestors	Beothuk
Maliseet	melted
game	Inuit
diseases	extinct
inland	Passamaquoddy

THE ACADIANS



**Read** page 58 in your text as well as the information on “The Deportation” below. Answer the following question.

**THE DEPORTATION**

When the British and the French began fighting again in 1755, the British decided that the Acadians had to take an oath of allegiance. If they didn't take it, the British felt that the Acadians could not be trusted and that they would have to move. The Acadians did not want to support the British or the French. They wanted to remain neutral.

So the deportation of the Acadians began. It caused misery to many families. In the summer and fall of 1755, British troops rounded up over 7000 Acadians. In every Acadian community around the Bay of Fundy, the soldiers burned Acadian homes. The Acadians were made prisoners of the British and pushed onto ships. They were taken to the American colonies. Many families were separated and some Acadians died on the voyage.

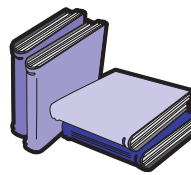
Some Acadians managed to escape to French territory. Some hid in the woods but many were caught and sent off to the American colonies. By 1763, when the Seven Years' War between Britain and France ended, a few Acadians were still hiding in the woods of Atlantic Canada. Gradually, many returned to start new lives in new communities. Their original land had been taken by the English settlers.

2. Look at the picture on page 58 which shows the expulsion of the Acadians at Fort Amherst. Imagine you are one of the Acadians in the picture. There are six children in the family, three boys and three girls. You are the 15-year old son. You find yourself separated from your family. Either write an account of what happens to you in a diary form **or** draw a picture showing what you decide to do.



Write a conversation between a husband and a wife who see land for the first time in weeks and wonder if they've made the right decision in coming.

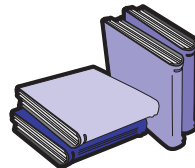
AFRICAN-CANADIAN COMMUNITIES



**Read** page 61 in your text as well as "Black History in Atlantic Canada" on page 44 of this manual. Answer the following question.

SETTLERS OF BRITISH ORIGIN

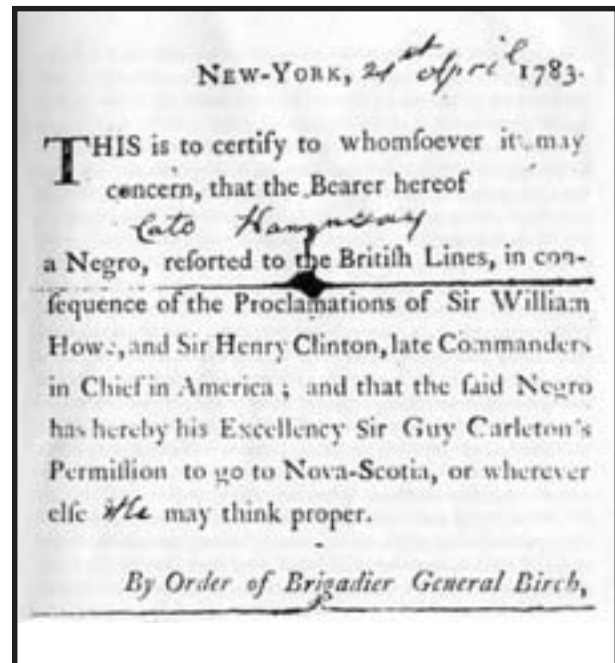
The journey across the Atlantic was a very difficult one. The conditions on the ships were sometimes dreadful, especially as many of the passengers were already sick and malnourished when they set out on their journey. **Read** pages 59-60 in your text and answer the following question.



4. Imagine you are David George. Write a letter to a friend in South Carolina, in which you describe your experiences in Nova Scotia.



3. Imagine what it was like for many of these immigrants who travelled from Britain to Atlantic Canada in sailing boats.



*Documents like this one were issued by the British to loyal Blacks at war's end, and served as a passport to Canada.*

Black Cultural Centre

**BLACK HISTORY IN ATLANTIC CANADA**

Black people have lived in Canada for 400 years. Some Black people came as slaves, but most have been free men and women who came in search of dreams.

There were never a great many slaves in New France—or later when the colony passed into British hands—certainly nowhere near the number there were in the United States or the Caribbean. However, it is known that Black slaves were among the skilled workers who built Halifax.

In the 1750s and 1760s, free and slave Blacks arrived in Nova Scotia from the New England colonies. They came as pioneer settlers taking advantage of the lands that had been taken from the Acadians after they had been expelled.

The first large-scale influx of Black people into Canada occurred after the American War of Independence. In the 1780s, over 3000 Black Loyalists and 1200 Black slaves left the United States to live in the Atlantic provinces. They were part of a mass migration of Loyalists who had sided with the British during the war. For their loyalty, they were promised farmland and provisions to start a new life. They received far less than they were promised; some received nothing at all. In 1792, about 1200 Black Loyalists sailed out of Halifax, bound for Sierra Leone in West Africa and in search of a better life.

A second wave of Black immigration occurred in 1796 when hundreds of Blacks were deported by the British from Jamaica. Known as the Maroons, they were the descendants of runaway slaves who had lived for generations in the hills of Jamaica and fought fiercely to avoid being captured. The Maroons helped build the Halifax Citadel and formed their own militia unit. By 1800, most of the Maroons had left for Sierra Leone.

After the War of 1812, about 2000 Blacks came to Nova Scotia and New Brunswick as refugees, seeking protection from American slavery. This was the third wave of Black migration to Atlantic Canada. Many found life difficult. They had been promised the same rewards as the whites who had remained loyal to

Britain: free land and three years of food rations. Few got land and their food only lasted for three months. They were not allowed to vote or have access to the law courts. Often, they were forced to take low-paying jobs. Some got discouraged and left, but those who remained formed the basis of the Black community in the Atlantic provinces. About 30,000 Blacks in total went to other parts of Canada in the 1800s to escape slavery in the United States.

The fourth wave of Black immigration happened in the late 19th and early 20th century as sailors and other workers arrived in Atlantic Canada. Canadian immigration laws made it difficult for Blacks to enter Canada. Restrictions based on race were not lifted until the 1960s. Since then thousands of Blacks have come to Canada.

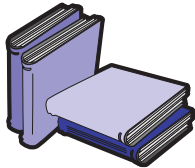
**WAVE 1 LOYALIST: DAVID GEORGE**

David George was one of the founders of the first Black church in America in 1773, the Silver Bluff Baptist Church in South Carolina. George arrived in Halifax in 1782, but he found there were very few Blacks to whom he could minister. In 1783 he moved to Shelburne where he found a large following of Blacks. But he also faced the distrust and hostility of many whites who were still slave owners and who were not accustomed to being preached to by a Black person. Unemployment, food shortages and pioneering problems also inflamed racial sentiments amongst the new settlers.

David George first organized camp meetings in the woods in Shelburne bordering between the white and black settlements. Initially he drew a congregation from both camps. Then, in 1784, there were racial riots: his chapel was entered and he was beaten and driven into a nearby swamp. He took shelter in Birchtown for about six months, where he baptized and preached in private homes. He returned to Shelburne later that year, only to find that his former meeting-house had been turned into a tavern.

From Shelburne, David George went on a preaching tour which took him to Liverpool, Saint John and Fredericton. He is credited with founding six churches (Shelburne, Birchtown, Ragged Islands, Saint John, Preston and Halifax).

## EXERCISE 5: FOCUS ON AN ISSUE: IMMIGRATION IN THE TWENTIETH CENTURY



**Read** page 63 in your text, as well as “Personal Account of a War Bride” and “A Glimpse into the Past” on page 46 of this manual.

Look at Figure 4.20 on page 63 and keep in mind:

- ✓ The average number of immigrants per year to the Atlantic provinces declined between 1976-1985, compared with the average between 1946-1955.
- ✓ Immigrants from Europe declined from about 80 percent of the total in 1946-1955 to about 35 percent of the total between 1976-1985.
- ✓ Immigrants came to the Atlantic provinces from more regions of the world between 1976-1985. Large numbers came from South Asia, Southeast Asia and parts of Latin America.
- ✓ Many countries of the world continue to battle civil wars, religious wars and other forms of hostility. Refugees and immigrants will continue to look for safety, security and a new life in countries other than their own.

Talk to (interview) a person who is either a recent immigrant to Atlantic Canada, or one who has been here for a long time. Write a one-page report describing this person’s experiences as a new immigrant to Canada. Use the following questions as a guide when interviewing the person and writing the report.

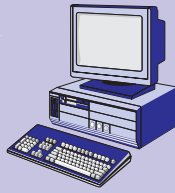
- Where were you born? Where did you get your education?
- When did you come to Canada? How old were you when you came?
- Why did you come to Canada?
- In what community did you first settle? Did you like it? In how many communities have you lived?
- Why did you pick Atlantic Canada to finally settle?
- Did you have trouble finding work? If so, why?
- What do you like about Canada? What don’t you like about Canada?





**PERSONAL ACCOUNT:****BARBARA CAMPBELL: WAR BRIDE**

(Personal stories about immigrants arriving on Pier 21 in Halifax, Nova Scotia can be found on the internet: <http://pier21.ns.ca/stories/>)



The Queen Frederika, a Greek ocean liner departed Rotterdam December 2, 1957 with Canadian personnel and their families. Recently married to Terrence H. Campbell and with a one-year old daughter Elizabeth M. Campbell, I placed all my trust in the hands of my husband, the people of Canada and God when I boarded the ship.

My heart was full of excitement and hope for a great future in Canada and a romantic crossing. However, barely past the English Channel, I discovered that I was a terrible sailor in the mounting waves due to an ocean storm. I managed to eat the first meal on board as well as the last meal (both were spaghetti); in between I lay on my bunk deep in the belly of this huge ship and agonized over my frequent ill feelings and the daily drill of closing off sections of the ship in the event of an emergency. I was sure I would go down with the ship. My husband was busy taking care of our daughter who also became ill which resulted in an infection that later became very infected and left a scar on her upper leg to this day.

Land insight, I instantaneously felt better. I dressed, ate the last meal served on board ship and prepared myself for the reception of my in-laws at the dock. It was a grey day and the shoreline of Halifax was unattractive; we docked at Pier 21, a huge, dark building busting at the seams, it appeared, with people. My in-laws waited; they were happy to have their son back in Canada and also happy to welcome their grandchild, and yes, I too was welcomed. It was some time before they could drive us to their home because of Immigration and Customs procedures. The sheer number of passengers appeared like a nightmare, but officials and volunteers

kept things moving and us relatively calm and happy. I could endure almost anything now that I was finally on solid ground.

It's been years since that voyage. I raised my family of six children while learning to speak English, attended University, competed in table tennis championships, worked in the fashion industry and joined the multicultural movement.

### A GLIMPSE INTO THE PAST PIER 21: WELCOME TO CANADA

Thousands of Canadians know Pier 21 in Halifax. This is the pier (dock) where immigrants from around the world landed. From 1928 to 1971, nearly 1.5 million people used this pier. Many were greeted by relatives. Others were met by groups who could help them. These groups included the Red Cross, Salvation Army, Knights of Columbus, Jewish Immigrant Society and church people.

During World War II, Pier 21 became part of Canadian history:

- 368,000 soldiers left from the pier to fight in Europe. Many never returned.
- 3,000 children from England landed here. They were sent to Canada because of fear that England would be invaded by Germany.

After World War II, 50,000 war brides who were from overseas and married to Canadian servicemen and their 22,000 children landed at Pier 21 to join their husbands. The pier was also used by 100,000 people who came to Canada after losing their homes or families because of the war.

What the numbers mean:

- 1.5 million people would fill the Sky Dome in Toronto 30 times.
- 368,000 soldiers would fill Montreal's Olympic Stadium more than eight times.
- 3,000 children would fill more than 100 classrooms.

## EXERCISE 6: FINAL UNIT ACTIVITY



On the map of the Atlantic provinces found on page 49 of this manual, plot the following information from each of the assignments.

### Assignment 1

- the four Atlantic provinces and their capital cities
- the communities found at these absolute locations: 54°N 67°W, 49°N 58°W, 44°N 66°W

### Assignment 2

- shade in all areas above 700m with a light brown colour
- shade in all areas below 200m with a light green colour

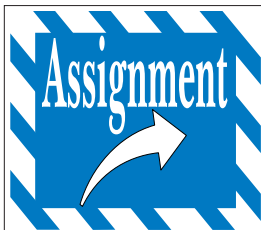
- locate and name these physical features: Voisey's Bay, Cabot Strait, Lewis Hill, Hillsborough Bay, Bras d'or Lakes, Mt. Carleton, Chignecto Bay, Strait of Belle Isle

### Assignment 3

- draw in the three main ocean currents that affect the Atlantic provinces
- draw in Sable Island in its correct location

### Assignment 4

- draw four boxes on the back of your map. Use each box to give information about a specific culture that has been important to the development of the Atlantic provinces. Give each box a title.



You can send Assignment 4 to your marker as soon as you are finished. For Assignment 4, send the following to your marker:

- Exercise 1 - Chapter review
- Exercise 2 - Population patterns
- Exercise 3 - Urbanization
- Exercise 4 - Roots of our population
- Exercise 5 - Focus on an issue: Immigration in the twentieth century
- Exercise 6 - Final unit activity

**You can start Unit 2 right away.**



ASSIGNMENT 4: EXERCISE 6—FINAL UNIT ACTIVITY

Tear out and send to your marker with Assignment 4

