> **SS6G5 The student will locate selected features of Canada.**
>
> a. Locate on a world and regional political-physical map: the St. Lawrence River, Hudson Bay, Atlantic Ocean, Pacific Ocean, the Great Lakes, Canadian Shield, and Rocky Mountains.

LOCATING PHYSICAL FEATURES OF CANADA

In order to learn more about Canada, start by learning its location. Look at the map that follows and put your finger on the United States. Move your finger north, and you'll land in Canada! From Canada's point of view, its entire southern border is with the United States. Notice the three oceans around Canada. The Atlantic Ocean is on the east. The Pacific Ocean is on the west. To the north is the **Arctic Ocean**. **Hudson Bay** extends far into Canada and connects to the Atlantic Ocean. Along the western border is the U.S. state of Alaska.

Canada has many rivers. One of the most important is the **St. Lawrence River**. It stretches from Lake Ontario to the Gulf of St. Lawrence on the Atlantic side of the country. Look on the map and find the eastern point of Lake Ontario. Follow the river eastward, and you will pass Montreal and Quebec City before reaching the Gulf of St. Lawrence. This river was important to Canada's history because it allowed explorers to travel deep into North America by water. It is an important natural resource today as a source of water and as a trade route.

Canada is home to many lakes. The **Great Lakes** form part of the border with the United States. Lake Superior, Lake Huron, Lake Erie, and Lake Ontario are split between the United States and Canada. Lake Michigan is entirely within the United States.

The **Canadian Shield** covers a large part of eastern and central Canada. It has ancient rock just below and sometimes sticking out of the soil. The area is known for its thin, rocky soil and rough, rolling landscape. This region has many lakes and rivers and is rich in minerals.

On the west, the **Rocky Mountains** are an impressive feature. These mountains stretch over 3,000 miles, from British Columbia in Canada to New Mexico in the United States. Mount Robson is the tallest peak in the Canadian Rockies at nearly 13,000 feet.

Study each of the landforms and features that were mentioned and learn their locations on the map. Knowing the location of important places will help you better understand the people that live in those places.

Canada
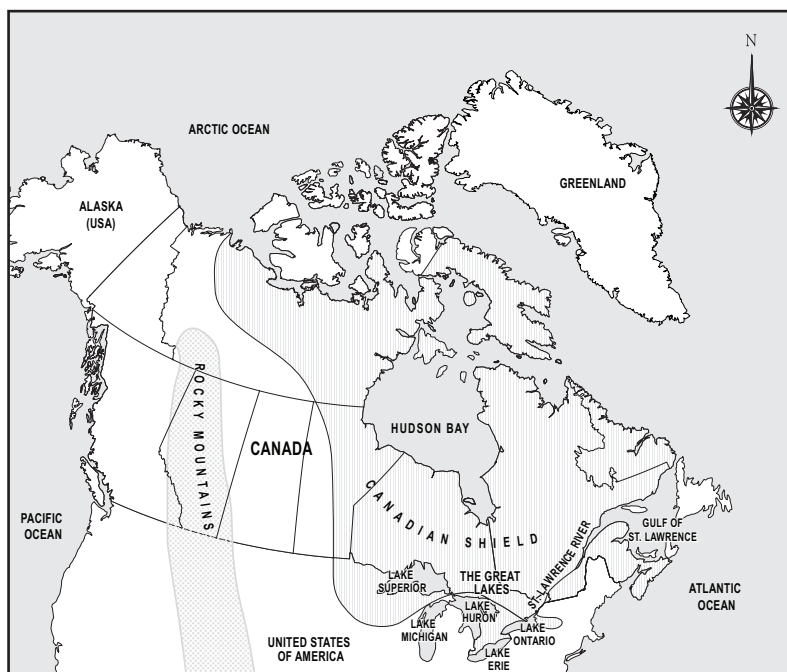
Use the information in the passage and the following map to answer questions 73-76.

____73. **Which is marked with a "1" on the map?**
   A. Hudson Bay
   B. Pacific Ocean
   C. Lake Superior
   D. Atlantic Ocean

____74. **Which would be found near the "3" on the map?**
   A. Lake Huron
   B. Canadian Shield
   C. Rocky Mountains
   D. St. Lawrence River

____75. **Which number is closest to the St. Lawrence River?**
   A. 2
   B. 3
   C. 6
   D. 7

____76. **Which would be found near the "7" on the map?**
   A. Lake Huron
   B. Canadian Shield
   C. Rocky Mountains
   D. St. Lawrence River

____77. **Which borders Canada?**
   A. Cuba
   B. Mexico
   C. Panama
   D. United States

____78. **Which area is known for its rolling, rocky land covering eastern and central Canada?**
   A. Lake Huron
   B. Canadian Shield
   C. Rocky Mountains
   D. St. Lawrence River

LOCATION OF CANADA

Canada is the largest country in the Western Hemisphere in land area. It is the second-largest country by land area in the entire world. Its southern border stretches across the northern United States. It is bounded by three oceans: the Atlantic on the east, the Arctic on the north, and the Pacific to the west. Alaska forms part of Canada's western border. From a polar point of view, the country is in an important position between the United States and Russia.

The population of Canada, about 33 million, is small compared to its land area. Mexico has about three times the number of people of Canada. The United States has about nine times the number of people of Canada. Most Canadians live on the southern border with the United States. About 90 percent of Canadians live within 100 miles of the border with the United States. Most of these live toward the east and central parts of the country.

Most Canadians live in cities or towns. Only about 20 percent of the people live in rural areas. Just over half of the population lives in one of four zones. The **Golden Horseshoe** zone lies around the southern end of Lake Ontario and includes Toronto. About one-fourth of all Canadians live in this zone. Another one-fourth of Canadians live in the three areas of Montréal, British Columbia's Victoria region and southern Vancouver Island, and the Calgary-Edmonton area.

The Great Lakes and the St. Lawrence River provide important trade routes into central Canada from the Atlantic Ocean. Excellent railroads and highways carry goods shipped to either coast. There are nine major seaports that help the country to trade with other countries around the world.

____79. **Which country is the second largest in the world in land area?**
  A. Alaska
  B. Russia
  C. Canada
  D. United States

____80. **Which statement is true about where people in Canada live?**
  A. They mostly live in rural areas.
  B. Most people live in the Toronto area.
  C. They live north of Ontario and Quebec.
  D. Most Canadians live within 100 miles of the U.S. border.

____81. **Which statement best describes Canada's population?**
  A. Mexico has a smaller population than Canada.
  B. The United States has a smaller population than Canada.
  C. Canada has a large population compared to the size of its land area.
  D. Canada has a small population compared to the size of its land area.

LATIN AMERICA AND CANADA

CLIMATE OF CANADA

Although Canada is a large country, the climate of the country keeps most of its people living in just a few areas. Most of the southeastern part of Canada has a humid continental climate. This zone is between the subtropical climate to the south and the subarctic climate in the north. It has warm to hot summers and cold winters. There can be up to 60 inches of precipitation a year. Snowfall can exceed 100 inches a year in some parts of eastern Canada. The climate in the southern and central parts of the country allows for a long growing season. Canada's central plains are important source of canola, wheat, and other grains.

The area along the Pacific coast has a temperate climate. The ocean cools the region in summer and keeps it warmer in winter. This region can get over 100 inches of rain a year. Most of this precipitation comes in winter.

Moving northward, Canada becomes much colder. Few Canadians live in the northern regions for this reason. The subarctic and arctic regions of Canada have long, cold winters and short, cool summers. It's possible to have temperatures below freezing even in the summer.

_____82. **What climate feature keeps most Canadians living in the southern part of their country?**
A. The south has over 100 inches of rain a year.
B. The south has over 100 inches of snow a year.
C. The north has very little precipitation each year.
D. The north has very cold winters and cool summers.

_____83. **Which part of Canada has subarctic and arctic climates?**
A. east
B. west
C. north
D. south

_____84. **The humid continental climate that covers a large part of Canada helps the country with which type of business?**
A fishing
B. mining
C. farming
D. shipping

NATURAL RESOURCES OF CANADA

Canadians have a country rich in **natural resources** (gifts of nature). Some of the most important of these resources are iron ore, nickel, zinc, copper, gold, lead, molybdenum, potash, diamonds, and silver. The large number of rivers and lakes are an excellent source of fish, fresh water, and hydroelectric power. Good soil allows farmers to grow crops for the people of Canada with enough left over to trade with other countries. The forests are a major natural resource along with abundant wildlife. Coal, oil, and natural gas are in large supply as well. Canadians have enough of these energy resources to supply their needs and sell the rest to other countries.

Because many of the natural resources of Canada are found in remote areas, Canadians are spread across their country. Small communities are found across Canada where mining and farming are important. Workers are needed to fish in rivers and at sea. Goods from these types of businesses are shipped by rail or highway to the larger cities for trade with other parts of Canada and the world.

_____85. **Which are important natural resources of Canada?**
A. coal, oil, water
B. oil, timber, workers
C. fish, timber, railroads
D. highways, natural gas, wildlife

_____86. **Why do Canadians live all across their large country?**
A. They do not like living so close to one another.
B. Many of their natural resources are in remote areas.
C. Cities have most of the natural resources they need to live.
D. Natural resources of Canada are mostly within 100 miles of the U.S. border.

_____87. **What types of communities are usually found in areas where mining and farming are important?**
A. large cities
B. campgrounds
C. fishing villages
D. small communities

_____88. **Why is it good for Canada that it has enough oil and natural gas to sell?**
A. It can help other countries that don't have these resources.
B. Canadians don't need as much oil and natural gas as people in other countries do.
C. It can supply its own energy needs and doesn't have to depend on other countries.
D. Canadians use more oil and natural gas than people in other countries but it costs them less.

> **SS6G6 The student will explain the impact of location, climate, distribution of natural resources, and population distribution on Canada.**
> b. Describe how Canada's location, climate, and natural resources impact trade.

HOW CANADA'S LOCATION, CLIMATE, AND NATURAL RESOURCES IMPACT TRADE

Canada's location in the world helps it to be a leader in world trade. Canada is uniquely located on three oceans: the Arctic, the Atlantic, and the Pacific. This gives the country wonderful opportunities to trade with both Europe and Asia. From a polar point of view, the vast country of Russia is nearby. When sea lanes are open, travel across the Arctic Ocean is possible. Canada has nine major ports and numerous smaller ones. These ports allow goods to be shipped into and out of Canada easily without having to travel through other countries. Canada's rivers help traders as well. The St. Lawrence River served as a highway for early European explorers. Today, the Great Lakes and St. Lawrence Seaway network allow goods to be shipped to and from the central part of Canada to the Atlantic Ocean. A major benefit for Canada is its location north of the United States. The two countries share over 3,000 miles of border. Trade across this long border is relatively easy, and Canadian businesses depend on easy trade of their goods and services to make their businesses successful. About 80 percent of Canada's exports come to the United States.

The climate of Canada helps the country trade with other countries. Though much of the northern part of the country has a rough, cold climate, the southern part is good for farming. A long growing season and good rainfall helps Canada produce canola, wheat, and other grains in large quantities. These are exported to other countries and traded for goods and services that are not available in Canada. Even though the climate overall is colder than the United States, it is not so harsh that trade cannot take place in the winter. An excellent system of highways, railroads, and air transportation has been built and adapted to the colder climate.

Canada's natural resources are very important to its ability to trade with other countries. Canada sells oil and natural gas, fish, agricultural products, and timber to other countries. Electricity is made at hydroelectric power plants along Canada's rivers. Extra energy not needed by Canadians is sold to the United States. About 5 percent of the land in Canada is arable. However, because there is so much land, that 5 percent is actually a large amount of land. The rich soil helps to produce valuable crops consumed in Canada and traded to other countries.

_____**89. Which condition makes it easy for Canada to trade with the United States?**
    A. The countries share a border over 3,000 miles long.
    B. Canada has easy access to seven major ports on three oceans.
    C. The countries have abundant natural resources and a long growing season.
    D. Canada has many natural resources and goods that are not available in the United States.

_____**90. Which geophysical area is most important to help businesses in central Canada move goods to countries in Europe?**
    A. the Canadian Shield
    B. the Rocky Mountains
    C. the ports on the Pacific Ocean
    D. the Great Lakes and the St. Lawrence Seaway

____91. **Why is timber an important natural resource for export by Canadian businesses?**
   A. There are more trees available than the Canadians can use themselves.
   B. There are fewer trees in Canadian forests than in most forests of the world.
   C. Many countries in the world trade with Brazil to get the timber that they need.
   D. Many countries in the Western Hemisphere trade only with Latin American countries.

____92. **How are Canadians able to produce enough food for their own use and still have food to sell to other countries when only 5 percent of the land is arable?**
   A. Canadians do not eat as much food as other people.
   B. Canadians buy most of their food from other countries.
   C. Canada is a very large country, so 5 percent arable land is quite a lot of land.
   D. Canada has lots of technology that they use to grow more crops on a small amount of land.

Use the graph to answer questions 93-96.

Annual Climatology
Vancouver, Canada
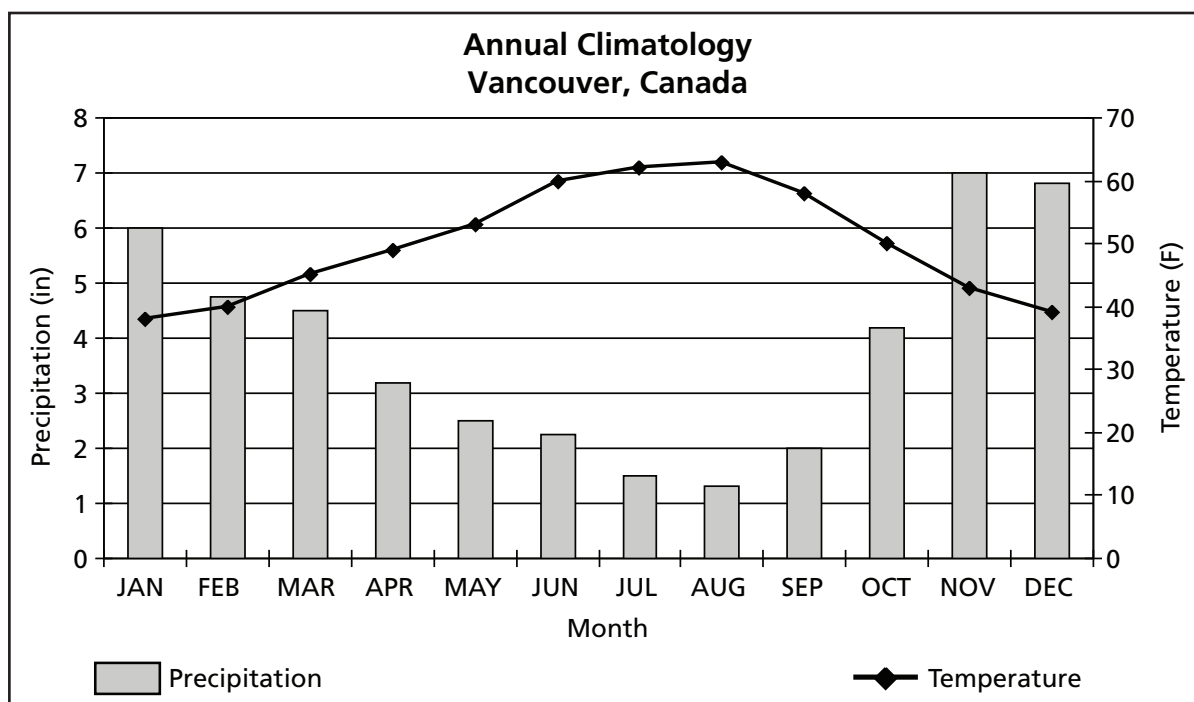
____93. **What month is usually the driest in Vancouver, Canada?**
   A. April
   B. August
   C. January
   D. November

____94. **What month is usually the coldest in Vancouver, Canada?**
   A. April
   B. August
   C. January
   D. November

____95. **About how many inches of precipitation does Vancouver have in January?**

    A. 4

    B. 6

    C. 40

    D. 60

____96. **Which sentence BEST summarizes the information in the graph?**

    A. Vancouver is hottest and driest in summer.

    B. Vancouver is hottest and wettest in summer.

    C. Summer and winter have similar temperatures but more rain in winter.

    D. Summer and winter have similar precipitation, but it's colder in winter.

SS6G7 The student will discuss environmental issues in Canada.

a. Explain the major environmental concerns of Canada regarding acid rain and pollution of the Great Lakes, the extraction and use of natural resources on the Canadian Shield, and timber resources.

Canada faces a number of environmental issues. It has many natural resources that it can use for its people and for trade to other countries. Some of the natural resources are renewable, and some are nonrenewable. The country must find ways to carefully manage both types of resources so that the environment is not damaged. Industries help Canada have a good economy with a high standard of living. However, factories are a source of pollution. Canada must find ways to keep its industry alive without destroying its environment.

ACID RAIN

Factories and automobiles produce many pollutants. Depending on what a factory makes, it can put many different pollutants into the air. Coal-burning power plants, cars, and trucks are also polluters of the air. Sulfur dioxide, carbon dioxide, and nitrogen oxides are especially dangerous. When these pollutants are put into the air, they mix with the water molecules and turn the water acidic. Clouds or rain droplets that are acidic are called ***acid rain.***

Acid rain causes many problems in the environment. Acid levels can become similar to the levels of acid in vinegar. This level of acid can kill plants, damage or kill trees, and pollute lakes and rivers enough to kill the fish. Property can be damaged too. In some cities, acid rain has dissolved the stone used in statues. The statues of people, for instance, lose their crisp facial features and begin to look smoothed and worn down.

Canada has passed laws to limit pollution. The government has worked with factory owners to build factories that do not pollute the air. Laws have been passed requiring automobiles to produce less pollution. The government also encourages Canadians to walk, ride bikes, or take the bus instead of driving their cars. Canada cannot solve this problem alone, however. In parts of southern Canada, 50-75 percent of the pollution that causes acid rain comes from the United States. Wind patterns tend to move the pollution from the United States north into Canada.

_____97. **Rain mixes with which substances to become acidic?**
    A. sulfur dioxide, oxygen, hydrogen
    B. hydrogen, oxygen, carbon dioxide
    C. water molecules, carbon dioxide, hydrogen
    D. sulfur dioxide, carbon dioxide, nitrogen oxide

_____98. **Which are sources of chemicals in acid rain?**
    A. forests
    B. walkers
    C bicycles
    D. coal-burning power plants

_____99. **Canada has to work with the United States to solve the problem of acid rain because the United States**
    A. is the source of much of Canada's air pollution.
    B. purchases many of the goods that Canada produces in its factories.
    C. has reduced the amount of acid rain and understands how to solve the problem.
    D. is careful to keep air pollution from leaving the United States and entering Canada.
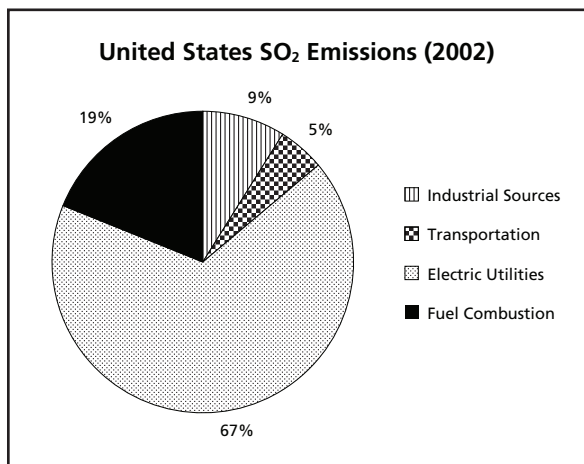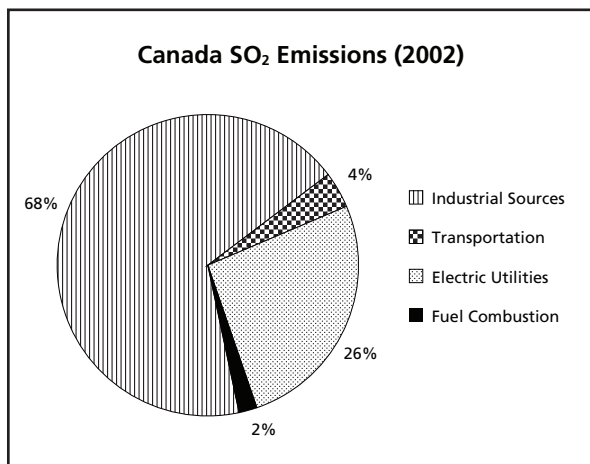
Use the statements below to answer question 100.

> 1. Fish in lakes die.
> 2. Forests begin to die.
> 3. Bicycle use increases.
> 4. Stone statues begin to lose their features.

_____ 100. **Which statements are problems that result from acid rain?**
    A. 1, 2, 3
    B. 2, 3, 4
    C. 1, 2, 4
    D. 1, 3, 4

WHAT ARE THE SOURCES OF SULFUR DIOXIDE (SO_2) IN THE AIR?

Use the two graphs to answer questions 101-104.

Canada SO_2 Emissions (2002)

68%
4%
26%
2%

- ▥ Industrial Sources
- ⊠ Transportation
- ▨ Electric Utilities
- ■ Fuel Combustion

United States SO_2 Emissions (2002)

9%
5%
19%
67%

- ▥ Industrial Sources
- ⊠ Transportation
- ▨ Electric Utilities
- ■ Fuel Combustion

_____ 101. **The purpose of these graphs is to show**
   A. the sources of SO_2 pollution in the United States and Canada.
   B. that the United States creates more SO_2 pollution than Canada.
   C. that Canada creates more SO_2 pollution than the United States.
   D. the sources of all air pollution in the United States and Canada.

_____ 102. **Which source of pollution is the greatest producer of SO_2 in the United States?**
   A. electric utilities
   B. fuel combustion
   C. industrial sources
   D. transportation (cars, trucks, etc.)

_____ 103. **What is the second leading source of SO_2 in Canada?**
   A. electric utilities
   B. fuel combustion
   C. industrial sources
   D. transportation (cars, trucks, etc.)

_____ 104. **How does SO_2 pollution from transportation compare between the two countries?**
   A. They are about the same.
   B. Canada has a much higher percentage.
   C. The United States has a much higher percentage.
   D. There is no SO_2 pollution from transportation in the two countries.

LATIN AMERICA AND CANADA

POLLUTION OF THE GREAT LAKES

Industries and people in Canada depend upon the water from the Great Lakes. They use the water to drink. They also use it in the processes of their factories. Since the Great Lakes are shared between the United States and Canada, it is important for the two countries to work together to keep the lakes' environment clean and healthy.

By the 1970s, the Great Lakes were becoming well known for their water pollution. In some places, fishing was unsafe. In other places, there were no fish alive! The factories around the Great Lakes had been using the lakes as their inexpensive dumping ground. In 1972, the governments of the two countries signed an agreement to begin reduction of **phosphorus**. This chemical is used in fertilizer, pesticides, toothpaste, detergents, and explosives. It is bad for lakes because, in large quantities, it can cause a rapid increase in algae called an **algal bloom**. One result from algal blooms is the eventual death of plant and animal life in the area of the bloom.

The Great Lakes Water Quality Agreement between the United States and Canada was signed in 1971 and renewed in 2002. The goal of the agreement is to restore the lakes' environment and prevent further damage. The countries are working to make sure that chemicals that could poison animals and people are not put into the lakes. The countries are also working to reduce the amount of human wasted dumped into the lakes.

_____ **105. The first Canadian-American plan to clean the Great Lakes was to reduce which chemical?**
    A. detergent
    B. fertilizer
    C. pesticide
    D. phosphorus

_____ **106. Why does the Canadian government have to work with the U.S. government to clean up the Great Lakes?**
    A. The two countries share the water in the lakes.
    B. The two countries put different types of pollution in the lakes.
    C. Animals and plants in the lakes depend on people to clean up the water.
    D. Animals and plants in the lakes are not important to the people of either country.

_____ **107. Which people are likely to be against the Great Lakes Water Quality Treatment Agreement?**
    A. fishermen who catch fish in the lakes
    B. homeowners who live along the lakes
    C. factory owners in the area of the lakes
    D. people who get their drinking water from the lakes

EXTRACTION AND USE OF NATURAL RESOURCES ON THE CANADIAN SHIELD

The Canadian Shield is a large area of uplands surrounding Hudson Bay. This region covers most of the eastern half of Canada. The soil in the region is thin and rocky. Beneath the soil is one of Canada's most valuable resources–minerals. The mines in this region produce gold, silver, copper, zinc, lead, iron ore, uranium, and nickel. In fact, the most valuable minerals available in Canada are in the Canadian Shield. About 1.5 million people make their living in the mining industry in Canada–many of them in the Canadian Shield.

Mining can be messy work. The land around mines can be damaged and the environment ruined. Blasting and digging with heavy machinery are common activities in mining areas. **Slag**, or leftover rock from the smelting process, is often dumped in any convenient place. Mining processes can spew sulfur dioxide, SO_2, into the air, producing acid rain and killing nearby vegetation and lake animals. Chemicals from the mines that are dumped into rivers and streams can poison the water and kill animal and plant life.

The Canadian Shield's minerals are also near the most populated areas of Canada. Pollution related to mining can have an impact on the large metropolitan areas to the south. The government has made new rules about mining. Some of the new rules reduce the amount of pollution allowed in waterways. Canada's government hopes to keep its fish alive and safe to eat without shutting down important mining industries.

_____ 108. **Where in Canada are the most valuable minerals found?**
   A. Hudson Bay
   B. Canadian Shield
   C. Golden Horseshoe
   D. St. Lawrence Seaway

_____ 109. **Which is a benefit of mining in Canada?**
   A. Valuable mining lands are located near cities.
   B. Waterways are polluted in the process of mining.
   C. Over 1.5 million people work in the mining industry.
   D. Sulfur dioxide (SO_2) is spewed into the air and lands in waterways.

__ 110. **Why is the Canadian Shield important to the economy of Canada?**
   A. It contains large, valuable mineral deposits.
   B. Mining operations look for new deposits of minerals.
   C. It is close to many of the large metropolitan areas of Canada.
   D. There are many ways that the environment can be damaged by mining.

THE TIMBER INDUSTRY IN CANADA

Vast forests cover almost half the land in Canada. Canadians have made this natural resource important to the economy. Loggers cut the trees and then send them to mills. These mills use the timber to make a variety of products including lumber, plywood, and wood pulp for making many kinds of paper.

Forests serve an important role in the environment. Animals and plants depend on the forests to live. Forests also serve to provide oxygen to the atmosphere and to filter out pollutants in the air. Forests serve as homes for wildlife and areas for human recreation.

Citizens in Canada are concerned that logging will destroy the forests and the benefits that it brings. A major concern for many Canadians is ***clear-cutting***. Most timber companies cut all the trees in a given area, leaving large treeless gaps in the forest. Results of clear-cutting include reduced water quality, erosion, and loss of wildlife habitat. Heavy machinery can leave the forest floor compacted. This makes it hard for new growth to start. Some environmental groups want companies to leave small trees and seedlings. They also want to see smaller groups of trees removed instead of hundreds of acres of trees at a time.

The government and industry are working together to try to manage the use of the forests. Hundreds of millions of seeds and seedlings are planted each year. Billions of dollars are spent managing and protecting the forests. Over $100 million is spent each year by the logging industry to protect wildlife and their habitats.

____ **111. Forests cover about how much land in Canada?**
        A. one-half
        B. one-third
        C. one-fourth
        D. three-fourths

____ **112. Which is a problem related to clear-cutting?**
        A. Soil is turned up.
        B. Erosion of soil stops.
        C. Timber companies save money.
        D. Wildlife loses large areas of habitat.

____ **113. What is the government of Canada doing to protect the forests?**
        A. planting seeds and seedlings
        B. spending billions of dollars selling forests
        C. encouraging clear-cutting to keep lumber costs down
        D. providing new homes for wildlife and new areas for human recreation