



STUDY GUIDE

Chapter 13, Section 1

For use with textbook pages 313–319.

Living in Europe

Terms to Know

European Union (EU) A trading community that unites much of western Europe (page 313)

Maastricht Treaty The treaty that set up the European Union (page 314)

heavy industry The manufacture of machinery and industrial equipment (page 317)

light industry The manufacturing of products, such as textiles or processed food, that do not require industrial raw materials (page 317)

mixed farming Raising several kinds of crops and livestock on the same farm (page 317)

farm cooperatives Organizations in which farmers share expenses and equipment in growing and selling farm products (page 317)

collective farms Government-owned farms in which farmers received wages plus a share of products and profits (page 317)

state farms Government-owned farms in which farmers were paid wages (page 317)

genetically modified food Food prepared from crops that have had their genes altered (page 317)

organic farming Farming that uses natural substances instead of fertilizers and chemicals to increase crop yields (page 318)

DRAWING FROM EXPERIENCE

What are the major forms of transportation in your community? In what ways do people in your community communicate? What are the main ways in which you communicate?

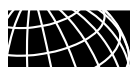
This section focuses on the economy, transportation, and communication in Europe today.

ORGANIZING YOUR THOUGHTS

Use the web below to help you take notes as you read the summaries that follow. Think about two facts that describe the following in Europe today: trade, industry, agriculture, transportation, and communication.



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**STUDY GUIDE****Chapter 13, Section 1****READ TO LEARN** **Introduction** (page 313)

Europeans continue to keep their national identities. However, they are also beginning to identify with the European region as a whole. Eastern European countries today are building democracies. They are also building closer ties to western Europe.

1. What two changes are occurring in eastern European countries today?

 **Changing Economies** (page 313)

Europe today is one of the world's largest manufacturing and trading regions. **The European Union (EU)** unites much of western Europe into one trading community. Many countries of eastern Europe are also building market economies.

The steps toward European unity have been developing since the end of World War II. In 1992 some European governments met in Maastricht, the Netherlands, and signed the **Maastricht Treaty**. It set up the European Union. The goal of the EU was to make European economies competitive with the rest of the world by not restricting the movement of goods, services, and people across its members' borders. It also wanted to establish a single European currency. The EU has worked to boost trade and to develop more efficient and productive economies.

The EU plans to extend membership to several eastern European countries. Since 1989, these countries have been moving from command economies to market economies. The changes have been difficult because workers are losing some of the social safety net provided by the communist system.

2. How does the EU plan to make European economies competitive?

 **Industry** (page 316)

The Industrial Revolution started in Europe. In the 1800s, Europe's large deposits of coal and iron led to the growth of **heavy industry**—the

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manufacture of machinery and industrial equipment. The largest industrial centers in Europe today are located in Germany, France, Italy, Poland, and the Czech Republic. Countries that lack industrial raw materials specialize in **light industry**, such as making textiles.

About 60 percent of the workforce in western Europe is employed by service industries, including banking and tourism. High-technology industries are a growing part of western Europe's economy.

3. What kinds of industries employ about 60 percent of workers in western Europeans?

Agriculture (page 317)

More Europeans make a living from farming than from any other single economic activity. Western European farmers use advanced farming methods and equipment to make the best use of their limited agricultural area.

Mixed farming—raising several kinds of crops and livestock on the same farm—is common. In some countries, farmers are part of **farm cooperatives**. These are organizations in which farmers share equipment and expenses in growing and selling farm products. Being members of cooperatives helps farmers reduce costs and increase profits.

Farming in eastern Europe has changed since the end of communist rule. Under communism, farmers worked on government-owned **collective farms**, where they received wages plus a share of products and profits. Other farmers worked on **state farms**, where they did not share in the profits but instead were paid wages. With the growth of democracy in eastern Europe, farms are becoming privately owned.

Throughout Europe new farming methods have led to opposition. Many people have protested the sale of **genetically modified foods**. These are foods prepared from crops that have had their genes altered so they can grow bigger or be more resistant to pests. Those who oppose this method believe that it has not been tested enough to be sure that genetically modified foods are safe to eat. Some farmers, concerned about chemical use, rely on **organic farming**. They use natural substances instead of fertilizers and chemicals to increase crop yields.

4. Why do some Europeans oppose the sale of genetically modified foods?

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**🌐 Transportation and Communications** *(page 318)*

Railroads throughout Europe connect the region's major cities and bring natural resources to Europe's industrial centers. High-speed rail lines operate in some western European countries. These railways cause less damage to the environment and are more economical than other forms of transportation. A well-developed highway system also links major European cities. Europe handles more than half of the world's international shipping at its ports.

Communication satellites broadcast television programs throughout western Europe. The quality of telephone service varies throughout Europe. A large percentage of western Europeans use cellular phones, electronic mail, and the Internet to communicate. Eastern European governments have stopped censoring printed materials, which continue to shape public opinion throughout Europe.

5. How are railroads important to European nations?



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Chapter 13, Section 2

For use with textbook pages 320–325.

People and Their Environment

Terms to Know

dry farming A way of farming that produces crops in dry areas without any irrigation (page 321)

acid rain Precipitation of airborne acidic chemicals mixed with water (page 321)

meltwater The result of melting snow and ice (page 321)

acid deposition Wet or dry acid pollution that falls to the ground (page 321)

environmentalist Person concerned with the quality of the environment (page 322)

greenhouse effect The condition caused by carbon dioxide and other gases trapping the sun's heat near the earth's surface (page 322)

global warming Long-term rise in the earth's average temperature (page 322)

biologist Scientist who studies plant and animal life (page 324)

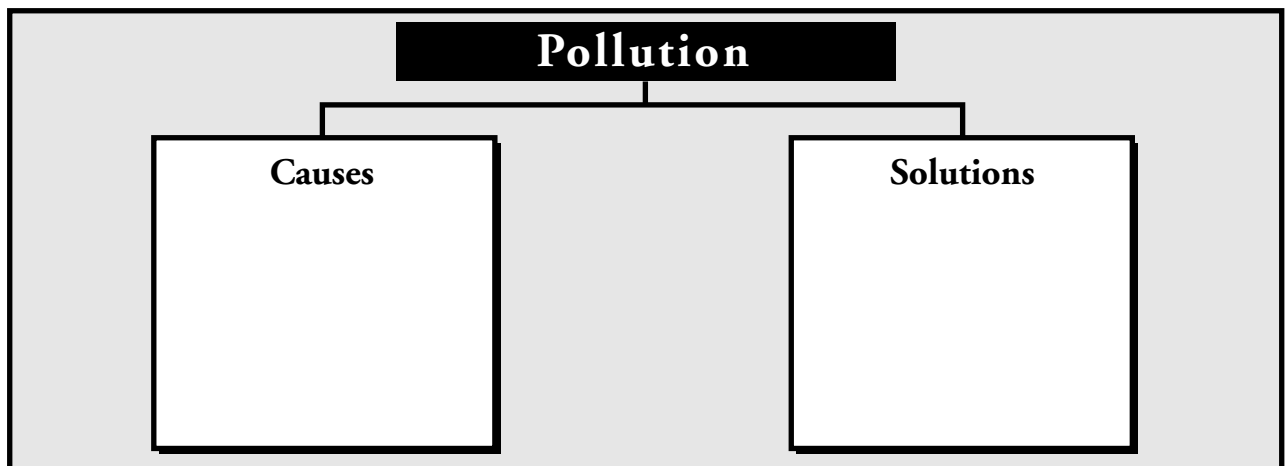
DRAWING FROM EXPERIENCE

What do you think are the greatest threats to the world's environment today? How do you think these threats can be resolved?

In the last section, you read about Europe's changing economy. This section focuses on the condition of Europe's environment.

ORGANIZING YOUR THOUGHTS

Use the diagram below to help you take notes as you read the summaries that follow. Think about the things that have caused pollution in Europe and the ways that Europeans have attempted to reduce pollution.



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**STUDY GUIDE****Chapter 13, Section 2****READ TO LEARN****Introduction** (page 320)

Damage to the environment crosses national boundaries. Rapid industrialization in eastern Europe polluted air and waterways, destroyed forests, and damaged buildings. Today Europeans are working to reverse the effects of pollution.

1. What has caused the pollution of eastern Europe's environment?

Humans and the Environment (page 320)

Europe's physical environment has posed many challenges to Europe's people. Earthquakes are a frequent occurrence in parts of southern Europe. Low rainfall has caused droughts. The dry climate has made **dry farming** necessary. Dry farming is a way of farming that does not use irrigation, but instead conserves the moisture in the soil.

In northwestern Europe, heavy storms have led to flooding. Violent winds and rain have caused loss of life and damage to property. Countries on the North Sea have built dams and dikes to control the flooding.

2. What challenges has Europe's physical environment presented to Europeans?

Pollution (page 321)

The high concentration of industry and population in Europe has severely damaged the land, air, and water in certain areas. In one area of Poland, eastern Germany, and the Czech Republic known as the "black triangle," soot covers the ground and the air smells of sulfur from smokestacks.

Before 1989 eastern European countries had few laws to control pollution. Industrial growth was considered more important than environmental safety. Eastern European countries today are making efforts to control pollution. The European Union requires pollution control from all its members.

In the 1960s industries built high smokestacks to carry pollution away from industrial sites. This pollution combined with moisture in the air to form **acid rain**, which fell on other countries. Acid rain has destroyed 35

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percent of Hungary's forests, 82 percent of Poland's, and 73 percent of forests in the Czech Republic and Slovakia. It also damages lakes and rivers. In winter, snow carries industrial air pollution to the ground. In spring, **meltwater**, the result of melting snow and ice, carries acid-forming chemicals into lakes and rivers. Eventually the acids cause the death of fish. In addition, **acid deposition**—wet or dry acid pollution that falls to the ground—has damaged many of Europe's historic buildings.

In eastern Europe, air pollution has resulted in a lower life expectancy for humans. It has also poisoned crops. **Environmentalists**, or people concerned with the quality of the environment, are studying the ways that air pollution has affected the earth's atmosphere. Carbon dioxide and other gases normally trap the sun's heat near the earth's surface. This condition creates a **greenhouse effect** which helps plants grow. However, the burning of fossil fuels such as coal and oil has increased the amounts of carbon dioxide in the atmosphere. Some scientists believe this increase is causing **global warming**—a rise in the earth's average temperature. They believe that global warming could melt polar ice caps and mountain glaciers, causing coastal areas to be flooded. Dealing with global warming requires international cooperation, but the international community has done little to address the problem.

Water pollution is particularly serious in the Mediterranean region. Countries along the coast have dumped their waste into the sea. This has contaminated marine life and created health hazards for people. Agricultural runoff and raw sewage have also polluted Europe's lakes and rivers.

3. What problems has Europe experienced as a result of acid rain?

Reducing Pollution (page 323)

Although much of Europe has been changed by human activity, Europeans want to preserve the wilderness areas that are left. They are working to solve their environmental problems. For example, the European Union can take legal action against member countries who do not uphold environmental protection laws. European countries have protected buildings and statues with acid-resistant coating. They have added lime to some lakes to reduce acid levels. Scientists who study plant and animal life, or **biologists**, are researching the effects of acid levels on fish.

Pollution problems that cross national borders require international cooperation. The European Union (EU) has approved rules to protect

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endangered species and prevent the dumping of wastes from ships and airplanes. The EU also requires large companies to recycle their packaging waste.

Eastern European countries requesting admission to the European Union are required to meet the EU's environmental standards before they can be admitted. Member countries in western Europe have converted many power plants from coal to cleaner-burning natural gas.

4. How have European countries addressed the results of pollution?
