MAKING CONNECTIONS

Who is affected by civil war?

Conflicts throughout the world have forced millions of people from their homes. Violent conflicts over border disputes in places like Ethiopia and Eritrea have forced thousands of people into refugee camps like the one shown in this photo. Refugees depend upon assistance from the international community in order to survive. In this chapter you will learn about efforts to solve global problems.

- What is the United Nations doing to resolve and prevent conflicts around the world?
- Give an example of a problem in another nation and explain how it affects the United States.
2001 Terrorists attack U.S. World Trade Center and Pentagon

2006 North Korea performs its first nuclear test

2006 World population passes 6.5 billion mark

**Identifying** Identify environmental, social, economic, and political challenges in the world today and record them on a Folded Chart. Under each entry, briefly summarize the challenge.
In the twenty-first century, science and technology continue to build a global community connected by the Internet. Scientific advances have brought benefits in medicine and agriculture, but also new weapons of war. Development is creating great wealth, but it also damages the planet. The uneven distribution of our global wealth may be one factor contributing to a new challenge—terrorism.

**Technological Revolution**

The benefits of the technological revolution must be balanced against its costs.

**HISTORY & YOU** Do you eat organic foods? Read to learn about organic farming and the Green Revolution.

Since World War II, but especially since the 1970s, a stunning array of changes has created a technological revolution. Like the first and second Industrial Revolutions, this revolution is also having a profound effect on people’s daily lives and on entire societies.

**Communication, Transportation, and Space**

Global transportation and communication systems are transforming the world community. People are connected and “online” throughout the world as they have never been before. Space exploration and orbiting satellites have increased our understanding of our world and of solar systems beyond our world.

Since the 1970s, jumbo jet airlines have moved millions of people around the world each year. A flight between London and New York took half a day in 1945. Now, that trip takes only five or six hours. The Internet—the world’s largest computer network—provides quick access to vast quantities of information. The World Wide Web, developed in the 1990s, has made the Internet even more accessible to people everywhere. Satellites, cable television, facsimile (fax) machines, cellular telephones, and computers enable people to communicate with one another practically everywhere in the world. Communication and transportation systems have made the world a truly global village.

The computer may be the most revolutionary of all technological inventions of the twentieth century. The first computer was really a product of World War II. British mathematician Alan Turing designed the first electronic computer to crack enemy codes. Turing’s machine did calculations faster than any human. IBM of the
Satellite Communications

Today, hundreds of satellites orbit Earth. Some are used to predict the weather, and others help navigate ships, aircraft, and cars. Communications satellites are used to relay radio, television, and telephone signals. Communication satellites are part of everyday life. Television stations transmit their programs to a satellite as radio waves. The satellite amplifies the signal and transmits it to your cable or dish provider to forward to your television. Satellite phones receive signals via satellite relay. They are much more costly than cell phones, so they are not commonly used. In an emergency, satellite phones may offer the only means of communication. When a hurricane destroyed Florida’s cell towers, rescue workers could still communicate by satellite phone.

United States made the first computer with stored memory in 1948. The IBM 1401, marketed in 1959, was the first computer used in large numbers in business and industry. These early computers used thousands of vacuum tubes to function. These machines took up considerable space. The development of the transistor and the silicon chip produced a revolutionary new approach to computers.

Then, in 1971, the microprocessor was invented and paved the way for the personal computer. Both small and powerful, the personal computer became a regular fixture in businesses, schools, and homes by the 1990s. The computer made many routine tasks easier and became important in nearly every area of modern life. Other tools and machines depend on computers to function. For example, a computer makes many of the decisions used in flying an airplane.

Through their personal computers, people can go on the Internet, a huge web of linked computer networks. The Internet was introduced to the public for the first time in 1972. That same year, electronic mail, or e-mail, was introduced.
The system mushroomed, and by the early 1990s, a new way of sending Internet information called hypertext transfer protocol (http) had been developed. This, combined with the invention of Web browsers, made it easier for people to use the Internet. By early 2007, there were more than 1 billion Internet users worldwide.

Technological developments have also improved our ability to explore space. Ever since Neil Armstrong and Buzz Aldrin landed on the moon in 1969, the exploration of space has continued. Space probes have increased our understanding of distant planets. Satellites in orbit provide information about weather on Earth. Other satellites transmit communication signals for radio, television, and telephone.

Launched in 1990, the Hubble Space Telescope (HST), a large astronomical observatory, orbits about 375 miles above Earth’s surface. This enables the HST to avoid the distorting effects of the Earth’s atmosphere and to provide incredibly clear views of our own solar system and distant galaxies. The National Aeronautics and Space Administration (NASA) sent two rovers, called Spirit and Opportunity, to the planet Mars. They arrived in 2004. Based on the minerals that the rovers found in Mars’s rocks, NASA scientists determined that the now-barren planet once had abundant supplies of water. NASA plans additional missions to Mars to prepare for the eventual landing of humans on the planet.

**Health Care and Health Crises**

In the field of health, new medicines enable doctors to treat both physical and mental illnesses. New technologies, including computer-aided imaging, have enabled doctors to perform “miracle” operations. Mechanical valves and pumps for the heart as well as organ transplants have allowed people to live longer and more productive lives.

Some technological changes have led to a new field called bioethics. This deals with moral choices in medical research. For example, genetic engineering alters the genetic information of cells to produce new variations. Some scientists question whether genetic engineering might accidentally create new strains of deadly bacteria that could not be controlled. The overuse of antibiotics has already created “supergerms” that do not respond to antibiotic treatment. Stem-cell research (using stem cells from human embryos to research cures for such diseases as Alzheimer’s and Parkinson’s) has caused much heated discussion. Also, human cloning and implanting a fertile egg into a human surrogate mother have generated intense debate in many countries around the world.

Concern about the side effects of modern medicines has also led to a dramatic growth in the holistic health-care movement that employs natural methods of healing such as herbal remedies, massage therapy, and acupuncture.
Certain infectious diseases have raised global concerns in recent decades. One devastating disease is AIDS or “acquired immune deficiency disease.” (See Chapter 30.) AIDS is a global issue of great seriousness. Nearly 3 million people died of AIDS in 2006 and millions live with HIV. The World Health Organization and the UN continue to sponsor initiatives to educate the public about the disease, provide treatment to those already infected, and search for a cure.

**Agriculture**

In agriculture, the **Green Revolution** has promised immense returns. The Green Revolution refers to the development of new strains of rice, corn, and other grains that have greater yields. Promoted as the technological solution to feeding the world’s population, huge quantities of chemical fertilizers are needed to grow the new strains. Many farmers cannot afford the fertilizers. In addition, the new crops have been subject to insects. The pesticides used to control the insects create environmental problems.

The growing concern with chemical pesticides in food has led to a dramatic increase in the practice of organic farming. Organic farming rejects the use of chemical fertilizers and pesticides, growth hormones, and livestock feed additives. Its goal is to maintain a healthy and sustainable **environment**.

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**INFOGRAPHICS**

**The Global AIDS Epidemic**

AIDS first appeared in the 1980s. HIV, the virus that causes AIDS, spreads through the exchange of body fluids. It can spread through sexual activity, blood transfusions, and even from infected mothers to their babies.

New drugs are helping people with HIV live longer. A major challenge today is paying for the expensive drugs for the millions who need them, especially in poor countries.

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**CRITICAL THINKING SKILLS**

The map is an estimate of the world population living with AIDS in 2006.

1. **Identifying** How many people living in Eastern Europe or Central Asia are infected with AIDS?
2. **Analyzing** What is the main obstacle to making HIV drugs widely available?
Environmental Crisis

**Main Idea** Environmental damage endangers the world’s sustainable development.

**HISTORY & YOU** Does your family drive a hybrid vehicle? Read to learn about environmental challenges in today’s world.

In *Silent Spring*, published in 1962, Rachel Carson, an American scientist, argued that the buildup of pesticides—chemicals sprayed on crops to kill insects—was having unforeseen results. Insects were dying, but so too were birds, fish, and other wild animals. Also, the pesticide residue on food harmed humans.

Carson’s warnings alarmed many scientists and gave rise to the new science of ecology, the study of the relationship between living things and their environment. Since then, scientific research studies have shown that dangers to the environment have many sources.

Three sources are by-products of population growth: deforestation, desertification, and destruction of the tropical rain forests. Deforestation is the clearing of forests to provide more farmland and timber. The African lion, elephant, and gorilla are now endangered species because deforestation has destroyed much of their natural habitat.

Desertification is the formation of degraded soil, turning semi-arid lands into nonproductive deserts. Overgrazing, poor cultivation practices, and destruction of vegetation in semi-arid lands destroy the soil’s productivity.

Tropical rain forests near the equator cover only 6 percent of Earth’s surface, but they support 50 percent of the world’s plant and animal life. These forests also remove carbon dioxide from the air and return oxygen to it. They are crucial to our survival, yet logging, road-building, and clearing for agriculture are destroying tropical forests at an alarming rate.

**Chemical Wastes and Disasters**

Chemical wastes pose another danger to the environment. The release of chlorofluorocarbons—gases used in aerosol cans, refrigerators, and air conditioners—destroys the ozone layer. This is the thin layer in the upper atmosphere that shields Earth from the sun’s ultraviolet rays.

Acid rain results when sulfur spewed out by factories mixes with moisture in the air. Acid rain is responsible for killing forests in North America and Europe.

Global warming has the potential to create a global crisis. The greenhouse effect, the warming of the Earth because of the buildup of carbon dioxide in the atmosphere, contributes to the melting of the polar ice caps, rising sea levels, and devastating droughts and storms.

A conference on global warming was held in Kyoto, Japan. To reduce emissions, more than 150 nations signed the Kyoto Protocol. The European Union and Japan ratified the treaty in 2002. The United States did not.

Ecological disasters have also harmed our environment. A chemical plant at Bhopal, India, released toxic fumes into the air in 1984. A nuclear accident at Chernobyl in 1986 released radiation. Hundreds died, and there were long-lasting health and environmental consequences. In 1989 the oil tanker Exxon Valdez ran aground in Alaska. The spill killed thousands of birds and polluted fishing areas.

**Sustainable Development**

Economic development that does not limit the ability of future generations to meet their basic needs is known as sustainable development. In promoting sustainable development, the United Nations urges nations to work to conserve all natural resources.

One natural resource is water. According to the UN, one-sixth of the world’s population lacks water for drinking or agriculture. Those who have no clean water often get sick with cholera, typhoid, and diarrhea. More than 5 million people die every year from the lack of water or from drinking untreated water.

Many nations have enacted recycling and water conservation programs. They have also curbed the dumping of toxic materials. This may help achieve sustainable development.

**Reading Check** Defining What makes development “sustainable”?

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1042 SECTION 1 Challenges of a New Century
Poverty and Civil Strife

**MAIN IDEA** Poverty, hunger, and civil strife continue to plague many developing nations.

**HISTORY & YOU** Do you have enough to eat each day? Read to learn about food shortages and world hunger.

After World War II, especially since the 1970s, the world developed a global economy. In a global economy, the production, distribution, and sale of goods are done on a worldwide scale. Almost 40 percent of the profits of U.S. businesses come from the sale of goods abroad or investments in foreign nations.

**Gap Between Rich and Poor**

One feature of the global economy is the wide gap between rich and poor nations. Rich nations are developed. They are mainly in the Northern Hemisphere and include countries such as the United States, Canada, Germany, and Japan. Developed nations have well-organized industrial and agricultural systems, make use of advanced technologies, and have strong educational systems. The poor nations, or developing nations, are located mainly in the Southern Hemisphere. They include many nations in Africa, Asia, and Latin America. Developing nations are primarily farming nations with little technology.

A serious problem in developing nations is an explosive population growth. According to UN projections, the world’s population could double by 2050, reaching over 12 billion. Much of that rapid growth will take place in developing nations, which can least afford it. Some developing nations have taken steps to decrease population growth. China advocated a one-child policy (see Chapter 31), and India encouraged a national family welfare program to reduce its population growth rate. However, neither measure has been very successful.

**World Hunger**

Growing enough food for more and more people creates a severe problem in many developing countries. An estimated 1 billion people worldwide today suffer from hunger.

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**INFographics**

**Destruction of Tropical Rain Forests**

The Amazon Basin in South America is a rich tropical rain forest. It holds over 30,000 species of plants and trees and a diversity of animal life. But like other rain forests, it faces deforestation. What drives the clearing of the land? Poor farmers clear small plots to grow food for survival. Large agricultural operations clear vast areas to raise cattle for export. Governments sell logging rights to raise money for development projects.

The local effects are severe. In a tropical rain forest, plants and trees—not the soil—hold nearly all the nutrients. After the land is cleared, the soil soon loses its ability to grow crops. The global effects may prove disastrous. Rain forests are home to over half the world’s plant and animal species. Plants that could provide new medicines are likely to go extinct before they are even discovered.

**CRITICAL THINKING SKILLS**

1. **Determining Cause and Effect** What may be the global effects of deforestation upon the environment?
2. **Analyzing** Why is rain forest destruction a problem for developed nations?
Every year, more than 8 million people die of hunger, many of them young children. Poor soil, increasing populations, and natural catastrophes contribute to world hunger.

Economic factors also contribute to widespread hunger. Growing crops for export, for example, might lead to big profits for large landowners. However, it leaves many small farmers with little land on which to grow food.

**Civil War and Ethnic Conflict**

Civil wars have also created food shortages. War not only disrupts normal farming, but warring groups try to limit access to food to destroy their enemies. In Sudan, 1.3 million people starved when combatants of a civil war in the 1980s prevented food from reaching them. As unrest continued during the early 2000s in Darfur (see Chapter 30), families were forced to leave their farms. As a result, an estimated 70,000 people had starved by mid-2004.

The Darfur situation has awakened the world to the practice of genocide. Many observers believed that the Sudanese regime conducted a systematic campaign to kill ethnic African peoples. The Serbian policy of ethnic cleansing of Bosnian Muslims in the 1990s also revived memories of Nazi atrocities.

Ethnic and religious conflicts have also caused tension in Asian and Southeast Asian countries. Tibet seeks independence from the Chinese government that has suppressed dissent among ethnic minorities. Tibet’s Dalai Lama has been in exile in India since 1959. In 1999, violence between Christians and Muslims broke out in East Timor (in the Moluccas Islands). Nearly 10,000 people died due to the conflict. A pact in 2002 supposedly ended the fighting, though clashes have continued.

**Reading Check**

**Explaining** What steps have India and China taken to help control population?
Political and Social Challenges

Not all nations guarantee their people basic human rights and equality.

**HISTORY & YOU** To what rights are you entitled? Read to learn about the Universal Declaration of Human Rights.

Many political and social changes have taken place as a result of World War II. As democracy spread, many countries affirmed and extended rights to their people, both male and female.

Human Rights

The United Nations took the lead in affirming the basic human rights of all people. On December 10, 1948, the UN’s General Assembly adopted the **Universal Declaration of Human Rights**. According to the declaration:

**PRIMARY SOURCE**

“All human beings are born free and equal in dignity and rights. . . . Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. . . . Everyone has the right to life, liberty, and security of person. . . . Everyone has the right to freedom of movement. . . . Everyone has the right to freedom of opinion and expression.”

—Universal Declaration of Human Rights, 1948

Since the adoption of the UN declaration, the human rights movement has achieved much success in freeing political prisoners and bringing economic and political change around the world. Nevertheless, human rights violations still occur worldwide.

Governments themselves often carry on the violence. Dictators and military regimes often punish people who disagree with their views. In Cuba, Chile, Myanmar, Iraq, Iran, and other countries, people have been persecuted for opposing repressive governments. In other countries, such as Bosnia and Rwanda, ethnic, religious, and racial hatreds have led to the mass murder of hundreds of thousands of people.

New Democracies

After World War II, African and Asian leaders wanted democratic governments. Within a decade, however, military dictatorships or one-party governments replaced democratic systems in Africa, Asia, and Latin America. In recent years, however, interest in democracy has rekindled. For instance, South Korea, Taiwan, and the Philippines hold free elections. Similar developments have taken place in a number of African countries and throughout Latin America.

Unfortunately, conflict due to regional, ethnic, and religious differences creates discord around the world. Ethnic divisions in Yugoslavia, unrest in the Middle East, and conflicts among ethnic groups in Africa all remain to be resolved.

Equality for Women

In the social and economic spheres of the Western world, the gap that once separated men and women has been steadily narrowing. More and more women are joining the workforce, and they make up half of university graduates in Western countries. Many countries have laws that require equal pay for women and men doing the same work, and some laws prohibit promotions based on gender. Nevertheless, women in many Western countries still do not hold many top positions in business or government.

Bound to their homes and families and subordinate to men, women in developing nations face considerable difficulties. They often are unable to obtain education, property rights, or decent jobs. Domitila Barrios de Chungara, a miner’s wife from Bolivia, said in a 1981 interview:

**PRIMARY SOURCE**

“But women like us, housewives, who get organized to better our people, well they beat us up and persecute us. . . . [People do not know] what it’s like to get up at four in the morning and go to bed at eleven or twelve at night, just to be able to get all the housework done, because of the lousy conditions we live in.”

—Domitila Barrios de Chungara, 1981

✓ Reading Check Identifying Which organization developed the Universal Declaration of Human Rights?
Explaining

What is the primary mission of the Department of Homeland Security?

Making Connections

How are school safety drills similar to the exercise in the photo?

The mission of the Department of Homeland Security (DHS) is to lead national efforts to prevent, prepare for, and respond to terrorist attacks and natural disasters. The DHS coordinates a vast network of state and local emergency management and law enforcement agencies. It plans responses to worst-case scenarios even as its agencies work to prevent them.

Acts of terrorism, now a part of modern society, have a worldwide effect.

Have you heard details about new security at American airports? Read to learn how terrorism challenges the world.

Acts of terror have become a regular feature of modern society. Terrorists often kill civilians and take hostages to achieve their political goals.

Modern Terrorism

During the late 1970s and 1980s, many countries placed their concern about terrorism at the top of foreign policy agendas. The impact of television newscasts contribute to the spread of terrorism.

Some terrorists are militant nationalists who want separatist states. The Irish Republican Army (IRA), for example, wants to unite Northern Ireland, governed by Great Britain, with the Irish Republic. (See Chapter 28.) Since the early 1970s, violence has rocked the country. IRA leaders now seem more willing to open normal relations with the Northern Ireland police. This is a big step toward achieving the goal of the Good Friday Peace Pact of 1998: a Protestant-Catholic governing coalition.

Sometimes terrorism is state-sponsored. Militant governments in Iraq, Syria, Cuba, and North Korea have provided sanctuary and support to numerous terrorist organizations.

The Impact of 9/11

One of the most destructive acts of terrorism occurred on September 11, 2001, in the United States. (See Chapter 28.) Following the horrific attacks on the World Trade Center and the Pentagon, President George W. Bush vowed to wage war on terrorism. This process began with military

The mission of the Department of Homeland Security (DHS) is to lead national efforts to prevent, prepare for, and respond to terrorist attacks and natural disasters. The DHS coordinates a vast network of state and local emergency management and law enforcement agencies. It plans responses to worst-case scenarios even as its agencies work to prevent them.

DHS Strategic Goals

- Identify potential terrorist threats and likely targets
- Detect and prevent attacks
- Coordinate the national response to terrorist acts and natural disasters
- Lead recovery efforts after terrorist acts and natural disasters

A terrorism response exercise in Los Angeles

1. Explaining What is the primary mission of the Department of Homeland Security?

2. Making Connections How are school safety drills similar to the exercise in the photo?
action by the United States and its allies against Afghanistan in October 2001.

At home, President Bush asked Congress to pass legislation to help track down terrorist suspects. An antiterrorist bill known as the **Patriot Act** was passed in October 2001. The Patriot Act allowed secret searches to avoid tipping off terrorism suspects. The law made it easier to wiretap suspects and to track e-mail, seize voice mail, and monitor library records. These sweeping and controversial measures led some Americans to debate how far constitutional rights should be restricted to protect them against terrorist attacks. In 2002 Congress established the Department of Homeland Security to coordinate efforts against terrorism at home.

Worldwide, one of the most noticeable changes in public policies since September 11, 2001, has been increased security at airports. Many European and Asian governments have also begun working more closely together in their intelligence and police activities to track down terrorists.

**Islamic Militants**

The causes of recent world terrorism are complex. Some analysts say this terrorism is rooted in the clash of Western and Islamic cultures. They argue that the Christians and Muslims have viewed each other with hostility since at least the time of the Crusades. Others suggest that poverty and ignorance lie at the root of the problem. Extremists find it easy to stir up resentment against wealthy Western societies. Finally, some say terrorism would be rare if the Israeli-Palestinian conflict could be solved.

One reason Middle Eastern terrorists have targeted Westerners can be traced to Western investment in the Middle East oil industry, which began in the 1920s. This industry brought wealth to ruling families in some Middle Eastern kingdoms, but most citizens remained very poor. They often blamed the West, especially the United States, for supporting the ruling families.

The oil business increased Middle Eastern contact with the West. Some Muslims feared that this contact would weaken their religion and their way of life. Some Muslims began organizing movements to overthrow their pro-Western governments. Muslims who support these movements are called fundamentalist militants. They promote their own vision of what a pure Islamic society should be. Most Muslims around the world do not share this vision, nor do they agree with the use of terrorism.

The movement for a conservative Islamic society was first seen in 1979 in Iran. (See Chapter 30.) After the revolution of 1979, the legal system, clothing styles, and social practices were regulated by a strict interpretation of Islam. These practices have spread to other Muslim countries.

**Reading Check**

How does the Patriot Act help law enforcement detect terrorist plots?

**Vocabulary**


**Main Ideas**

2. Summarize the technological advances made and the drawback or cost of each in the areas listed below.

<table>
<thead>
<tr>
<th>Technological Advances</th>
<th>Drawback or Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
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<tr>
<td>Space Exploration</td>
<td></td>
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<tr>
<td>Health Care</td>
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<tr>
<td>Agriculture</td>
<td></td>
</tr>
<tr>
<td>Weaponry</td>
<td></td>
</tr>
</tbody>
</table>

3. Explain how desertification endangers sustainable development.

4. List the rights mentioned in the Universal Declaration of Human Rights.

**Critical Thinking**

5. The BIG Idea Identifying Central Issues How can societies balance their desire for economic development with the pressures such development places on the environment?

6. Evaluating Why must ethics be part of technological advances?

7. Analyzing Visuals Describe the type of business owned by the woman in the image on page 1044. What products does she produce? What tools does she use?

**Writing About History**

8. Expository Writing In an essay, describe why some leaders disagree about the best solutions to global environmental problems.
New Global Communities

In today’s world, nations and communities are more closely connected than ever. This has meant that problems in one part of the world can affect people all over the globe. In the words of British Prime Minister Tony Blair, “Today conflicts rarely stay within national boundaries.” Increasingly, the world’s nations must unite to create lasting solutions to the contemporary problems of poverty, nuclear proliferation, global warming, and terrorism.

The United Nations

The United Nations focuses on international problems.

HISTORY & YOU Do you recall from Section 1 the Universal Declaration of Human Rights of the United Nations? Read to learn about the UN’s structure and activities.

In recent decades, many nations have become more convinced that there are significant problems that can only be solved by working with other nations. Today, the United Nations (UN) is one of the most visible symbols of the new globalism.

The UN was founded in 1945 at the end of World War II. U.S. president Franklin Delano Roosevelt was especially eager to create an organization to work for peace. One of the UN’s two chief goals is peace. The other goal is human dignity. These goals were clearly stated in the UN’s charter. Members pledged “to save succeeding generations from the scourge of war . . . to reaffirm faith in fundamental human rights . . . and to promote social progress and better standards of life in larger freedom.”

The General Assembly of the United Nations is made up of representatives from all member nations. It has the power to discuss any important question and to recommend action. The Security Council advises the General Assembly and passes resolutions that require the organization to act. Five nations have permanent seats on the Security Council: the United States, Russia, Great Britain, France, and China. Ten other members are chosen by the General Assembly and serve for limited terms. Because each permanent member can veto a decision, deliberations can often end in a stalemate. The head administrator of the United Nations is the secretary-general.

Specialized agencies function under the UN’s direction. These agencies address economic and social problems and organize conferences on important issues such as population growth and the environment. The UN has also provided peacekeeping forces—military forces from neutral member states that settle conflicts and supervise truces in “hot spots” around the globe.
Today, about 770 million adults—one-fifth of the world’s adult population—lack basic reading and writing skills. This statistic represents a shocking waste of human potential. To combat this problem, the United Nations Education, Scientific and Cultural Organization (UNESCO) coordinates the efforts of many organizations participating in its Education for All program. The program’s goal is to increase global literacy by 50 percent by 2015.

The United Nations sees literacy as essential to ending poverty, slowing population growth, achieving gender equality, and ensuring economic development. Literacy provides access to education, which contributes to a more productive workforce and to fuller participation in today’s world.

The UN established the International Atomic Energy Agency (IAEA) in 1957. This agency operates a safeguards system against nuclear proliferation—the spread of nuclear weapons production technology and knowledge to nations without that capability. The greatest risk comes from countries that have not joined or have violated the Nuclear Non-proliferation Treaty (NPT). India, Pakistan, Israel, North Korea, and Iran fall within these categories. In 1998, India and Pakistan exploded nuclear devices underground. North Korea performed its first nuclear test in October 2006, and Iran refused to shelve its nuclear enrichment program.

As the IAEA director said, “The threat of nuclear terrorism is real and current... the existence of a nuclear threat anywhere is a threat everywhere, and as a global community, we will win or lose this battle together.”

**CRITICAL THINKING SKILLS**

1. **Making Connections** Based on the map and what you know about developing nations, how is literacy related to development?
2. **Analyzing** Why is literacy important to education?

**UNESCO and World Literacy**

**Percentage of Population That Is Literate**

<table>
<thead>
<tr>
<th>World literacy rate percent</th>
<th>Greater than 95</th>
<th>50–79</th>
<th>No data</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 50</td>
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**An adult literacy class in Bolivia**

**CRITICAL THINKING SKILLS**

1. **Making Connections** Based on the map and what you know about developing nations, how is literacy related to development?
2. **Analyzing** Why is literacy important to education?

**Reading Check** Identifying What is one goal of the International Atomic Energy Agency?
Population and Migration

**MAIN IDEA**  The ever-increasing world population affects the world economy.

**HISTORY & YOU** Has your family ever moved to a new community? Read to learn why some people have migrated.

The growth of new global communities depends on population and migration trends. Population patterns and global migrations are affecting the type of communities in which people will live.

**Population Trends**

A July 2006 estimate put the current world population at over 6.5 billion people, only 18 years after passing the 5-billion mark. At its current rate of growth, the world population could reach 12.8 billion by 2050, according to the UN’s long-range population projections. The UN’s more conservative projection puts that number at 8.9 billion. Even with the more conservative figure, the world population is expected to increase nearly 37 percent over the next four decades.

Soon, the most populous nations in the world will be developing countries, especially India and China. By 2050, India will have surpassed China in population and will likely remain the most populous country in the world thereafter.

In wealthy regions such as Western Europe, though, population is declining and “graying”—a larger percentage of the population is reaching retirement. In 2000, European nations had the oldest population of any region in the world: 15 percent of the population was 65 or older. By 2050, 28 percent are expected to be in this age group. In fact, by 2050, the United States is expected to be the only wealthy nation with a growing population.

Life expectancy is projected to increase worldwide after 2050. In all projection scenarios, the age distribution will shift toward older people. Due to longer life expectancies and lower birth rates in the future, the number of people 80 and over and those who live beyond 100 might rise. Just 1.1 percent of the population was 80 and over in 2000; by 2300, that percentage will increase to 17. An older population places a demand on the economy because the taxes of workers must be stretched further to cover care of the elderly.

Developing countries will face a different kind of problem. Between 2000 and 2050, the less-developed countries are expected to experience a 61 percent increase in population. This number of people might mean increased migrations as well as increased urbanization. Since many cities lack the infrastructure to support the larger populations, concerns are rising about future international health and environment problems.

**Global Migrations**

Since 1945, tens of millions of people have migrated from one part of the world to another. There are many reasons for these migrations. Persecution for political reasons caused many people from Pakistan, Bangladesh, Sri Lanka, Eastern Europe, and East Germany to seek refuge in Western European countries. Brutal civil wars in Asia, Africa, the Middle East, and Europe led millions of refugees to seek safety in neighboring countries. A devastating famine in Africa in 1984–1985 caused hundreds of thousands of Africans to move to relief camps throughout the continent to find food.

Most people who have migrated, however, have done so to find jobs. Latin Americans seeking a better life have migrated to the United States. Guest workers from Turkey, southern and eastern Europe, North Africa, India, and Pakistan have entered more prosperous Western European lands. In the 1980s, about 15 million guest workers worked and lived in Europe.

Many host countries allowed guest workers to stay for several years. In the 1980s and 1990s, however, foreign workers often became scapegoats when countries faced economic problems. Political parties in France and Norway, for example, called for the removal of blacks and Arabs in order to protect the ethnic purity of their nations. In Asian countries, there is often a backlash against other Asian ethnic groups.

✓ **Reading Check**

**Summarizing** Give four reasons why people migrate.
Globalization

Main Idea: International organizations and citizen groups work to solve global problems.

HISTORY & YOU: Do you recall how the American Red Cross started? Read to learn how many kinds of groups work on world problems.

The technology revolution has tied people and nations closely together and contributed to globalization. **Globalization** is the process by which people and nations have become more interdependent. Economically, globalization has taken the form of a global economy. Politically and socially, globalization has led to the emergence of citizen groups and other transnational organizations that work across national boundaries to bring solutions to problems that are common to all humans.

Global Economic Organizations

The global economy began to develop after World War II and gained momentum in the 1980s and 1990s. After World War II, the United States and other nations set up the World Bank and the International Monetary Fund (IMF). The World Bank is actually a group of five international organizations, largely controlled by developed countries. It provides grants, loans, and advice for economic development in developing countries. The World Bank’s stated goal is “a world free of poverty.”

The IMF, founded in 1945, is now an “organization of 184 countries.” Its goal is to oversee the global financial system. To achieve its goal, the IMF watches exchange rates and offers financial and technical assistance to developing nations. Both the World Bank and the IMF have been criticized for forcing inappropriate Western economic practices on non-Western nations. Critics also argue that World Bank and IMF policies only aggravate the poverty and debt of developing nations.

Another reflection of the global economy is the **multinational corporation** (a company that has divisions in more than two countries).
At the United Nations Millennium Summit in 2000, world leaders agreed to work together to achieve eight development goals by 2015. Developing countries are enacting reforms, and developed countries are supporting them with aid and expertise. The United Nations coordinates these efforts and tracks progress with country report cards. The 2006 report shows some progress, but the world still has a long way to go.

DEVELOPMENT GOALS
1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development

“We will have time to reach the Millennium Development Goals . . . but only if we break with business as usual . . . Success will require sustained action . . . It takes time to train the teachers, nurses and engineers; to build the roads, schools and hospitals; to grow the small and large businesses able to create the jobs and income needed. So we must start now. And we must more than double global development assistance over the next few years. Nothing less will help to achieve the Goals.”

—Kofi Annan
UN Secretary-General from 1997 to 2006

Prominent examples of multinational corporations include Siemens, IBM, Toyota, and the Sony Corporation. The growing number of multinational corporations that do business around the world increasingly tie one country to another in a global economy. For example, an economic downturn in the United States can create stagnant conditions in Europe and Asia. We live in an interdependent world.

Global trade is another important component of the global economy. Over the years, many nations joined in talks to make trade between countries free and easy. These talks led to General Agreement on Trade and Tariffs (GATT). In 1995, the nations that had signed the GATT treaties agreed to create the World Trade Organization (WTO). Made up of more than 140 member nations, the WTO arranges trade agreements and settles trade disputes. The WTO has been criticized for ignoring environmental and health concerns and for leaving out small and developing countries. Still, it is the only global organization that deals with rules of trade among nations.

Groups of nations have joined together to form trading blocs. By 2004, the European Union included 25 member states and is the world’s largest single trading entity. The EU has a single internal market and a common currency (the euro).

Elsewhere, the North American Free Trade Agreement (NAFTA) created a free-trade area for Canada, the United States, and Mexico. The Asia Pacific Economic Cooperation (APEC) agreement has tried to do the same among nations that border the Pacific Ocean.
Transnational Organizations

Global awareness has led to new social movements that involve ordinary citizens and focus on problems that nations share. Problem areas include threats to the environment, women’s and men’s liberation, child labor, appropriate use of technology, and promotion of peace.

Some organizations, such as the Red Cross, draw their membership from people in many different countries. Some individuals act at the grassroots level—that is, in their own community. A favorite slogan of grassroots groups is “Think globally, act locally.” Hazel Henderson, a British-born economist, believes that these individuals can be powerful agents for change.

PRIMARY SOURCE

“These aroused citizens are by no means all mindless young radicals. Well-dressed, clean-shaven, middle-class businessmen and their suburban wives comprise the major forces in California fighting against nuclear power. Hundreds of thousands of middle-class mothers are bringing massive pressure to ban commercials and violent programs from children’s television.”

—Hazel Henderson, Creating Alternative Futures

Another movement that addresses world problems is the growth of nongovernmental organizations (NGOs). NGOs are often represented at the United Nations. They include professional, business, and cooperative organizations, as well as foundations. Also included are religious, peace, and disarmament groups that work to limit the size of military forces and weapons stocks. Other NGOs protect the welfare of women and children and include environmental and human rights groups.

American educator Elise Boulding promotes NGOs. She believes they can educate people to consider problems globally. She says that all NGOs are expected “to define problems in global terms, to take account of human interests and needs as they are found in all parts of the planet.” The number of international NGOs increased from 176 in 1910 to nearly 37,000 in 2000.

Global solutions to global problems have been hindered by political and ethnic disputes. Even as the world becomes more global and interdependent, disruptive forces work against efforts to enhance our human destiny.

Many lessons can be learned from the study of world history. One is especially clear: a lack of involvement in the affairs of one’s society can lead to a sense of powerlessness. An understanding of our world heritage and its lessons might well give us the opportunity to make wise choices in a crisis-laden and often chaotic age. We are all creators of history. The choices we make in our everyday lives will affect the future of world civilization.

✓ Reading Check Explaining What is the European Union?

Vocabulary
1. Explain the significance of: Franklin Delano Roosevelt, peacekeeping forces, nuclear proliferation, migration, projection, globalization, World Bank, International Monetary Fund (IMF), multinational corporation, World Trade Organization (WTO), grassroots level, Hazel Henderson, nongovernmental organizations (NGOs), disarmament groups, Elise Boulding.

Main Ideas
2. List the nations that have permanent seats on the UN Security Council. Use a chart like the one below to make your list.

<table>
<thead>
<tr>
<th>Nations That Have Permanent Seats on the UN Security Council</th>
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3. Explain why the age distribution in the world’s population will shift toward older people after 2050.

4. Name three international organizations that were established to help solve global economic problems.

Critical Thinking
5. The BIG Idea Making Connections Why is the United Nations so important in today’s world?

6. Evaluating Why is nuclear proliferation a global concern?

7. Analyzing Visuals Examine the map on page 1049. Is there an area or country with a literacy rate that surprised you? Explain why or why not.

Writing About History
8. Descriptive Writing Choose one NGO to research. Write an essay about the organization’s mission, goals, accomplishments, and failures.

History ONLINE

For help with the concepts in this section of Glencoe World History, go to glencoe.com and click Study Central.
THE TECHNOLOGICAL REVOLUTION

- Advanced communication and transportation systems are linking the world’s people.
- New technologies for exploring space have increased our understanding of the universe.
- Weapons of mass destruction, or WMDs, are a grim result of the technological revolution.
- Breakthroughs in medicine and agriculture save lives, but some raise ethical questions.

CAR BOMB DESTROYS NIGHTCLUB IN BALI, INDONESIA

All nations must face the challenge of terrorism.

REPAIRING THE HUBBLE SPACE TELESCOPE

The Hubble Space Telescope provides images of our solar system and other galaxies.

GLOBAL CHALLENGES

- Deforestation, chemical wastes, oil spills, and nuclear accidents threaten the environment.
- Nations must conserve natural resources to achieve sustainable development.
- Poverty, hunger, and civil unrest plague many developing countries.
- Human rights violations occur worldwide.
- Terrorism has become part of modern society.

GLOBAL SOLUTIONS

- The United Nations works for world peace and human dignity.
- Nongovernmental organizations focus on issues such as disarmament, child welfare, and human rights.
- Economic interdependence has given rise to international organizations to address issues affecting the global economy.

RED CROSS HELPS FAMINE VICTIMS IN SUDAN

The Red Cross, a transnational organization, provided food and medical care during the 1984–1985 famine in western Africa.
STANDARDIZED TEST PRACTICE

TEST-TAKING TIP

If you do not know the answer to a question, eliminate any answer choices that you know are incorrect. Then choose the best answer from the remaining choices.

Reviewing Vocabulary
Directions: Choose the word or words that best complete the sentence.

1. The _______ has produced new strains of rice, corn, and other grains that have greater yields.
   A greenhouse effect  
   B global economy  
   C Neolithic Revolution  
   D Green Revolution

2. North Korea’s recent test of its first nuclear weapon is an example of nuclear _______.
   A disarmament  
   B proliferation  
   C bioterrorism  
   D globalization

3. Overgrazing and poor cultivation practices in semi-arid lands are creating _______, or a decline in the soil’s productivity.
   A desertification  
   B organic evolution  
   C deforestation  
   D conservation

4. The technology revolution has contributed to _______, or the process by which people and nations have become more interdependent.
   A secularization  
   B sustainable development  
   C bioterrorism  
   D globalization

Reviewing Main Ideas
Directions: Choose the best answers to the following questions.

Section 1 (pp. 1038–1047)

5. What invention in 1971 made small personal computers possible?
   A The vacuum tube  
   B The World Wide Web  
   C The microprocessor  
   D Hypertext transfer protocol

6. What new field deals with moral issues involved in technological advances, such as stem-cell research?
   A Bioethics  
   B Genetic engineering  
   C Ethnic cleansing  
   D Ecology

7. Which of the following is the main cause of global warming?
   A Rising sea levels  
   B Increase in solar radiation  
   C Release of chlorofluorocarbons into the atmosphere  
   D Buildup of carbon dioxide in the atmosphere

8. The world’s developing nations are mostly located in which hemisphere?
   A Northern  
   B Southern  
   C Eastern  
   D Western

Need Extra Help?

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<tr>
<th>If You Missed Questions</th>
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<th>2</th>
<th>3</th>
<th>4</th>
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</table>
9. What is the main goal of the Irish Republican Army?
   A To help Great Britain in time of war
   B To form a Protestant-Catholic coalition
   C To unite Northern Ireland with the Irish Republic
   D To make Southern Ireland an independent state

Section 2 (pp. 1048–1053)
10. What are the two main bodies of the United Nations?
    A General Assembly and National Council
    B Security Council and National Assembly
    C National Council and National Assembly
    D Security Council and General Assembly

11. Which country is expected to be the most populous in the world by 2050?
    A United States
    B India
    C China
    D Sudan

12. For what reason have most people migrated?
    A To find jobs
    B To escape persecution
    C To find food
    D To escape civil war

13. Which organization oversees the global financial system?
    A World Bank
    B World Trade Organization
    C International Monetary Fund
    D United Nations

Critical Thinking

Directions: Choose the best answers to the following questions.

Use the following map to answer question 14.

Radioactive Fallout From Chernobyl, 1986

14. Which of the following is a true statement about the global effects of the nuclear accident at Chernobyl?
    A Fallout covered more than half of the Southern Hemisphere.
    B Fallout extended as far as eastern Canada.
    C Fallout covered about two-thirds of the Northern Hemisphere.
    D The heaviest fallout occurred in the Soviet Union.

15. What would be a global economic effect should a war or revolution occur in the Middle East?
    A A devaluation of the euro
    B A big increase in the price of oil
    C A recession or a depression
    D A drop in the market price of grains
16. Which of the following is a true statement about world population between now and 2050?
   A  The greatest population growth will occur in wealthy nations.
   B  Migrations and urbanization in developing countries will increase.
   C  The population’s average age will become increasingly younger.
   D  Disease and starvation will reduce life expectancy worldwide.

17. Which argument below might come from an opponent of stem-cell research?
   A  The research might produce deadly "supergerms" that cannot be controlled.
   B  The research might make it possible to create a human being in a laboratory.
   C  The research uses cells from human embryos.
   D  The research alters the genetic makeup of an organism.

18. Which problem is the subject of this cartoon?
   A  World hunger  
   B  Population growth  
   C  Global warming  
   D  Deforestation

19. Summarize the argument that Carson is presenting in this quotation.

20. In Carson’s opinion, who will question the lack of concern shown for the natural world?

21. Terrorism has become part of modern life. What are some possible causes of global terrorism?
World Wide Wonder

It seems as if the Internet has been around forever, but it’s existed only since 1969. Over the years, the Internet has grown in importance. Here are highlights from its history.

**1969** A U.S. Defense Department agency called the Advanced Research Project Agency (ARPA) connects four universities in a communications network. It is called ARPANET. This primitive network is the start of the Internet era.

**1972** The first electronic mail (e-mail) is sent.

**1982** The word Internet is used for the first time.

**1984** The Domain Name System (DNS) is put in place. Extensions such as .com, .org, and .edu are used to identify network addresses.

**1990** Englishman Tim Berners-Lee invents the World Wide Web while working in a Swiss physics laboratory.

**1993** Mosaic, the first web browser to use graphics, becomes available.

**1994** Companies begin to sell items on the Internet. The term spam, meaning unsolicited e-mail, is first introduced.

**1999** College student Shawn Fanning introduces Napster, a program that lets Internet users swap music for free. Calling it a violation of copyright, the music industry gets Napster declared illegal. Eventually, Napster becomes a pay service.

**2004** The worm MyDoom infects Internet servers, affecting about one-twelfth of all e-mail messages.

**2006** Users of the Internet worldwide number more than one billion.

**VERBATIM**

“I do not know how the Third World War will be fought, but I can tell you what they will use in the Fourth—rocks.”

ALBERT EINSTEIN, declaring that an atomic war would end world civilization

“There can be no liberty unless there is economic liberty.”

MARGARET THATCHER, prime minister of Great Britain, a firm believer in free-market capitalism

“It’s a very humbling occasion. Kenyans have given me a challenge.”

MWAI KIBAKI, elected democratic president of Kenya, on succeeding in 2003 the repressive party that ruled the country for 39 years

“Women suddenly have more value in this society.”

LULUA ABDULLAH AL-OMARI, Kuwaiti mother of four, on efforts to encourage female voters in Kuwait’s first elections since women won the right to vote in 2005

“Everything has changed, but nothing is better.”

FAY WELDON, English author, on the impact of feminism on women’s lives

MELTDOWN!

These satellite photos show the Arctic ice cap in 1979 and 2005. An area twice the size of Texas, normally covered by ice, is now open water. Scientists fear the ice cap, as well as Earth’s glaciers, are melting because of global warming. Polluting gases produced by burning coal, oil, and other fossil fuels are a major cause of global warming. These “greenhouse” gases trap the heat from sunlight, raising Earth’s temperature. Most of the world’s countries have signed the 1997 Kyoto Protocol, a treaty that requires them to reduce their greenhouse emissions. But as the pictures show, efforts to turn down the heat haven’t yet succeeded.

**1979**

**2005**
What’s in a Name?

Africa has the most countries of any continent. Since the 1960s, many of those nations have gained independence—and changed their names. Can you match the current name of the African country (1–10) to its previous name, or names (a–j)?

1. Democratic Republic of the Congo
2. Lesotho
3. Djibouti
4. Burkina Faso
5. Malawi
6. Mali
7. Zimbabwe
8. Benin
9. Tanzania
10. Zambia

a. Upper Volta
b. Southern Rhodesia
c. Sudanese Republic
d. The countries of Tanganyika and Zanzibar
e. Dahomey
f. Zaire
g. French Territory of the Afars and the Issas
h. Northern Rhodesia
i. Basutoland
j. Nyasaland

MILESTONES

DEBUTS. THE EURO, the official currency of the member countries of the European Union. The euro replaces the French franc and 12 other European currencies. The nations will use common bills and coins, making it easier to do business.

CLONED. DOLLY, a Finn Dorset lamb. She is the first mammal cloned from an adult cell. A six-year-old female sheep gave birth to Dolly on July 5, 1996. This feat by Scottish scientists raises ethical issues.

DIED. PABLO NERUDA, Chilean poet and winner of the 1971 Nobel Prize in Literature. Neruda was appointed ambassador to France by his friend, Salvador Allende, Chile’s socialist president. Neruda died shortly after military officers removed Allende from office in 1973. Protests against the dictatorship took place at his funeral.

KILLED. An estimated 800,000 RWANDANS in 100 days, beginning in April 1994. The victims, members of a minority ethnic group called the Tutsis, were killed by the majority Hutus. The two groups have been at odds for many years. The immediate cause of the violence was the death of the president of Rwanda, a Hutu, whose plane had been shot down.

OPENED. QINGHAI-TIBET RAILWAY, a 709-mile engineering marvel connecting the Tibetan capital to the rest of China; in Lhasa, in 2006. Critics of the project say it threatens Tibet’s environment and will erode Buddhist culture by bringing in ethnic Chinese immigrants. Reaching an altitude of 16,404 feet, the railway is the world’s highest.

BY THE NUMBERS

1 million Deaths each year from malaria, which is spread by the anopheles mosquito and kills mostly children in Africa

44% Portion of athletes at the 2004 Summer Olympics who are women, up from 38% at the 2000 Games

8.7 million Number of millionaires on the planet, according to a recent study

17 Number of No. 1 hits by the Beatles, tied with Elvis for the most No. 1 hits by any single act

98 Number of minutes it took Sputnik, the first artificial satellite, to orbit Earth

1,888 The estimated number of languages spoken in Africa

5 The number of current Communist states (China, Vietnam, Laos, Cuba, and North Korea)

CRITICAL THINKING

1. Finding the Main Idea  What are the supporting details the writer uses in “Meltdown!” to get across the point that global warming is taking place?

2. Inferring  Based on the information in the “Milestone” about Pablo Neruda, where do you think the poet stood politically?