

Chapter Objective, Essential Questions, & TEKS

• Objective:

Explain the significance and impact of events in the new millennium, such as the September 11th Attacks, the Computer Revolution, Hurricane Katrina, and spread of American Pop Culture.

• Essential Questions:

- In what way were both 2000 and 2008 unique Presidential election years?
- How did Americans react to the terrorist attacks of September 11, 2001?
- How did Presidents Bush and Obama respond to the 2008-2009 financial crisis?
- What impact has American popular culture had on rest of the world?

• TEKS:

- History: 2 (D), 10 (C), 10 (F), 11 (A), 11 (D), 11 (E)
- Geography: 12 (A), 13 (B)
- Economics: 18 (B)
- Government: 19 (B), 19 (D), 20 (B)
- Culture: 25 (A), 25 (C), 25 (D), 26 (C), 26 (D)
- Science, Technology, & Society: 27 (A), 27 (B), 27 (C), 28 (A), 28 (C)

Chapter Vocabulary

- George W. Bush
- Al Gore, Jr.
- Presidential Election of 2000
- September 11, 2001
- World Trade Center
- Pentagon
- Osama Bin Laden
- Al-Qaeda
- Taliban
- War on Terror
- Department of Homeland Security
- U.S.A. P.A.T.R.I.O.T. Act
- War in Iraq
- Hurricane Katrina
- New Orleans Levees
- Financial Crisis of 2008

- American Recovery & Reinvestment Act
- Presidential Election of 2008
- Barack Obama
- Sonia Sotomayor
- Technology / Innovation
- J-I-T Production
- Robotics
- Time-Study Analysis
- Computer Revolution
- Genetic Engineering
- Multinational Corporation
- Demography
- Illegal Immigration

Important Ideas

- The 2000 Presidential election was the closest in U.S. history. AI Gore won the popular vote. but the winner in the Electoral College depended on who won Florida. Many Florida voters had failed to correctly punch in their ballots. The Florida Supreme Court demanded a recount. The U.S. Supreme Court overruled it by a 5 to 4 decision, making George W. Bush President.
- On September 11, 2001, Islamic Fundamentalist terrorists hijacked commercial airliners and flew them into the World Trade Center and the Pentagon. A 3rd plane crashed in Pennsylvania. Osama bin Laden and his organization, Al-Qaeda. had carried out these acts of terror.
- In response to the September 11th attack, President Bush declared a global War on Terror. With its allies. the United States invaded Afghanistan when its Taliban rulers refused to hand over Osama bin Laden to the United States.
- In response to September 11th, President Bush created the Department of Homeland Security, the TSA, and pushed through Congress the USA PATRIOT Act. These measures were introduced in response to the threat of terrorism. Some suspected terrorists were imprisoned at Guantanamo Bay in Cuba where they were not given the full benefits of the Bill of Rights.
- Critics argued that some of these measures against suspected terrorists violated the U.S. Constitution, but officials responded that they were necessary to combat terrorism and to save the lives of thousands of innocent Americans.
- President Bush authorized the invasion of Iraq when he believed that dictator Saddam Hussein of Iraq was hiding weapons of mass destruction (WMDs), such as biological and chemical weapons, and also felt that UN inspectors' findings were inadequate. The United States and its allies invaded Iraq. Hussein's forces were quickly defeated, but coalition forces later became tied down in fighting an insurgency in Iraq that developed after the invasion.
- In 2008. America suffered a severe financial crisis. The crisis began when many homeowners could not pay their mortgages after interest rates rose. Mortgage backed securities then lost much of their value, threatening banks and investors. The Bush Administration provided \$700 billion in emergency relief. making the U.S. government a partner to many private businesses.

Important Ideas

- In 2008, Barack Obama was the first African American to be elected President after a hard-fought campaign in which he defeated Hillary Clinton in the primaries and John McCain in the Presidential election.
- Under President Obama 's leadership, Congress passed the American Recovery and Reinvestment Act, pumping more federal money into the economy. Obama also gave financial relief to the leading automobile manufacturers to prevent them from going bankrupt.
- President Obama pushed health care reform and the reform of banks and credit card lenders through Congress. He also appointed Sonia Sotomayor as the first Hispanic to the U.S. Supreme Court.
- President Obama began to withdraw forces from Iraq and added troops to the war in Afghanistan. In 2011. U.S. forces apprehended and killed Osama bin Laden, who had been found hiding in Pakistan. In Spring 201 1, local populations in Tunisia. Egypt, and Libya overthrew their dictators. President Obama encouraged local Arab leaders not to use force against the demonstrators.
- Scientific discoveries and technological innovations drive the American economy today. The free enterprise system. with its profit motive and system of copyrights and patents, helps drive innovation forward. Often, scientists and engineers make innovations to address specific needs.
- The United States is now part of a global economy. The use of energy and protection of the environment are important aspects of this economy.
- American popular culture, spread by music. film. television. and the Internet now has global reach. These media depict the American culture and way of life to other nations around the world.
- Demography is the study of population. Since World War II, the size of the U.S. population has more than doubled. During this period, the center of the nation's population has shifted away from the Northeast towards the Sun Belt. Much of the recent population growth in the United States has been due to both legal and illegal immigration.

The George W. Bush Presidency

- **George W. Bush**, the son of former President George H. W. Bush, was the Governor of Texas from 1995 to 2000. In November 2000, Bush became President after winning a majority of the Electoral College in the closest Presidential election contest in U.S. history.
- The 2000 Election: Bush vs. Gore:
 - Bush's Democratic opponent was Bill Clinton's Vice President, AI Gore. Despite Clinton's successes, the Democrats were weakened by Clinton's impeachment scandal. Gore was also hurt by the emergence of a third-party candidate, author and consumer advocate Ralph Nader, as well as by a downturn in the American economy. Bush gained further support when he performed better than expected in the Presidential debates.
 - On election night, Gore won the popular vote by a half a million votes. In some states the margin was so narrow that the winner of the Electoral College remained unclear for weeks. Bush appeared to hold a narrow lead in Florida, pending a final count. If either candidate won Florida, where Bush's brother was Governor, it would give him enough electoral votes to win the Presidency.



The 2000 Election: Bush vs. Gore

- At first, it appeared that Bush had carried the state. But after a mandatory recount, his lead was fewer than 1,000 votes. Not only was the Florida vote close, but there were also questions regarding its accuracy. Thousands of voters had not fully punched in the holes in their paper ballots to indicate the candidate they were voting for. During the count, vote-counting machines had ignored these ballots. Gore demanded a recount by hand in four Florida counties. State officials refused to extend the deadline for this recount, and were supported by a lower state court. State officials certified Bush as the winner of Florida's electoral votes.
- Gore appealed to the Florida Supreme Court, which demanded a statewide recount. Bush appealed this decision to the U.S. Supreme Court. The Court ruled, by a narrow 5 to 4 vote, to order an end to the recount. The Florida Supreme Court had instructed those making the recount to evaluate the voter's intent in cases where the ballot was not correctly punched in. The U.S. Supreme Court majority objected to this, saying there were no consistent standards for reviewing the ballots. Critics felt that the U.S. Supreme Court had voted along party lines- 5 conservative Justices vs. 4 liberal ones. Some thought the Court, with a majority of Justices appointed by Presidents Nixon, Ford, Reagan and Bush, was acting against the will of the people, as expressed in the popular vote, to put a minority candidate whom they favored into office.



November 7, 2000



Bush's Domestic Policy

- As President, George W. Bush pushed through a tax cut in an attempt to revitalize the economy. The Federal Reserve Board also dropped interest rates to their lowest levels in decades. The tax cuts revived the economy, but also brought a return to high federal budget deficits. The cuts also mainly favored the wealthy. Bush claimed that the cuts were needed to get the economy growing again.
- As Governor of Texas, Bush had been active in promoting educational reform. As President, he introduced the No Child Left Behind Act, requiring states to test all students in English and mathematics each year from the third to the eighth grade.





September 11th Attacks

- On **September 11, 2001,** Islamic Fundamentalist terrorists boarded four different U.S. airliners. Once airborne, the planes were hijacked. The hijackers threatened to kill the passengers and the crew in order to get access to the pilot's cockpit. The terrorists included trained pilots. Then they flew the planes into the **World Trade Center** in New York City and the **Pentagon** building in Washington, D.C. A fourth plane crashed in Shanksville, Pennsylvania, when passengers resisted the terrorists.
- Three thousand people were killed, making this the worst attack in U.S. history. **Osama bin Laden** and his organization, **al-Qaeda**, took credit for these terrorist attacks. Bin Laden came from a wealthy Saudi Arabian family. His father founded a construction company in Saudi Arabia and became a billionaire. The Soviet invasion of Afghanistan in 1979 stirred bin Laden to recruit Islamic soldiers from around the world to resist the Soviets. This organization later became the basis of al-Qaeda.
- After the attacks on the United States, bin Laden was sheltered by the Taliban-controlled government of Afghanistan. The **Taliban**, a group of Islamic Fundamentalists, refused to surrender bin Laden to the United States.



The Global War on Terror

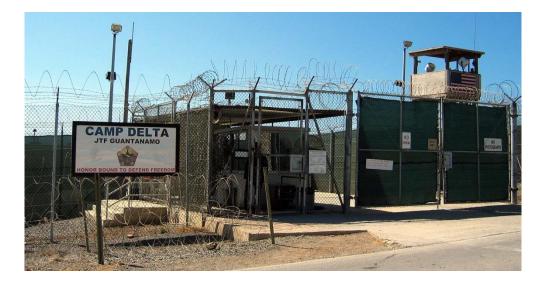
- President Bush vowed to launch a global "War on Terror" against those nations that harbored terrorists. In October 2001, Bush ordered air and ground assaults, which toppled the Taliban and destroyed al-Qaeda's bases. Although many members of al-Qaeda were caught, Osama bin Laden himself managed to elude capture.
- President Bush also took steps to curb terrorism at home. *A* new federal agency, the **Transportation Security Agency** (TSA), took over security at U.S. airports, and all passengers and luggage were subjected to a thorough screening. In 2003, President Bush created a new Cabinet post, the **Department of Homeland Security.** Its mission was to keep the United States secure from all threats. Its activities range from nuclear detection and intelligence coordination to the protection of high-level government officials.





The Global War on Terror

- Bush also sponsored the **USA PATRIOT Act** of 2001, which greatly expanded the government's law enforcement powers. The September 11th terrorists had been organized into four teams. Some had trained as pilots in America. They had cell phones and computers to communicate, and bank accounts funded by international terrorist groups. The new act allowed law enforcement officials and intelligence agencies the power to conduct sweeping searches and surveillance, detain immigrants and monitor bank accounts. President Bush authorized the National Security Agency (NSA) to wiretap suspected callers without first obtaining a warrant. Some felt that the USA PATRIOT Act gave the executive branch too much power, threatening individual liberties. Its "warrantless" wiretaps were later held to be unconstitutional.
- President Bush also imprisoned suspected terrorists, captured in Afghanistan at Guantanamo Bay in Cuba, where the rights required by the U.S. Constitution did not have to be given to the accused. Prisoners who went on a hunger strike were force-fed. The Department of Justice believed that limited torture techniques, such as "water-boarding" pouring water on the face of a prisoner to create the sensation of drowning --were justified to obtain information from the suspects about future attacks, which might save thousands of lives. Critics felt torture is rarely successful or necessary for obtaining accurate information. They claimed prisoners were treated inhumanely, even though some of them might be innocent.





Constitutional Issues After 9/11

• The attack on the U.S. on September 11, 2001 led to important changes in the policies of the federal government. The Constitution grants Congress the power to provide for the common defense. Those who support a vigorous pursuit of international terrorists want to see government powers expanded to accomplish this goal. However, recent laws have raised constitutional issues. Although the government is responsible for protecting Americans from such attacks, this fact does not authorize all actions directed towards this purpose.

USA PATRIOT Act:

The USA PATRIOT Act greatly expanded the authority of law enforcement and intelligence agencies to monitor private communications and obtain personal information. Many Americans feel that this act has given the federal government too much power, threatening individual Liberties. For example, the act authorizes the FBI to use wiretaps and grants the government access to "any tangible items" of a person under surveillance, including surveillance of individuals and groups not connected to a terrorist group. As you know, the Act's "warrantless" wiretaps were tater held to be unconstitutional.

The NSA Unchained





Constitutional Issues After 9/11

• The TSA:

The attacks by terrorists using planes raised questions about the effectiveness of airport security at checkpoints before passengers board an aircraft. Since 9/11, security at American airports has been greatly increased. The procedures carried out by the TSA raise several constitutional questions: What authority does the TSA have to search a person or luggage? How can Americans protect themselves against unreasonable and overly intrusive searches? Since airlines are private entities, what authority do government representatives have to conduct searches of private individuals using them?

Military Tribunals:

Under President George W. Bush, the federal government established military tribunals on American soil to try legal residents who were not citizens of the United States on charges of terrorism. The Fifth Amendment grants individuals the right to due process of law. Do "due process" rights apply only to U.S. citizens?





The War in Iraq

- President Bush next turned his attention to Iraq. Bush and his top advisors feared that Iraqi dictator **Saddam Hussein** might provide biological, chemical, or even nuclear weapons to Islamic terrorists like Osama bin Laden.
- Hussein had used chemical weapons against the Kurds in the 1980s. Although Hussein denied that he possessed "weapons of mass destruction" (WMDs), he at first refused to allow U.N. inspectors to search in Iraq. Later, U.N. inspectors found no WMDs, but some questioned whether their inspection was thorough enough. The United States, Britain, and Spain warned Iraq to surrender its WMDs or face invasion. France, Germany, and Russia favored a more cautious approach, calling for additional inspections. American leaders feared Hussein would use any delay to hide his weapons. In March 2003, President Bush gave Hussein 48 hours to leave Iraq or face invasion. When Hussein rejected the ultimatum, coalition forces took military action.
- The United States began its campaign with a series of air strikes. In early April, U.S. forces entered Baghdad. Hussein's dictatorship quickly collapsed. Later, Hussein himself was captured, tried for crimes against Iraqi citizens during his long reign, and executed by Iraqis in 2006.





The War in Iraq

- Meanwhile, coalition forces established a provisional government in Iraq. In early 2005, Iraqi voters elected representatives to draw up a constitution. Soon afterwards, a newly elected Iraqi national government took power, becoming the first Arab democracy in the Middle East.
- Although Hussein was defeated, the war was far from over. An insurgency consisting of former supporters of Hussein, Shiite radicals, and Iraqis angry at foreign intervention soon arose. Differences between the major ethnic groups of Iraq added greatly to this conflict. American forces also committed some key missteps. For example, Iraqi prisoners at Abu Ghraib prison were tortured and humiliated, adding to the unpopularity of foreign troops on Iraqi soil.
- By the end of 2006, as many as 1,000 people were still being killed in Iraq each month. President Bush announced a new "surge" strategy, sending more than 20,000 additional U.S. troops to Iraq to secure local neighborhoods, protect the Iraqi population, guard Iraq's borders, and strike at al-Qaeda forces. This surge greatly reduced violence in Iraq. American withdrawal from Iraq then became a central issue in the 2008 U.S. Presidential campaign.





Hurricane Katrina

- President George W. Bush's second term (2005-2009) also witnessed the arrival of Hurricane Katrina. This hurricane led to the evacuation and flooding of almost 80% of New Orleans and other parts of the Gulf Coast. Katrina brought the highest storm surge and waves ever recorded to hit the North American continent. Its surge and waves greatly exceeded the engineering design of the New Orleans levees.
- Hurricane Katrina was also the costliest hurricane on record. Much of the damage occurred when the levees in New Orleans failed to hold back the storm water. More than 1,800 people lost their lives in the flooding, making Katrina one the deadliest natural disasters in American history. It caused devastation as far as 100 miles from the storm's center. Rescue efforts were so delayed that many citizens found themselves stranded for days on rooftops and in attics. Almost 20,000 people were trapped in New Orleans' Superdome, crammed together in sweltering heat and unsanitary conditions.



2008-2009 Financial Crisis

- The end of Bush's second term coincided with the worst financial crisis in the United States since the Great Depression. For decades, the federal government and Federal Reserve had followed policies to reduce swings in the economy. These efforts, combined with the growth of globalization, now contributed to an unexpected collapse.
- When the stock market dropped sharply back in 2000, the Federal Reserve lowered interest rates to stimulate the economy. Many took advantage of these lower interest rates to buy new homes. Some banks lent money to borrowers who could not really afford their homes. Increasing homeownership caused house prices to rise, leading to speculation in housing. Later, these mortgages were bundled with other investments and sold to other banks or investors.
- By 2007, overbuilding led to falling house prices. Some people had special mortgages that adjusted to higher interest rates. When interest rates began to rise, some homeowners found they could not afford their mortgages. This led to a rising number of home **foreclosures** (when a homeowner cannot pay the mortgage, and the bank takes back the house to sell it). Meanwhile, the federal government gave rebates to taxpayers and businesses in February 2008 to stimulate the economy.





2008-2009 Financial Crisis

- In September 2008, the federal government took over the nation's largest mortgage lenders. Despite these actions, the financial crisis still spiraled out of control. Firms that held mortgage-backed securities started to fail. In the final months of the Bush Presidency, several large investment firms showed signs of collapsing. The government allowed the investment firm of Lehman Brothers to fail. Others threatened to follow. Banks stopped lending, and credit dried up for individuals and businesses.
- In October. the Emergency Economic Stabilization Act (2008) authorized the Secretary of the Treasury to spend up to \$700 billion to buy distressed investments and to provide funds to banks to prevent them from failing. The Treasury and Federal Reserve provided emergency funding to the insurance giant AIG, several brokerage houses, and the nation's largest banks.



The Obama Presidency

- The 2008 Presidential campaign was one of the hardest-fought election in U.S. history. It began long before the financial crisis became so severe. Democrats attacked the conduct of the war in Iraq. while Republicans supported it. Former First-Lady Hillary Clinton was seen as the early Democratic frontrunner because of her popularity with women. However, a young Senator from Illinois, Barack Obama, emerged as the Democratic nominee after one of the closest primary contests in history. A top student at Harvard Law School, Obama had become a community organizer and politician in Chicago. The Republican Party nominated Senator John McCain, a candidate with a distinguished war record and a former prisoner-of-war in Vietnam.
- Obama's campaign received a tremendous boost when Oprah Winfrey. one of the world's wealthiest women and the highest paid entertainer in the world, publicly endorsed him over Hillary Clinton. Winfrey was a self-made superstar. With the nation's most watched daytime television show at the time, Winfrey was able to provide important support to Obama, especially among women.



The Obama Presidency

Obama Elected President:

In the campaign. Obama criticized the decision to go to war in Iraq, which he had opposed. He also promised health care reform. His candidacy especially appealed to young people, African Americans, and opponents of the Iraq war. Obama called for closing the prison at Guantanamo Bay. He also promised millions of undocumented aliens a path to eventual citizenship. Obama spoke against tax cuts for the wealthiest Americans, but promised no tax increases on middle class Americans. His opponent, John McCain. emphasized his record as an independent-minded Republican. McCain chose a woman, Alaska Governor Sarah Palin. as his Vice-Presidential running mate.

Importance of the 2008 Election:

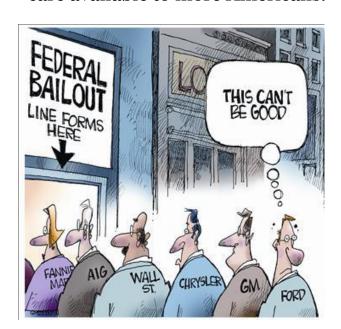
- The son of a Kenyan father and a white American mother,
 Obama was the first African-American to be elected
 President -135 years after the Emancipation Proclamation
 and 45 years after Dr. King's "I Have a Dream" Speech.
- His election was also significant for a number of other reasons. Obama campaigned on a promise of change that powered him through the longest, most costly Presidential campaign in U.S. history. His election was remarkable for his rapid rise in American politics from a position of obscurity just a few years before. Obama used the Internet to gather supporters and to raise campaign contributions. With a stunning grassroots movement, he won the Presidency.





Obama Responds to the Crisis

- President Obama sought to prevent a depression like the 1930s. His objective was to simulate the economy by creating jobs, rebuilding roads, schools, bridges and tunnels. Obama also proposed important changes to the nation's health care system and system of education.
- In April 2009, Obama and Congressional leaders agreed to the **American Recovery and Reinvestment Act**, to jumpstart the American economy. More than \$700 billion was to be spent by the federal government in a bailout package designed to create new jobs, save existing ones, spur economic activity, and invest in long-term infrastructure development. Part of the money would be spent directly by the federal government. Other funds were to be supplied to state governments.
- The Obama Administration further responded to the financial crisis by passing legislation to regulate credit cards, lending and other banking practices. He also took steps to save the U.S. auto industry. After much controversy, a health care reform act was passed, which sought to make health care available to more Americans.





Supreme Court Appointments

Sonia Sotomayor was raised in a South Bronx housing project by working class parents. After a brilliant legal career, President Clinton nominated her for the U.S. Court of Appeals. In 2009, Obama nominated Sotomayor to the U.S. Supreme Court, making her the first Hispanic justice and the third woman to serve on the U.S. Supreme Court. Later that year, Obama named another woman, Elena Kagan, a former Harvard Law School Dean, to the U.S. Supreme Court.



Foreign Policy

• Like President Carter, Obama sought to exercise moral leadership and work more closely with allies. He faced several threats to American security from overseas.

Pakistan. President Ohama Iran. Despite increased economic The "Arab Spring." President encouraged Pakistan to take a and political sanctions, Iran Obama discouraged dictators continues to develop a nuclear more aggressive stance in fightfrom using force to suppress ing terrorism. U.S. troops, actweapon, World leaders fear this democracy movements in Tunisia. ing on a special mission, entered would tip the balance of power Yemen, Syria, and Egypt. In Libya, Pakistan, where they were able in the Middle East. Iran sponsors he authorized airstrikes to defend to track down and kill al-Oaeda terrorist groups in the Middle rebels, leading to Gaddafi's downterrorist Osama bin Laden. East, and its leaders have openly fall and death. threatened Israel's existence. Israel, President Ohama seeks to Irag. President Obama gradually withdrew U.S. troops which were work with Israelis and Palestinians. FOREIGN POLICY UNDER replaced by Iraqi security forces. to achieve a two-state solution -The situation remains challeng-PRESIDENT OBAMA a Jewish state and a Palestinian ing as acts of terrorism continue state living side-by-side in peace. against the Iraqi government. China. China continues to Afghanistan. President Obama Europe. President Obama has increased the level of U.S. troops maintained close ties with export a large number of goods in Afghanistan in an effort to Europe, The European Union to Americans while its invesstabilize the country and revitalhas experienced its own finantors buy a great deal of U.S. ize its development. cial crisis, similar to that faced Treasury notes, supporting the large American debt. by the United States.

Technological Innovation

- Just as important as recent government policies have been several long-term technological, economic, and social developments. These are gradually changing the American way of life.
- **Technology** is the use of tools and techniques to meet human needs. Modem technology, based on science, has led to many changes in manufacturing and productivity. Modem technology is often based on the application of scientific discoveries to solve practical problems.
- **Innovation** consists of two steps: first, inventing a product or process; second, producing it or putting it into effect. The first step requires creativity, while the second demands resources and organization. Over the past half century, the United States has been at the forefront of scientific discovery and technological innovation. For example, Americans developed the transistor, integrated circuit, computer, Internet, light emitted diode (LED), Global Positioning System (GPS), and UNIX computer operating system. Such innovations can spur workplace productivity. New ways of managing human and natural resources can have the same effect. For example, many companies now use **robotics** to aid in manufacturing.





Technological Innovation

- Others employ "just-in-time" (J-I-T) production, in which parts arrive at the precise time in the manufacturing process they are needed by workers. The ability of computers to track inventory has made this technique, which requires precise communication, possible. J-I-T production benefits the manufacturer by eliminating the need for a large inventory of parts. For example, when Hewlett Packard introduced J-I-T production, it reduced the time to manufacture a group of 3 1 circuit boards from 15 days to II hours. The cost of inventory for these boards fell from \$670,00 to only \$20,000.
- **Time-study analysis** was first developed more than 50 years ago. A trained observer records how long it takes a qualified worker to perform a particular task at a given rate of working. This information helps managers to improve production methods and become more efficient.



Free Enterprise & Technological Innovation

• The free enterprise system allows people to use their own economic resources to produce goods and services for sale to others. Copyright and patent laws give writers and inventors exclusive rights to their own creations and inventions. In a free enterprise system, scientists, inventors, and entrepreneurs have a powerful incentive to pay attention to the needs of consumers. Since they can profit by meeting consumer needs, they continually strive to improve established products and to create new ones. Both the producers and the consumers benefit. By allowing people to pursue their own interests, free enterprise can drive technological innovation and achieve extraordinary results. Running shoes, personal computers, gel toothpaste, cellular phones, iPhones, and global positioning system products are just some of the products created as a result of innovation by our free enterprise system.





Innovations Addressing Specific Needs

- Attempts to address specific needs often lead to scientific discoveries and technological innovation. For example, in the 1950s, Dr. Jonas Salk specifically developed a vaccine to cure polio. In the 1980s, a new disease appeared known as AIDS. Those who contracted the disease had no immunity to other illnesses. Scientists set about discovering what caused AIDS and finding a cure. They discovered it was caused by the HIV virus, which attacks the human immune system. The virus can be transmitted during sexual contact or blood transfusions. Scientists were able to develop a number of specific drugs that slow down the reproduction of the HIV virus and help restore the immune system. Scientists are now attempting to find a vaccine to prevent AIDS. Scientists have also developed new drugs to reduce the levels of cholesterol, lowering the risk of heart attacks, and they are working on a cure for Alzheimer's, a disease that attacks an older person's memory and mental abilities. Scientists have also developed more insect-resistant foods with greater nutritional value, making it possible to support the world 's growing population.
- Both the U.S. military and space program have used teams of scientists and engineers to design solutions to specific problems. These solutions often have more general applications: the jet engine, for example, is now used by commercial airlines to power their airplanes, and the Internet, developed for scientists, is now used to communicate by everyone.

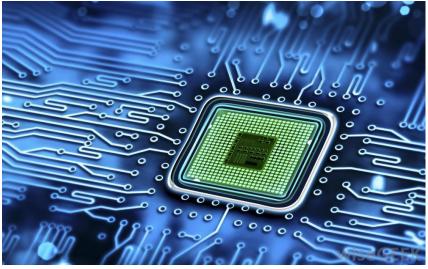




Computer Revolution

- Much of the increased productivity of the American economy in the last few decades has been due to advances in information technology (IT). Computers are machines that use a binary system to store and manipulate information.
- A computer is able to carry out a series of logical or mathematical operations. The computer has a memory that stores the information or data, and a central processing unit that carries out the steps. The first computers used vacuum tubes, which were then replaced by transistors and later by integrated circuits based on silicon chips. The use of **silicon chips** has launched a technological revolution. Each year, computers have become smaller and capable of faster processing. Computers now make possible the use of countless labor-saving machines. The computer industry has created millions of jobs in manufacturing, programming and services. For example, computer management deals with developing software solutions and products. Microsoft, Intel, Apple, and Google are household names.





Computer Revolution

• The **Internet**, a world-wide linking of computers, has made it easier to communicate and find information. **E-commerce** (doing business on the Internet), is now gradually replacing many traditional brick-and-mortar forms of business. The United States leads the world in supercomputing. Supercomputers have helped the United States achieve a competitive advantage in defense, medicine, energy, environment, finance, manufacturing and product development. The o' American economy continues to attract scientific and engineering talent from around the world. However, other countries are catching up. For example, China now has 24 of the world's 500 most powerful supercomputers.



Medicine & Health

• Progress has also been made in medicine. Since World War II, the development of antibiotics, new vaccines, and other medicines have enabled Americans to cure many diseases. Americans have also become more health-conscious: limiting the fat, sugar and salt in their diets; drinking less alcohol; and exercising more. Federal and state governments have limited tobacco advertising. Scientists have been identifying the estimated 100,000 human genes on our 23 chromosomes, allowing **genetic engineering.** Thousands of diseases, such as cancer, cystic fibrosis, and sickle-cell anemia, may some day be cured through these techniques.





The Global Economy

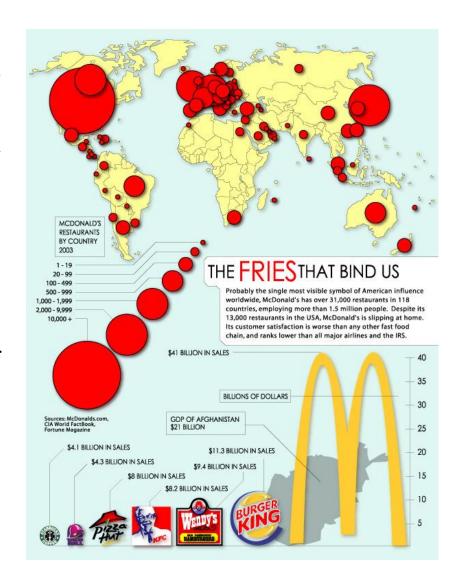
• In the 1950s, American manufacturers mainly sold to consumers in the U.S. market. Today, our economy is integrated into the global economy. A multinational corporation is a corporation that has set up local companies, or subsidiaries, in several countries. Today, multinationals make and sell their products in every comer of the world. At the start of the twenty-first century, multinationals controlled more than half of the industrial assets of the U.S. and employed millions of workers here and abroad. For example, McDonalds is a franchise with over 30,000 restaurants in 113 countries. Starbucks sells coffee in 40 overseas markets, operating 12,000 stores. Nike has stores on six continents. Wal-Mart has 2,700 global retail units employing 500,000. Exxon-Mobil and Chevron have subsidiaries in several countries.





Globalization

The emergence of multinational corporations has contributed to globalization. This has had a serious impact on government policies. For example, when a government bans its factories from dumping toxic waste into rivers and harming the environment, a national company must comply by changing its procedures. However, a multinational company can decide to simply move its production abroad to a more friendly country rather than comply. Multinationals can move their production to countries where labor is less expensive, environmental regulations are more lax, and taxes are lower or non-existent. This freedom of movement penalizes those governments that seek to maintain higher standards of social welfare, environmental regulation or tax policies. Competition among multinational corporations is now intensifying. For example, American automobile manufacturers now face stiff competition from multinational corporations originating in Japan, Germany, Britain, and Korea.

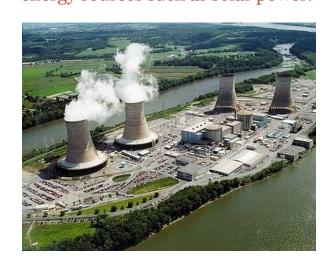


Energy

• Population growth and rising living standards have led to a greater demand for energy, at home and abroad. It was once thought that nuclear power plants might meet most of our energy needs without pollution. The Three Mile Island accident in 1979 and the earthquake and tsunami in Japan in 2011 have raised fears that nuclear power might impose more dangers than first thought. New sources of oil in Alaska and the world's seas have helped meet some of our energy needs, but a damaged BP oil derrick in the Gulf Coast led millions of barrels of oil to pour into the Gulf waters, revealing additional dangers from fossil fuels as well.

• Energy's Impact on the American Way of Life:

Americans once benefited from low-cost energy. OPEC's raising of crude oil prices in the 1970s has changed this outlook. With more than nine million jobs in the American economy dependent on energy production, energy plays a critical role in our economic future. Some economists believe that a sharp rise in oil prices in the first decade of the 21st century contributed to the slowdown in the U.S. economy and the dramatic rise in unemployment. High energy consumption continues to be an aspect of the American way of life. Americans now emphasize energy conservation and the need to develop new energy sources such as solar power.



Managing the Environment

• In the past several decades, Americans have become increasingly aware of the growing danger to our environment. As countries become more developed and the world's population grows, pollution of the Earth's air, water, and other resources becomes an ever increasing threat to the future survival of humankind.

Global Warming:

Some pollutants in the atmosphere prevent heat from escaping into space. This greenhouse effect may permanently raise temperatures to dangerous levels. The United States has been a leading offender, producing 25% of the gases that cause this effect.

Acid Rain:

Many pollutants released by industry and automobile exhausts turn into acids that are washed out of the air when it rains. When these pollutants return, they are highly toxic, often killing fish, destroying forests, and eroding soil.

Erosion of the Ozone Layer:

The ozone layer absorbs ultraviolet radiation passing through the Earth's atmosphere. Too much of this radiation can cause skin cancer. The ozone layer was being rapidly eroded by the widespread use of certain types of fluorocarbons once found in pressurized aerosol spray cans. These are now prohibited.

Water Pollution:

As cites have become more crowded, their ability to handle increased sewage and waste is strained. This can lead to the dumping of raw sewage into surrounding waters, contaminating drinking water, killing wildlife, and threatening the health of everyone in society.

Role of the Government

- There is a growing belief among Americans that protection of the environment is a governmental responsibility. This is based on the realization that we all need to breathe clean air and drink safe water. Only the government is capable of managing these resources and preventing pollution since it has the ability to punish violators. Government decisions, however, are often linked to the costs involved: how much are Americans willing to sacrifice to protect their environment? This question makes protection of the environment especially challenging.
- Creation of the **Environmental Protection Agency** and the passage of the **Endangered Species Act** gave the federal government special powers for protecting the environment. States also have their own laws and agencies for environmental protection. Both the federal and state governments also directly own some forest, desert, and mountain areas. Governments are responsible for meeting the costs of floods, droughts, and other environmental disasters. Governments undertake the construction of dams, roads, bridges. Both the federal and state governments have their own programs related to environmental protection, environmental awareness, and pollution control. Lastly, private groups and voluntary organizations play an increasing role in promoting public awareness and protecting the environment, such as the **Sierra Club**, founded in California by conservationist John Muir in 1892.



Global Reach of American Pop Culture

 Since World War II, American popular culture has exercised a great influence both on the lives of Americans and on people in the rest of the world.

Music & the Visual Arts:

American companies record the music of such artists as Elvis Presley, Barbra Streisand, the Supremes, Madonna, and Michael Jackson, or country and western musicians like Johnny Cash and Willie Nelson. They produce vinyl records, cassette tapes, compact discs, and most recently, digital downloads. This music is often played on radio and television and can now even be heard on the Internet. Visual arts, once reserved solely for the wealthy or museums, is now commercially reproduced in magazines, newspapers, television programs, advertising and on the Internet. Artists like Andy Warhol exploited this trend by developing Pop Art.





Global Reach of American Pop Culture

Films, Television, & the Internet:

- Hollywood studios produce films shown around the world. Many of the movies made today, like *Avatar*, have stunning digital effects. Most American television programs are also made in Los Angeles. The spread of cable and satellite television has greatly expanded the number of channels and programs available. These films and television programs often depict American culture and the American way of life. First and foremost, they influence Americans themselves.
- American media can also now be seen around the world. After World War II, American music and movies became popular in Europe. Later, they spread to every continent. Today, people throughout the world watch American movies and TV programs, dance to American music, wear American fashions, and even eat and drink American foods. English has emerged as an international second language. Google, Facebook and Wikipedia have also helped spread American culture. American popular culture is now found in every walk of life thanks to American entrepreneurs, television, movies, computers, and the Internet. It influences other cultures and their views of the U.S..



Changes in U.S. Demography

• **Demography** is the study of population. Since World War II, there have been significant changes in the demography of the United States. First, the size of the total U.S. population has more than doubled since the end of World War II:

Year	Population	Year	Population
1950	151,325,798	1990	248,709,873
1960	179,323,175	2000	281,421,906
1970	203,211,926	2010	308,745,538
1980	226,545,805	2020	_

In fact, the United States is the third largest nation in terms of population, after China and India. Secondly, the center of population of the United States has shifted away from the Northeast and Midwest and towards the Sun Belt. The map below shows an ever westward shift of the population. California had 10.5 million in 1950 and 37 million in 2010. Texas' population grew from 7.7 million in 1950 to 25 million in 2010, while Florida had only 2.8 million people in 1950, it has grown to 18.8 million today.

Changes in U.S. Demography

Thirdly, much of the recent population growth of the United States has been due to immigration. About 13% of the population living in the United States today are immigrants. The United States has both **legal immigrants--** those who apply for and receive visas for permanent residence, known as green cards-- and millions of **illegal immigrants.** Illegal immigrants are people who cross America's borders with Mexico or Canada, or who land on American shores, without officially entering the country. Some estimate there are as many as 15 million illegal aliens now living in the United States. These numbers are not part of the official population count of the United States. At the same time. some illegal immigrants do not pay taxes and may require social services by sending their children to public school or requiring emergency medical attention. To complicate matters. many illegal aliens have lived in the United States for decades as law-abiding individuals. pay taxes, and have children who. because they were born on American soil, are U.S. citizens. How to handle these millions of illegal alien poses an important social issue.

