

4 Environmental Activism

LEARN ABOUT TO UNDERSTAND America's efforts during the 1970s to address its environmental problems how the nation attempted to strike a balance between environmental concerns and continued industrial growth.

ONE AMERICAN'S STORY

In 1973, Lois Gibbs and her family moved to Niagara Falls, New York, which Gibbs described as a "typical American small town." However, underneath this quiet town was a disaster in the making. In the 1890s, the Love Canal had been built to provide hydroelectric power for the Niagara area. The canal ended up being used as a place for chemical companies to dump waste. In the 1970s, bulldozers filled in the canal. A school and rows of homes were built nearby.

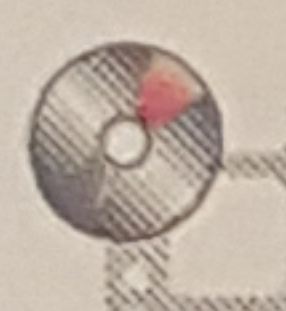
From the day the school opened, parents complained of nauseous odors and black sludge on the grounds. In 1977, when Lois Gibbs's son fell sick, she decided to investigate the school's problems. Frustrated at nearly every turn, Gibbs refused to give up. She eventually uncovered the existence of the toxic waste site and mobilized the community to demand government action. In 1980, President Jimmy Carter authorized funds for many of Niagara Falls's families to move to safety. Years later, Lois Gibbs wrote a book detailing her efforts.

A PERSONAL VOICE

I want to tell you our story—my story—because I believe that ordinary citizens—using the tools of dignity, self-respect, common sense, and perseverance—can influence solutions to important problems in our society. . . . In solving any difficult problem, you have to be prepared to fight long and hard, sometimes at great personal cost; but it can be done. It must be done if we are to survive as a democratic society—indeed, if we are to survive at all.

LOIS GIBBS, *Love Canal: My Story*

While her courage and determination were unique, Lois Gibbs's concerns about environmental hazards were shared by many Americans in the late 1970s. Through the Arab oil embargo and OPEC price increases, Americans learned that their natural resources were not limitless. Many realized that they also could no longer take the environment for granted. Throughout the 1970s, Americans—from grassroots organizations to the government—began a concerted effort to address the nation's environmental concerns.



VIDEO

POISONED PLAYGROUND

Lois Gibbs and the Crisis at Love Canal

The Roots of Environmentalism

This button was used to promote Earth Day.



Although many Americans began mobilizing in the 1970s to protect the environment, the realization that urban growth and industrial development were damaging the nation's natural resources had actually begun a decade earlier. In particular, a shocking book had awakened America's concerns about the environment and helped lay the groundwork for the activism of the 1970s.

RACHEL CARSON AND SILENT SPRING In 1962, Rachel Carson, a marine biologist, published a book entitled *Silent Spring*. Carson attacked the growing use of pesticides—chemicals used to kill insects and rodents. Many owners of large farms sprayed a variety of pesticides on their crops to keep hungry insects from devouring their harvest. Carson argued that pesticides poisoned the very food they were intended to protect and as a result killed many birds and fish.

In her book, Carson warned that America faced a "silent spring" in which birds killed off by pesticides would no longer fill the air with song.

spring without voices," she wrote. "On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh." Carson argued that one pesticide in particular, DDT, was a threat even to humans. She contended that DDT, which is very slow to decay, made its way through the entire food chain—from plants to animals and ultimately to human beings.

Within six months of its publication, *Silent Spring* sold nearly half a million copies. It also prompted an immediate counterattack from many chemical companies, which attacked the book as inaccurate and threatened legal action against Carson. However, for a majority of Americans, Carson's book was an awakening to the danger that human activity posed to the natural environment. "There's no doubt about the impact of *Silent Spring*; it's a real shocker," declared a reviewer of the book. People throughout the country wrote to their representatives in Congress and to the president, demanding an investigation into the nation's pesticide use. Shortly after the book's publication, President Kennedy established an advisory committee to investigate the situation.

With Rachel Carson's prodding, the nation slowly began to focus more on environmental issues. In 1963, Congress passed the Clean Air Act, which regulated automotive and industrial emissions. Although Carson would not live to see the U.S. government outlaw DDT in 1972, her work helped many Americans realize that their everyday behavior, as well as the nation's industrial growth, had a damaging effect on the environment.

Environmental Concerns in the 1970s

Throughout the 1970s, the administrations of Richard Nixon and Jimmy Carter, along with numerous grassroots organizations, confronted such environmental issues as pollution, conservation, and the growth of nuclear energy.

THE FIRST EARTH DAY The United States ushered in the 1970s—a decade in which it would actively address its environmental issues—fittingly enough with the first **Earth Day** celebration. In late 1969, Wisconsin's Senator Gaylord Nelson had suggested that Americans set aside April 22, 1970, as a day of serious discussion of environmental problems. On that day, nearly every community in the nation and more than 10,000 schools and 2,000 colleges hosted some type of environmental-awareness activity. The organizers of the first Earth Day, many of whom were antiwar and civil rights activists, spotlighted such problems as pollution, the growth of toxic waste, and the earth's dwindling resources. The Earth Day celebration has endured. Each year on April 22, millions of people around the world gather to heighten public awareness of environmental problems.

THE GOVERNMENT TAKES ACTION President Nixon was not considered an **environmentalist**, or someone who takes an active role in advocating measures to protect the environment. However, Nixon recognized the nation's growing concern about the environment. In his 1970 State of the Union address he declared, "The great

KEY PLAYER

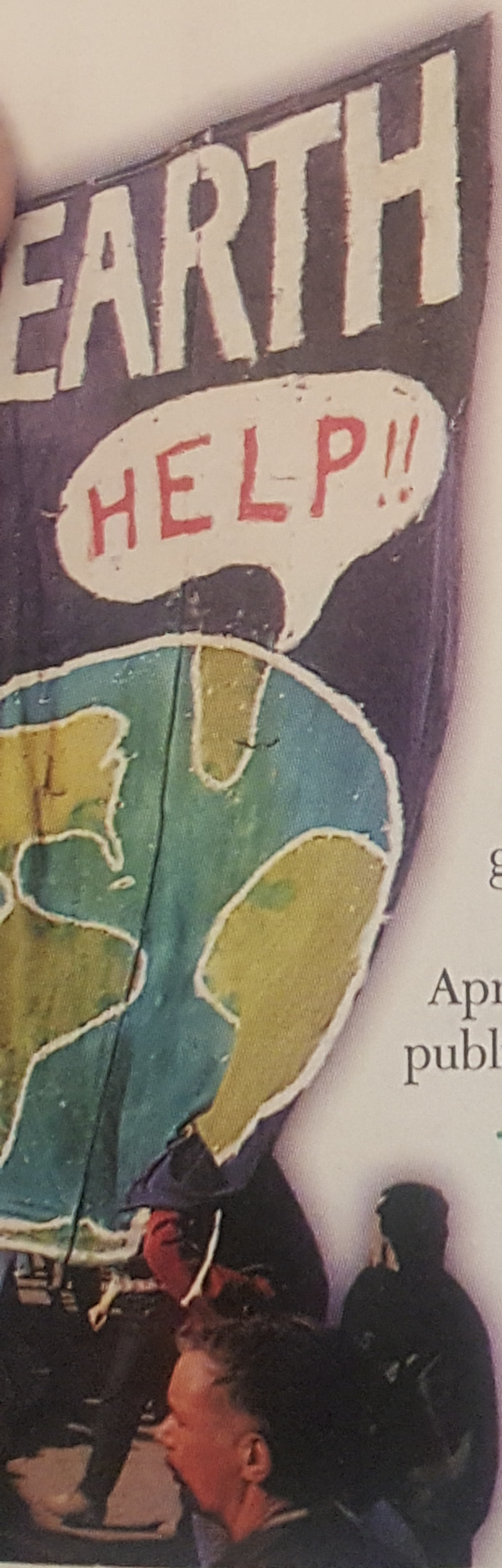


RACHEL CARSON
1907–1964

The marine biologist Rachel Carson was born far from the sea, in the small town of Springdale, Pennsylvania. She grew up with a brother and a sister in a two-story wooden house that had no plumbing, no furnace, and no electricity.

Carson was a sickly child who often had to remain at home, where her mother tutored her. Throughout her youth and into her college years, Carson was a studious, but quiet and aloof, person. "She just wasn't social," remembered a classmate. "Being poor had some bearing on that. She didn't have the clothes or the extra things a girl needed at college then."

Carson entered college intent on becoming a writer. During her sophomore year, she took a biology class to fulfill her science requirement. She quickly fell in love with the study of nature, and the next year she switched her major from English to science.



question of the seventies is: Shall we surrender to our surroundings or shall we make our peace with nature and begin to make reparations for the damage we have done to our air, to our land and to our water?"

President Nixon set out on a course that led to the passage of several landmark measures to protect the environment. In 1970, he consolidated 15 existing federal pollution programs into the **Environmental Protection Agency** (EPA). The new agency was given the power to set and enforce pollution standards, to conduct environmental research, and to assist state and local governments in pollution control. Today, the EPA remains the federal government's main instrument for dealing with environmental issues.

Nixon also signed a new Clean Air Act in 1970. The act gave the nation's industries five years to meet new pollution standards, including a mandate that automakers reduce the tailpipe emissions of their new cars by 90 percent. When automakers complained that they would be unable to meet this goal by 1975, the EPA extended the deadline to the 1980s. Automakers eventually complied by introducing the catalytic converter (which changes tailpipe pollutants into less harmful substances). The use of catalytic converters also forced consumers to use gasoline free of additives containing lead, a harmful pollutant.

Following the 1970 Clean Air Act, Congress passed laws that limited pesticide use, protected endangered species, and curbed strip mining—the practice

NOW & THEN

Air Pollution in California

The term *air pollution* often makes people think of brown smog suffocating a city like a thick woolen blanket, but not all air pollution is so dramatically visible. Two types of waste matter pollute the air. One is particulates—particles of liquid or solid matter, such as lead. The other is gases, such as carbon monoxide, sulfur oxides, and nitrogen oxides. Nitrogen oxides react with other gases and sunlight to form ozone, a pollutant that causes respiratory problems.

The biggest sources of air pollution are fuel combustion in cars, airplanes, homes, factories, and power plants and the byproducts of industrial processes such as smelting ore and refining oil. Certain weather conditions can cause these pollutants to accumulate over cities in dangerous levels or to become visible as smog.

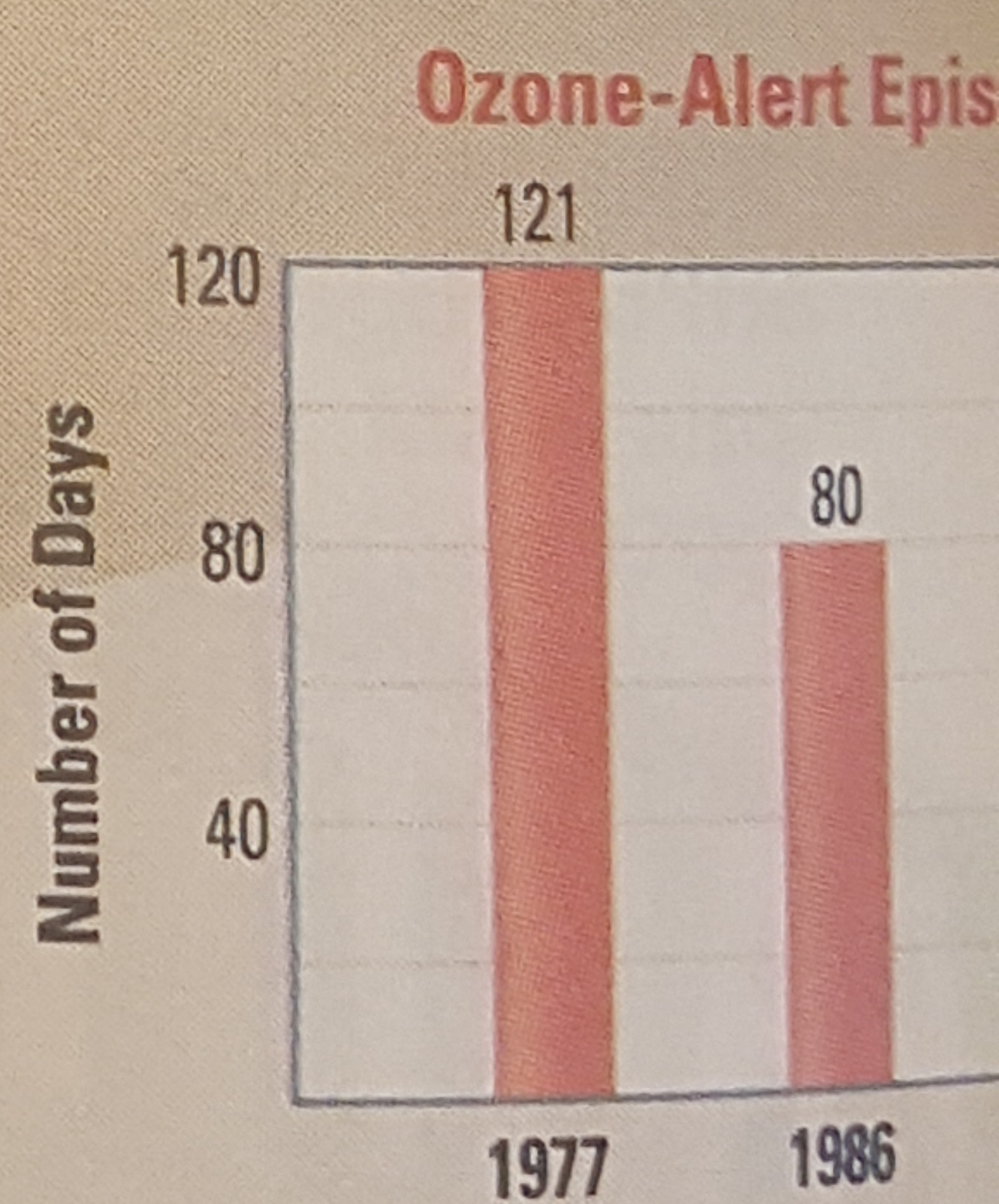
Southern California, because of its high population density and heavy traffic, has long had some of the most polluted air in the country. To counteract this, the state of California has been a pioneer in passing laws to protect the environment.

Los Angeles has had serious problems with air pollution since the 1950s. The federal government's Clean Air Acts of 1965 and 1970 sought to help people in cities like Los Angeles by establishing stricter emission standards for automobiles and by requiring factories to reduce their sulfur oxide emissions. In addition, since 1970 California has had the strictest motor-vehicle emissions standards in the nation.

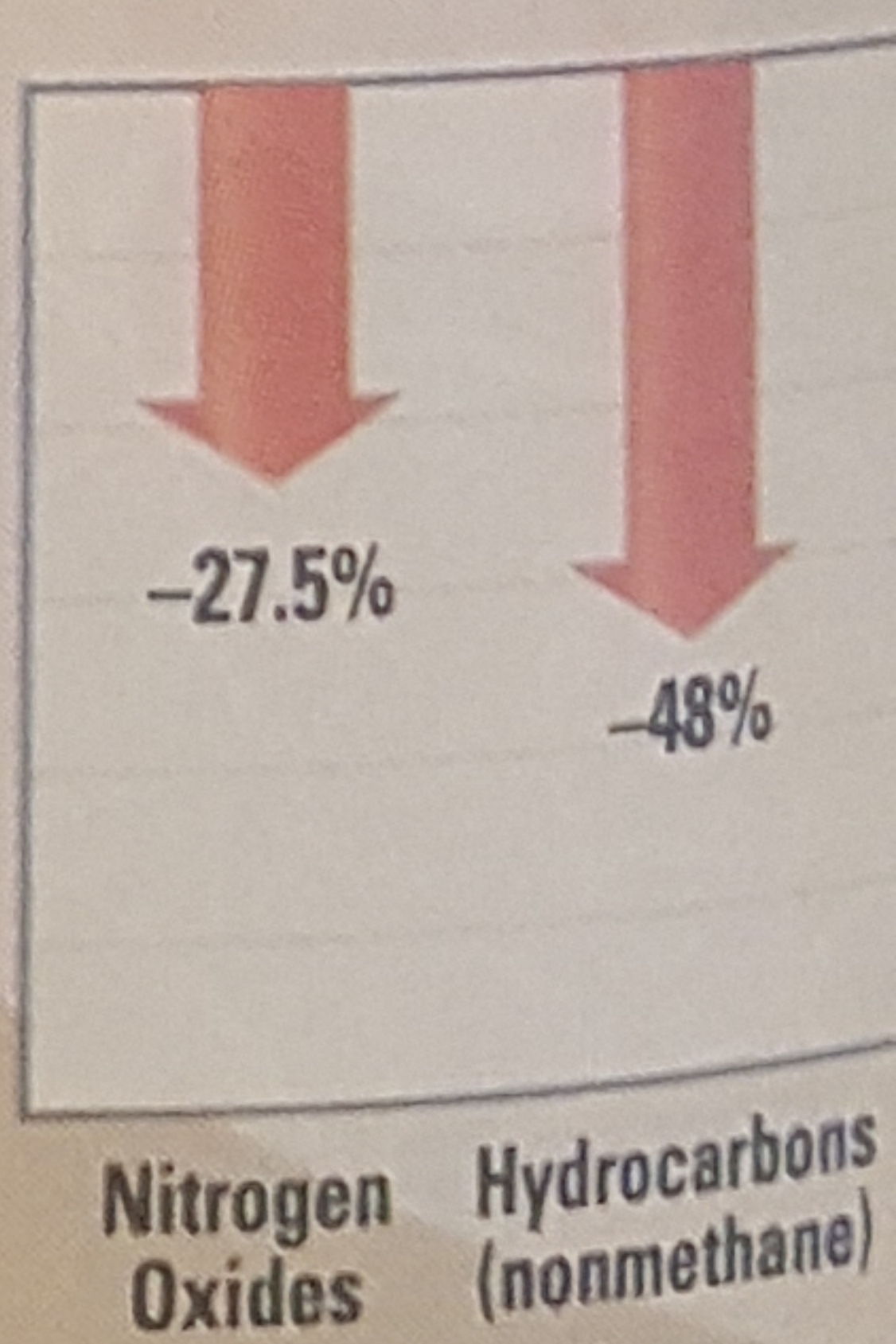


1974

Environmental Prog
Los Angeles Re



Air Pollution Reduction



Source: Californ

Southern California has ex steady improvement in air 1976. Since that time, most been equipped with cataly which greatly reduce the h of individual automobiles.

of mining for ore and coal by digging gaping holes in the land. While it made significant advances in environmental protection, the Nixon administration failed to fully satisfy either the conservative or the liberal element of society. Conservatives complained that the new environmental laws placed too great a burden on business, and liberals contended that the new legislation did not go far enough.

BALANCING PROGRESS AND CONSERVATION IN ALASKA During the 1970s, the federal government took steps to ensure the continued well-being of the nation's largest, and one of its most ecologically sensitive, states. In 1968, the Atlantic Richfield Company announced the discovery of a gigantic oil field along Alaska's Arctic coast. In 1974, construction began on a pipeline to carry the oil 800 miles to the ice-free ports of the state's southern coast. The discovery of oil and the subsequent construction of a massive system to transport it created many new jobs and greatly increased state revenues.

However, the influx of new development also raised concerns about Alaska's wildlife environment, as well as the rights of its native peoples. In 1971, Nixon signed the Alaska Native Claims Settlement Act, which turned over millions of acres of land to the state's native tribes for conservation and tribal purposes. In 1978, President Carter enhanced this conservation effort by setting aside an additional 56 million acres in Alaska as national monuments.

In 1980, Congress added another 104 million acres to the state's protected conservation areas.

THE DEBATE OVER NUCLEAR ENERGY As the 1970s came to a close, Americans became acutely aware of the dangers that nuclear power plants posed to both humans and the environment. Since the 1950s, nuclear power advocates had argued that nuclear energy was the energy of the future. It was cheap, plentiful, and, they argued, environmentally safe. They pointed to years of safe operation at nuclear plants and called for larger and more powerful plants to meet the nation's growing energy needs. During the 1970s, as America realized the drawbacks to its heavy dependence on foreign oil for energy, nuclear power seemed an attractive alternative.

However, opponents of nuclear energy warned against the industry's growth. They contended that nuclear plants, and the wastes they produced, were potentially dangerous to humans and their environment. The construction of more nuclear power plants, they argued, increased the likelihood of accidents, which could lead to the accidental release of deadly radiation into the air.

THREE MILE ISLAND In the early hours of March 28, 1979, the concerns of nuclear energy opponents appeared to come true. That morning, one of the nuclear reactors at a plant on **Three Mile Island** near



The Alaskan Pipeline stretches across hundreds of miles of tundra. Construction of the pipeline was completed in 1977 at a cost of \$8 billion. In 1980, the high revenues from the oil allowed Alaska to abolish state income taxes for its residents.



In 1996, California pioneered a new pollution-fighting measure by requiring the use of cleaner-burning gasoline in motor vehicles. Although more expensive, cleaner-burning gasoline immediately reduced pollution emissions. The California EPA estimated that ozone levels during the summer of 1996 were 18 percent lower than those in 1994 and 1995.

ACT WITH HISTORY

FORMING OPINIONS In your opinion, should we adopt the California law requiring the use of cleaner-burning gasoline? Explain your answer by weighing both the costs and benefits of adopting this legislation.

SEE SKILLBUILDER HANDBOOK, PAGE 919.

RESEARCHING Research another environmental problem, such as water pollution, indoor air pollution, waste disposal, or global warming. Create a chart showing what measures have been taken to deal with the problem and whether the problem improved or worsened. Present your chart to the class.

Visit <http://www.mcdougallittell.com> for more about environmentalism.

MORE ABOUT . . . Nuclear Accidents

The world's worst nuclear reactor accident occurred on April 26, 1986, at the Chernobyl nuclear power plant in Ukraine, which was then part of the Soviet Union. "What happened was very simple," said a plant worker. "There was an explosion. . . . Fifteen seconds later there was a sudden shock, and a few seconds later a stronger shock." The blast released large amounts of radiation into the air. Soviet officials reported that 31 people died immediately and more than 200 others were hospitalized. However, the accident's legacy lives on in increased cancer rates and birth defects in the region. The Chernobyl plant continues to operate, but the surrounding city—which remains enveloped in low levels of radiation—has become a ghost town. The city, which once held 50,000 residents, now is home to only about 6,000 plant workers and safety technicians.

In March 1979, a serious accident occurred at the nuclear energy plant at Three Mile Island, Pennsylvania (bottom).

Harrisburg, Pennsylvania, malfunctioned. The reactor overheated after its cooling system failed, and fear quickly arose that radiation might escape and spread over the region. Two days later, low-level radiation actually did escape from the crippled reactor. Pennsylvania's governor ordered schools in the area closed. Officials evacuated some residents, while others fled on their own. One homemaker who lived near the plant recalled her desperate attempt to find safety.

A PERSONAL VOICE

On Friday, a very frightening thing occurred in our area. A state policeman went door-to-door telling residents to stay indoors, close all windows, and turn all air conditioners off. I was alone, as were many other homemakers, and my thoughts were focused on how long I would remain a prisoner in my own home. . . . Suddenly, I was scared, real scared. I decided to get out of there, while I could. I ran to the car not knowing if I should breathe the air or not, and I threw the suitcases in the trunk and was on my way within one hour. If anything dreadful happened, I thought that I'd at least be with my girls. Although it was very hot in the car, I didn't trust myself to turn the air conditioner on. It felt good as my tense muscles relaxed the farther I drove.

ANONYMOUS HOMEMAKER, quoted in *Accident at Three Mile Island: The Human Dimensions*

In all, more than 100,000 residents were evacuated from the surrounding area. On April 9, the Nuclear Regulatory Commission, the federal agency that monitors the nuclear power industry, announced that the immediate danger was over. President Carter inspected the site to help assure the public that the reactor was safe again. An investigation into the incident revealed that plant maintenance personnel had not been properly trained and that certain safety precautions at the plant were lax.

The events at Three Mile Island refueled the debate over nuclear power. Supporters of nuclear power pointed out that no one had been killed or seriously injured. Opponents countered by saying that chance alone had averted a tragedy. They demanded that the government call a halt to the construction of new power plants and gradually shut down existing nuclear facilities.

While the government did not do away with nuclear power, federal officials did recognize nuclear energy's potential danger to both humans and the environment. As a result of Three Mile Island, the Nuclear Regulatory Commission strengthened its safety standards and improved its inspection procedures. By 1988, at least 17 new nuclear power plants had opened in the United States, and none had suffered a breakdown.

C. Answer Opponents of nuclear power wanted the government to stop using nuclear plants. Instead, the Nuclear Regulatory Commission tightened its safety standards and improved its inspection procedures.

THINK THROUGH IT
C. [THEME] Science and Technology
How did the Three Mile Island incident affect the use of nuclear power in America?

OBJECTIVE

3 INSTRUCT

A Continuing Movement

► Discussing Key Ideas

- Americans continue to show great concern for the nation's environmental issues.
- As the 21st century dawns, the United States works to strike a balance between economic progress and conservation.



Block Schedule

TEACHING OPTION

Time Needed: 20 Minutes



Cooperative Activity: Debating the Use of Nuclear Energy

Task: Student groups will debate the growing use of nuclear energy in the United States.

Purpose: To understand the arguments for and against the use of nuclear energy.

Activity: After choosing a position through a lottery, groups of three or four students will research the arguments either for or against the use of nuclear power. In researching their position, groups should consider such issues as the safety of nuclear power, the difference between nuclear power and

other power sources, and public opinion about nuclear power. In researching its position, each group should also examine the state of nuclear energy in the United States today, including the current state of nuclear power in their county or state. Groups holding positions for and against the growth of nuclear energy will debate each other.

ALTERNATIVE ASSESSMENT BOOK

Standards for Evaluating a Cooperative Activity

A Continuing Movement

Although the environmental movement of the 1970s gained popular support, opponents of the movement also made their voices heard. In Tennessee, for example, where a federal dam project was halted because it threatened a certain species of fish, local developers took out ads asking residents to “tell the government that the size of your wallet is more important than some two-inch-long minnow.” When confronted with environmental concerns, one unemployed steelworker spoke for others when he remarked, “Why worry about the long run, blossomed in the 1970s became in the 1980s and 1990s a struggle to balance environmental concerns with jobs and progress.

As you will read in the next chapter, President Ronald Reagan’s policy of deregulation, or reducing government restrictions on the way businesses may operate—created new challenges for the environmental movement during the 1980s. However, in the years since the first Earth Day, environmental issues have gained increasing attention and support. Environmentalists have continued to win battles on the local level, including the blocking of roads, airports, and other projects that they claimed would be ecologically dangerous.

In the 1990s, Americans began addressing new environmental problems. Scientists warned that industrial pollutants were depleting the earth’s ozone layer, which protects the globe from the sun’s most dangerous rays. In addition, some studies showed that the continued burning of fossil fuels (such as oil and coal) was contributing to a condition known as global warming, or a general rise in the earth’s temperature.

One sociologist noted that the energy crisis and the environmental movement of the seventies “forced us all to accept a sense of our limits . . . to seek prosperity through conservation rather than growth.” Today, America continues to seek prosperity, not by forsaking growth for conservation, but by trying to strike a workable balance between the two.

NOW THEN

THE EXXON VALDEZ OIL SPILL

In 1994, a federal jury awarded almost \$287 million in damages to thousands of Alaskans. The award was the climax of events that began in March 1989, when the giant oil tanker *Exxon Valdez* hit a reef in Prince William Sound, off the coast of Alaska, and dumped almost 11 million gallons of crude oil into the water. It was the largest oil spill in the country’s history.

Within days, the black oil fouled more than 1,200 miles of coastline and beaches. At least 10 percent of the area’s birds, sea otters, and other wildlife were killed, and commercial fishing in the area was seriously disrupted.

The jury also ordered the Exxon Corporation to pay \$5 billion in punitive damages as a result of the spill. The size of these awards demonstrates that the nation has become serious about holding corporations responsible for damaging the environment.



A fisherman holds an oil-slicked bird after the Exxon Valdez oil spill.

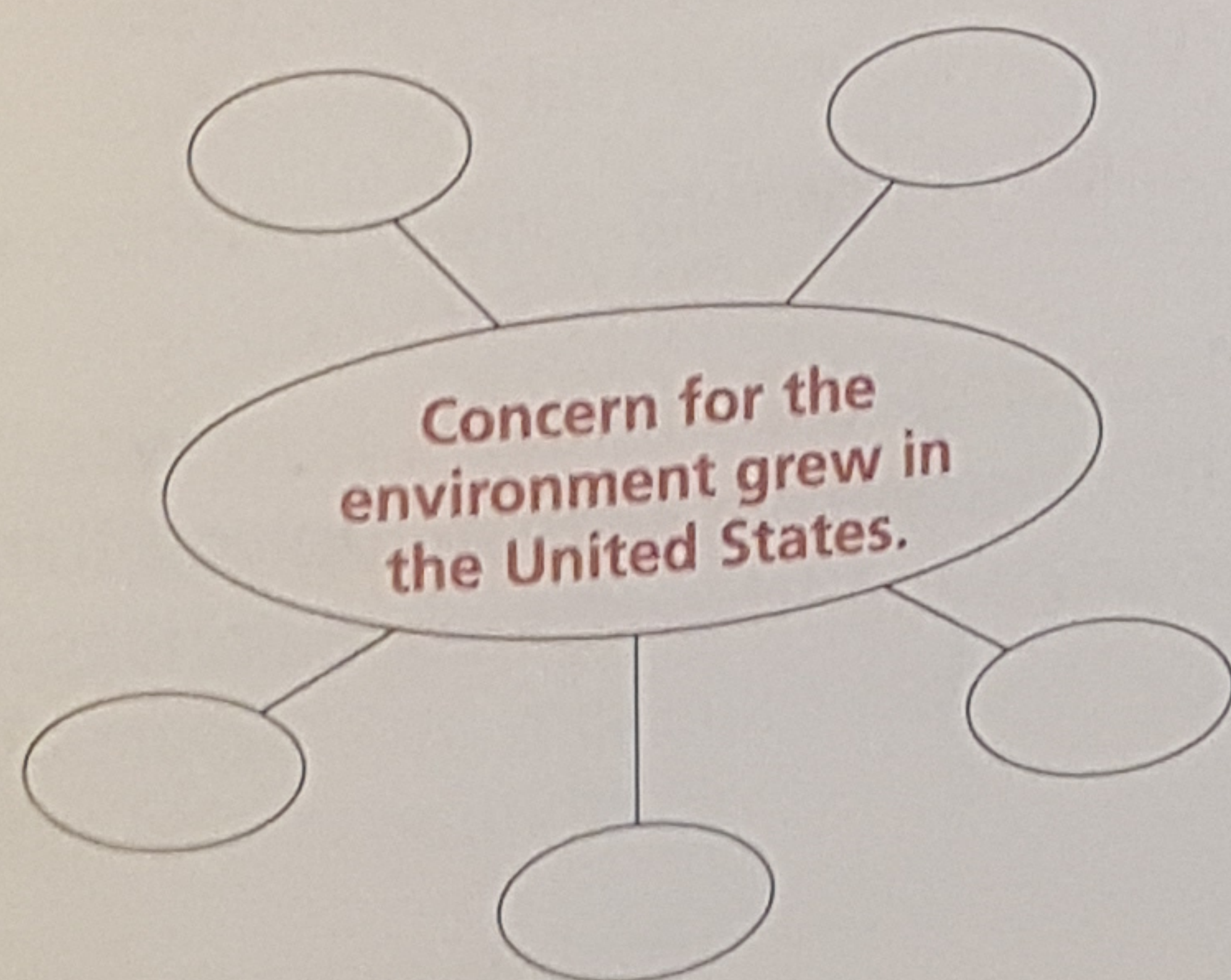
Section 4 Assessment

1. TERMS & NAMES

Identify:

- Rachel Carson
- Earth Day
- environmentalist
- Environmental Protection Agency
- Three Mile Island

- ### 2. SUMMARIZING
- Re-create the web below on your paper and fill in events that illustrate the main idea in the center.



- ### 3. ANALYZING CAUSES
- Why do you think Rachel Carson’s book *Silent Spring* had such impact when it appeared?

THINK ABOUT

- environmental awareness before the 1960s
- the message of *Silent Spring*
- the domestic agendas of the Kennedy, Johnson, and Nixon administrations

- ### 4. FORMING OPINIONS
- How much should the United States rely on nuclear power as a source of energy? Explain your view.

THINK ABOUT

- the safety of nuclear power
- the alternatives to nuclear power
- U.S. energy demands

ANSWERS

1. TERMS & NAMES

- Rachel Carson, p. 808
- Earth Day, p. 809
- environmentalist, p. 809
- Environmental Protection Agency, p. 810
- Three Mile Island, p. 811

2. SUMMARIZING

Possible Answers: Rachel Carson publishes *Silent Spring*. In 1970, the first Earth Day is held. Nixon organizes the EPA. Three Mile Island raises concerns about nuclear power. People struggle to balance environmental and economic

3. ANALYZING CAUSES

Possible Responses: Students might say that *Silent Spring* might say that *Silent Spring* made people aware that chemical pesticides could harm even humans; it made people realize how human activity affects the environment. Others might point to the persuasive power of Carson’s writing or the willingness of Kennedy, Johnson, and Nixon to act to protect the environment.

4. FORMING OPINIONS

Possible Responses: Supporters may argue that nuclear power should be widely used because it is cleaner than coal or oil, plentiful, and cheap, and its overall safety record is excellent. Opponents may argue that nuclear power is potentially very dangerous, that nuclear waste is difficult to dispose of, and that the high risks outweigh the benefits.