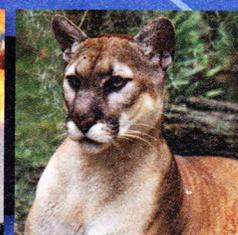
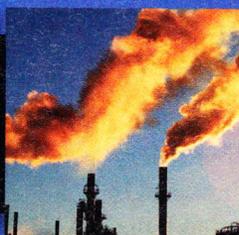


## There's More Online!

- ✓ **BIOGRAPHY** Rachel Carson
- ✓ **IMAGE** Earth Day
- ✓ **MAP** Recent Environmental Problems
- ✓ **SLIDE SHOW** Endangered Species List
- ✓ **VIDEO** Environmentalism
- ✓ **INTERACTIVE SELF-CHECK QUIZ**



## LESSON 5

## Environmentalism

**ESSENTIAL QUESTIONS** • How do you think the Nixon administration affected people's attitudes toward government? • How does society change the shape of itself over time?

## Reading HELPDESK



## Academic Vocabulary

- intensify • alternative

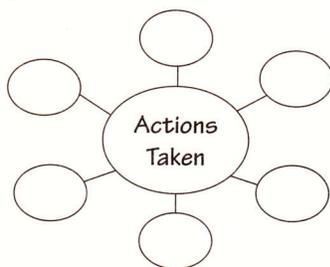
## Content Vocabulary

- smog • fossil fuel

## TAKING NOTES:

## Key Ideas and Details

**Organizing** As you read, complete a graphic organizer similar to the one below by including actions taken to combat the nation's environmental problems in the 1960s and 1970s.



## IT MATTERS BECAUSE

Americans became increasingly aware of the damage being done to the environment. Soon, environmental issues became national concerns, and individuals, local groups, and the government acted to address the damage and protect natural resources.

## The Origins of Environmentalism

**GUIDING QUESTION** What concerns inspired the environmental movement?

In 1966 Carol Yannacone of Patchogue, a small community on Long Island, New York, learned that officials were using the powerful pesticide DDT as part of a mosquito control operation at a local lake. Yannacone and her husband Victor, an attorney, were concerned that the pesticide might be poisonous. They decided to contact local scientists, who confirmed their suspicions.

The Yannacones then successfully sued to halt the use of the pesticide. In so doing, they had discovered a new strategy for addressing environmental concerns. Shortly after the Yannacones' court victory, the scientists involved in the case established the Environmental Defense Fund. They used its contributions for a series of legal actions across the country to halt DDT spraying. Along with those of other environmental organizations, their efforts led to a nationwide ban on DDT in 1972.

The effort to ban DDT was only one part of a new environmental movement that took shape in the 1960s and 1970s. The person who helped trigger this new movement was a soft-spoken marine biologist named Rachel Carson. Carson's 1962 book *Silent Spring* assailed the increasing use of pesticides, particularly DDT. She argued that while pesticides curbed insect populations, they also killed birds, fish, and other creatures that might ingest them. Carson warned Americans of a "silent spring," in which there would be no birds left to usher spring in with their songs. "No . . . enemy action had silenced the rebirth of new life in this

stricken world. The people had done it themselves. . . . A grim specter has crept upon us almost unnoticed, and this imagined tragedy may easily become a stark reality we all shall know," she warned.

*Silent Spring* became a best seller and one of the most controversial and influential books of the 1960s. The chemical industry was outraged and began an intense campaign to discredit Carson and her arguments. Many Americans believed Carson's warnings, however, largely because of what they were seeing around them and reading in news reports.

Rivers across the nation were no longer safe for fishing or swimming. **Smog**, or fog made heavier and darker by smoke and chemical fumes, hung over many major cities. In the Northwest, timber companies were cutting down acres of forest. In 1969 a major oil spill off Santa Barbara, California, ruined miles of beach and killed many birds and aquatic animals. Land development in Florida's Everglades contributed to the destruction of much of the original natural area. Pollution and garbage caused many fish to die in Lake Erie. By 1970, many citizens were convinced it was time to do something about protecting the environment.

### A Grassroots Effort Begins

Many observers point to April 1970 as the unofficial beginning of the environmentalist movement. That month, the nation first observed Earth Day, a day devoted to environmental concerns. The national response was overwhelming. On college campuses, in secondary schools, and in communities, Americans actively showed their environmental awareness.

After Earth Day, many citizens formed local environmental groups, adding new voices to those of organizations such as the Audubon Society, the Sierra Club, and the Wilderness Society. These organizations worked to protect the environment and promote the conservation of natural resources. In 1970 activists started the Natural Resources Defense Council to coordinate a nationwide network of scientists, lawyers, and activists.

Many communities and businesses responded to these organizations. They tried to make communities and buildings more environmentally friendly, and worked to restore damaged natural spaces.

#### **READING PROGRESS CHECK**

**Determining Cause and Effect** How did the environmental movement affect the rise of smaller grassroots efforts?

## The Environmental Movement Blossoms

**GUIDING QUESTION** *How did new laws passed in this time period protect the environment?*

As the environmental movement gained support, the federal government took action. In 1970 President Nixon signed the National Environmental Policy Act, which created the Environmental Protection Agency (EPA). The EPA set and enforced pollution standards, promoted research, and directed antipollution activities with state and local governments.

In 1970 President Nixon signed a new Clean Air Act into law. This act established emissions standards for factories and automobiles. It aimed to improve national air quality within five years, and set guidelines and timetables for states and cities to meet.

In the following years, Congress passed two more pieces of significant environmental legislation. The Clean Water Act of 1972 restricted the discharge of pollutants into the nation's lakes and rivers. The other act was

**smog** fog made heavier and darker by smoke and chemical fumes

The publication of *Silent Spring* made biologist Rachel Carson one of the early environmental movement's important figures. The book's warnings about the dangers of pollution drew fire from the chemical industry but won over many readers.

#### **CRITICAL THINKING**

**Making Generalizations** What was Carson's greatest contribution to the environmental movement?





Smog heavily polluted the air around major cities, heightening residents' awareness of environmental problems.

### ▶ CRITICAL THINKING

**Analyzing Primary Sources** Based on this photograph, what might be a main contributor to the problem of smog?

**intensify** to become more frequent and powerful

**alternative** another choice

**fossil fuel** a fuel formed in the Earth from decayed plant or animal remains

the Endangered Species Act of 1973, which established measures for saving threatened animal and plant species. These laws succeeded in reducing smog, and the pollution of many lakes, streams, and rivers declined.

### Love Canal

Despite increasing federal legislation, Americans also worked for change at the community level throughout the 1970s. One of the most powerful displays of community activism occurred in a housing development near Niagara Falls, New York, known as Love Canal.

During the 1970s, residents of Love Canal began to notice an increasingly high number of health problems in their community. The

people in the community were suffering from nerve damage, blood diseases, cancer, miscarriages, and birth defects. The residents soon learned that their community sat atop a decades-old toxic waste dump. Over time, its hazardous contents had spread through the ground. Led by a local woman, Lois Gibbs, the residents joined together and demanded that the government take steps to address these health threats. Gibbs later wrote about the importance of organizing to protect the environment:

#### PRIMARY SOURCE

“It will take a massive effort to move society from corporate domination, in which industry’s rights to pollute and damage human health and the environment supersede the public’s right to live, work, and play in a safe environment. This is a political fight, since the science is already there showing that people’s health is being placed at risk. To win the political fight, we need to continue to build the movement, to network with one another, and to plan, strategize, and keep moving forward.”

—from *Love Canal: The Story Continues . . .*, 1998

Residents struggled against uncooperative officials and worked to increase awareness of their plight. The state finally relocated more than 200 families in 1978.

The same year, President Carter declared Love Canal a limited disaster area. In 1980 he called for emergency aid and moved approximately 500 families who remained to new locations. In 1983 Love Canal residents sued the company that had created the dump site and settled the case for around \$20 million. The site was cleaned up by sealing the waste within an underground bunker and demolishing homes located above the dumping ground.

### Concerns About Nuclear Energy

Also during the 1970s, a number of citizens became concerned about the use of nuclear reactors to generate electricity. As nuclear power plants began to dot the nation’s landscape, the debate over their use **intensified**. Supporters of nuclear energy hailed it as a cleaner and less expensive **alternative** to **fossil fuels**, such as coal, oil, and natural gas, which are in limited supply. Opponents warned of the risks nuclear energy posed, particularly the devastating consequences of radiation released into the air.

The nuclear debate gained national attention in a shocking fashion in 1979. In the early hours of March 28, one of the reactors at the Three Mile Island nuclear facility outside Harrisburg, Pennsylvania, overheated. The

problem occurred after its cooling system failed. That night, as plant officials scrambled to fix the problem, low levels of radiation began to escape from the reactor.

Officials evacuated many nearby residents, while others fled on their own. Citizens and community groups expressed outrage at protest rallies. Officials closed down the reactor and sealed the leak. The Nuclear Regulatory Commission, the federal agency that regulates the nuclear power industry, eventually declared that the plant was safe. President Carter even arranged a visit to the site to allay the public's concerns.

The accident at Three Mile Island had a powerful impact politically. It left much of the public with grave doubts about the safety of nuclear energy. Such doubts have continued.

**READING PROGRESS CHECK**

**Evaluating** Was the national government's response to the environmental movement effective? Why?

In the aftermath of the accident at Three Mile Island, residents held protests that questioned the safety of nuclear energy.

**CRITICAL THINKING**

**Defending** Are the residents justified in their concerns about nuclear energy? Explain why or why not.



PHOTO: Wally McNamee/Historical/CORBIS

**LESSON 5 REVIEW**



**Reviewing Vocabulary**

- 1. **Describing** What is smog?
- 2. **Listing** What are some examples of fossil fuels?

**Using Your Notes**

- 3. **Naming** Review the notes that you completed throughout the lesson to list some environmental protection initiatives that were begun during this period.

**Answering the Guiding Questions**

- 4. **Identifying** What concerns inspired the environmental movement?

- 5. **Assessing** How did new laws passed in this time period protect the environment?

**Writing Activity**

- 6. **INFORMATIVE/EXPLANATORY** Take on the role of an investigative reporter, and describe the environmental disaster at either Love Canal or Three Mile Island. Explain how community activism brought the issue to the nation's attention.