



**Social Studies
School Service**

www.socialstudies.com

Downloadable Reproducible eBooks *Sample Pages*

These sample pages from this eBook are provided for evaluation purposes. The entire eBook is available for purchase at

www.socialstudies.com or www.writingco.com.

To browse more eBook titles, visit

<http://www.socialstudies.com/ebooks.html>

To learn more about eBooks, visit our help page at

<http://www.socialstudies.com/ebookshelp.html>

For questions, please e-mail eBooks@socialstudies.com

To learn about new eBook and print titles, professional development resources, and catalogs in the mail, sign up for our monthly e-mail newsletter at

<http://socialstudies.com/newsletter/>

*Copyright notice: Copying of the book or its parts for resale is prohibited.
Additional restrictions may be set by the publisher.*

Geography Essentials

Environment and Society

By Betsy Hedberg

Kerry Gordonson, Editor
Dr. Aaron Willis, Project Coordinator
Shoshana Muhammad, Editorial Assistant
Nicholas Merkushen, Editorial Assistant

Social Studies School Service
10200 Jefferson Blvd., P.O. Box 802
Culver City, CA 90232
<http://socialstudies.com>
access@socialstudies.com
(800) 421-4246

© 2004 Social Studies School Service

10200 Jefferson Blvd., P.O. Box 802
Culver City, CA 90232
United States of America

(310) 839-2436
(800) 421-4246

Fax: (800) 944-5432
Fax: (310) 839-2249

<http://socialstudies.com>
access@socialstudies.com

Permission is granted to reproduce individual worksheets for classroom use only.
Printed in the United States of America.

ISBN: 1-56004-194-3

Product Code: ZP885CD

TABLE OF CONTENTS

Geography Standards: Essential Element Five.....	<i>iv</i>
Lecture Notes.....	S1
Student Handouts.....	H1
Teaching Materials	
Multiple Choice Quiz.....	1
Multiple Choice Quiz: Answer Key	6
Discussion Questions	11
Extension Activities	13
Related Web Sites	14

Geography Standards: Essential Element Five

ENVIRONMENT AND SOCIETY

STANDARD 14: How human actions modify the physical environment.

STANDARD 15: How physical systems affect human systems.

STANDARD 16: The changes that occur in the meaning, use, distribution, and importance of resources.

**From the National Council for Geographic Education:
Eighteen National Geography Standards**
(<http://www.ncge.org/publications/tutorial/standards/>)



Environment and Society

Social Studies School Service

Learning about the environment means investigating the give and take between humans (and human activities) and the natural world. How do people impact the natural environment? How does the natural environment affect people and help them make choices? What role do natural resources play in shaping people's decisions and actions? These are some of the questions that this presentation will address.



Social Studies School Service

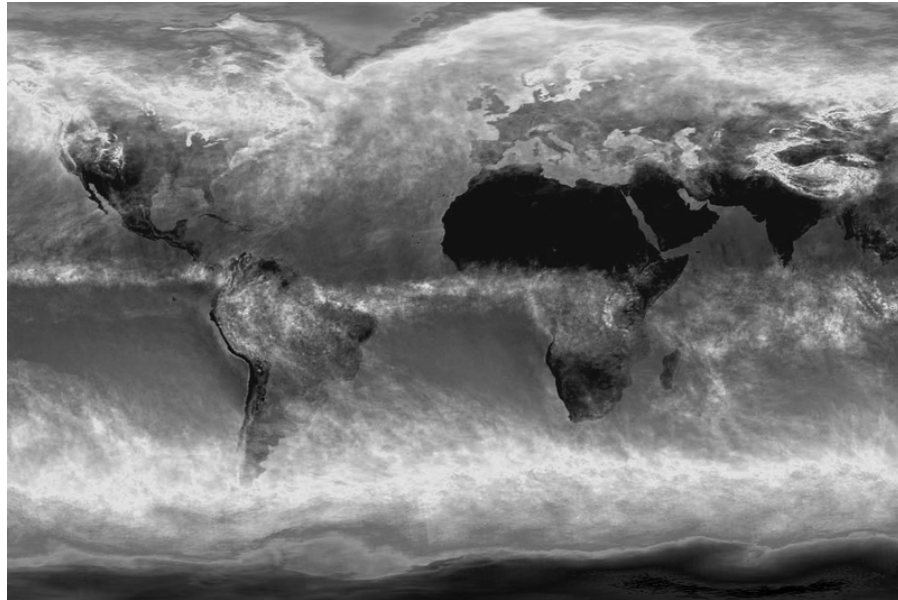
Geography Standard 14

People impact the physical environment in many ways, with results ranging from harmless to devastating. Each of the earth's four basic components—atmosphere, hydrosphere (water), lithosphere (soil and rock), and biosphere (life)—has been and continues to be greatly affected by human activities.



Social Studies School Service

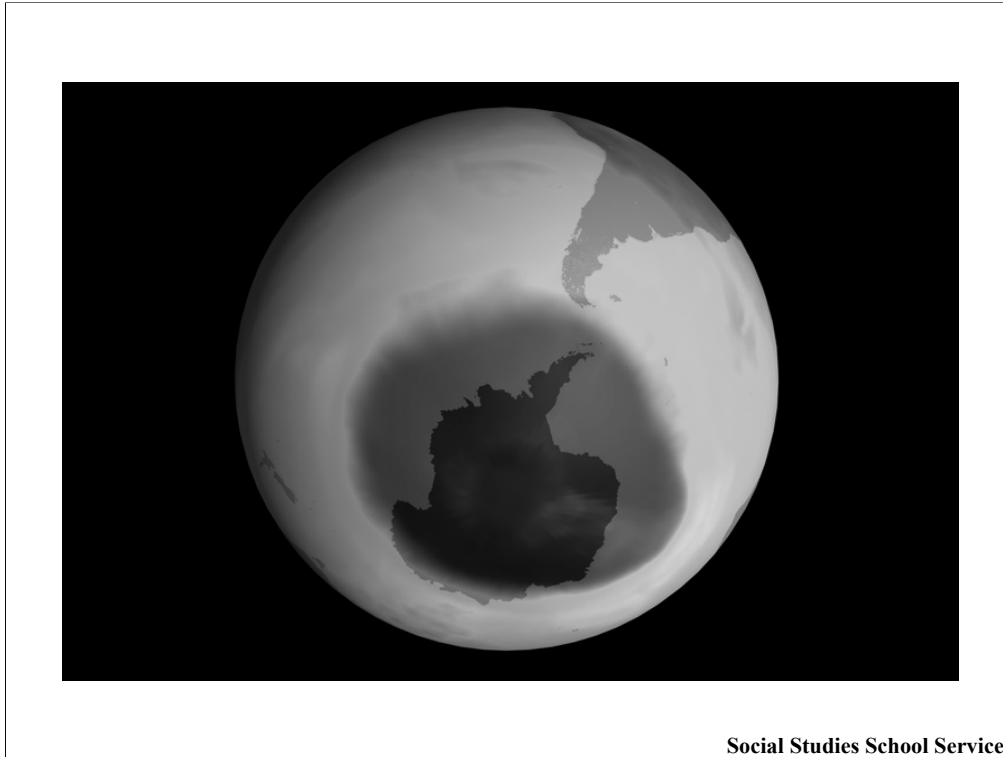
Cars, industry, and smaller machines such as lawn mowers all contribute to air pollution, such as this smog over the city of Houston. Smog results when chemicals and particles (such as nitrogen oxides) mix together in the lower layers of the atmosphere. Burning fossil fuels such as coal and oil causes most of the smog in U.S. cities.



Social Studies School Service

Over the past several years, scientists have discovered that the earth's temperatures are rising at faster rates than they have since the end of the last ice age (about 10,000 years ago). This phenomenon is known as "global warming"; scientific evidence overwhelmingly suggests that human activities are in large part responsible.

Global warming occurs when emissions from the use of fossil fuels (such as gasoline exhaust from cars and emissions from coal-burning power plants) rise into the air and get trapped in the atmosphere by a phenomenon called the "greenhouse effect." The greenhouse effect, a normal function of our atmosphere, reflects heat radiated from the earth's surface back to the earth and prevents it from escaping into space. This process helps keep our planet's temperatures moderate enough for us to withstand. When the earth's surface emits increasing levels of heat, however, the greenhouse effect contributes to a gradual increase in the planet's temperatures—global warming.



Fossil fuel emissions have also caused a hole in the ozone layer over Antarctica. Ozone, a molecule that contains three oxygen atoms, can be both good and bad for our planet, depending on where it's situated in the atmosphere and how much of it there is. On a smoggy day, you might hear that the "ozone level" is particularly high. Ozone occurs as a part of smog; when it's close to the ground, it causes irritation to the eyes and lungs. This is the "bad" ozone.

"Good" ozone exists in the stratosphere, high above the earth's surface. At this altitude, ozone traps ultraviolet radiation coming from the sun and thus protects the earth's inhabitants from receiving too much of this potentially harmful radiation. The ozone hole occurs when human-made chlorofluorocarbons (CFCs) deteriorate the stratospheric ozone. CFCs appear in numerous products, including many aerosol sprays and chemicals used in refrigerators and air conditioners. People living in Australia and New Zealand, where the ozone hole is particularly noticeable, are subject to worse-than-usual sunburn.



Social Studies School Service

Global warming also causes an increase in the temperatures of the earth's oceans and gradually melts glaciers and oceanic ice. Scientists have made various predictions of what might occur if this trend continues, but most scientists agree that global warming poses a looming threat to our planet.