

标准英语分级读物·学生卷·第1级

全球警报

GLOBAL ALERT

原版美国阅读教程

内附全套教学指导及练习

用英文阅读，学百科知识

完美实现国家新课程标准要求

童趣出版有限公司编译 人民邮电出版社出版

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刘道义
特别推荐

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责任编辑: 孙蓓 封面设计: 曹爱华

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最佳学习安排

训练正确阅读习惯，提高理解分析能力

- 第一步， 正式的学习开始之前，请先认真阅读封面封底，以了解本书的特点。
- 第二步， 在开始阅读某一本书时，首先阅读目录页，然后粗略翻阅全书各页，看一看照片和图表。根据以上粗读所获信息判断出本书的基本内容和主题。
- 第三步， 想一想你已经掌握了多少关于本书主题的知识。
- 第四步， 开始阅读。阅读的重点放在与主题相关的新知识上。哪些是你通过阅读本书获得的新知识，用简洁的方式做上标记。
- 第五步， 边读边标出你有切身体会的地方，你喜欢或支持的观点或做法。
- 第六步， 遇到当页注释中没有的生词，要尽量根据上下文猜出它的意思，而不要马上查词典，以免打断阅读。将这些生词标出来，读后查词典印证你的猜测。
- 第七步， 读完后，总结文章主要讲的是什么，并在文中找出具体内容支持你的判断。

写作

- 第八步， 完成阅读后，写出本书提要。
- 第九步， 分析本书文章的写作方法，按要求完成“教学指导与练习”中的写作练习。

口语讨论

- 第十步， 与同学们就本书主题展开讨论，并提出自己的观点和结论。

付诸行动

- 第十一步，行动起来，完成“教学指导与练习”中设计的全部活动，包括科学实验和社会活动！

重要提示

利用词汇注释巩固和扩充词汇量

为扩充学生词汇量，超出高中课本范围的词汇在读本各页中做了注释，并汇总在书后词汇表和索引中，以方便学习和记忆。

利用音标学习单词发音

为规范本读物的音标标注方法，并更充分地体现美式发音的特点，本读物采用标准的Jones国际音标和K.K音标，Jones在前，K.K在后，同时标注同一个单词。此两种音标为目前使用最多的音标系统，而K.K音标又能充分体现美式发音的特点。音标查证以商务印书馆的《牛津高阶英汉双解词典》（第四版）为准。

GLOBAL **Alert!**

全球警报

BY JERI CIPRIANO

王金玉 注

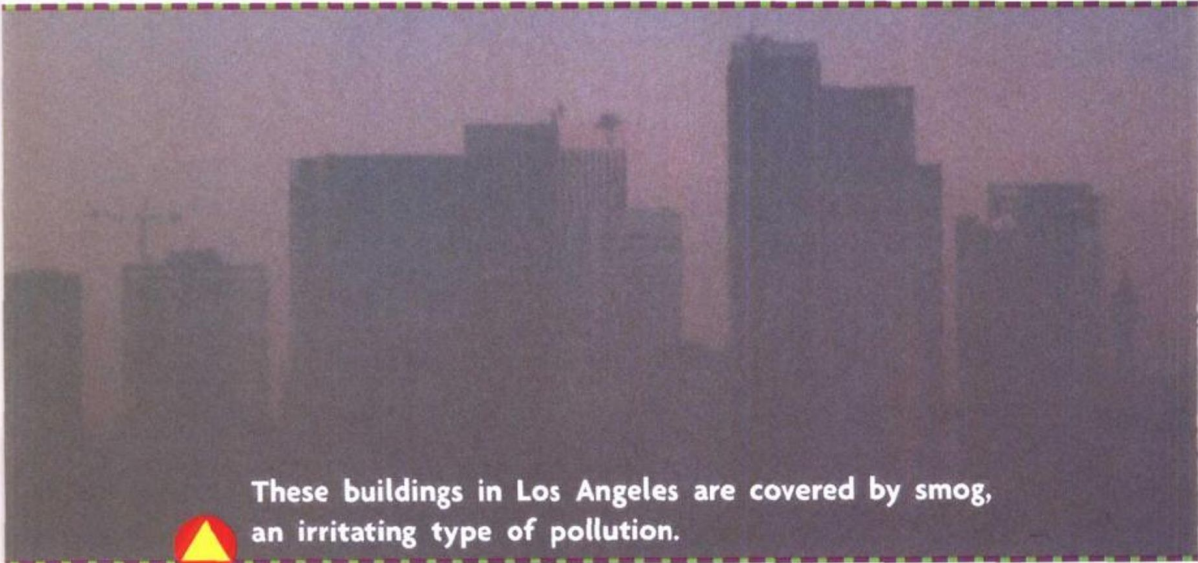
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Introduction

You probably already know that pollution is bad. Perhaps you have even found ways to help stop pollution. Maybe you've recycled some of your garbage. Maybe you've helped clean up your local park or beach. These actions cut down on pollution and keep our home, planet Earth, healthy.

In this book, you're going to learn about a certain kind of pollution: **air pollution**. Air pollution is harmful, but there are ways you can help stop it.



These buildings in Los Angeles are covered by smog,
an irritating type of pollution.

pollution [pə'lu:ʃən, pə'lʊʃən] n. 污染
recycle ['ri:saɪkl, 'ri'saɪkl] v. 再循环
garbage ['gɑ:bidʒ, 'gɑ:bidʒ] n. 废料、污物

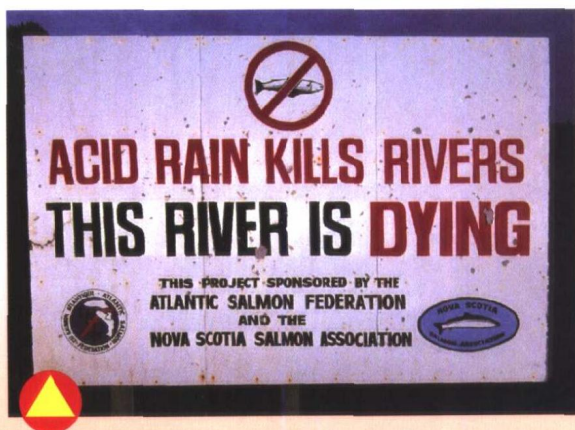
local ['ləukəl, 'ləkəl] a. 局部的、本地的
cut down 削减
certain ['sɜ:tən, 'sɜ:tən] a. 某一个

Why is it important to stop air pollution? There are many reasons. Air pollution affects the air we breathe, so it can damage people's health. Children are especially sensitive to air pollution.

Air pollution can affect the **ozone** layer by producing "holes." The ozone layer is a layer high up in the atmosphere that protects Earth from harmful rays of the Sun. Holes in the ozone layer allow these rays to reach us and cause harm to living things.

Air pollution also contributes to **global warming**. Global warming can change the climate and affect our weather.

Air pollution produces **acid rain**. Acid rain harms water supplies and soil. As acid rain falls to Earth, it showers plants and animals with strong, harmful chemicals. It also wears away statues and buildings. It can even cause metal surfaces on cars to crumble!



This sign was posted to alert people to the effects of acid rain on local rivers and fish.

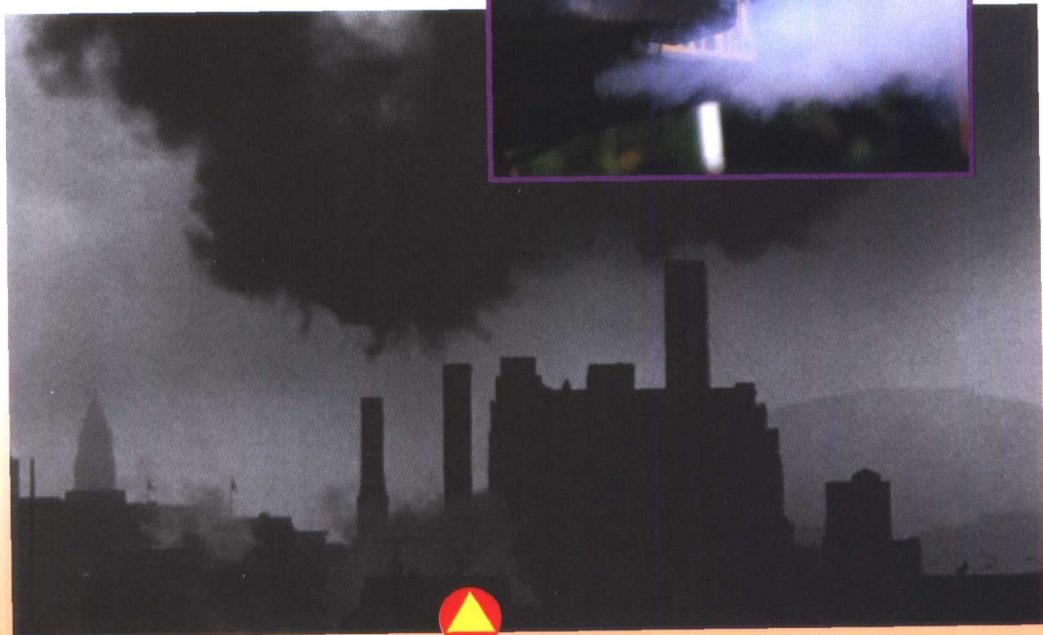
affect [ə'fekt, ə'fekt] v. 影响
damage ['dæmɪdʒ] v. 破坏
sensitive ['sensɪtv, 'sensətɪv] a. 敏感的
ozone ['əʊzən, 'oʊzən] n. 臭氧
layer ['leɪə, 'leɪə] n. 层

atmosphere ['ætməsfiə, 'ætməs, fɪr] n. 大气
protect...from 保护...免受
contribute to 起一份作用
global ['gləʊbəl, 'glɒbəl] a. 全球的
acid ['æsɪd] a. 酸的
statue ['stætju:, 'stætʃu] n. 雕像
crumble ['krʌmbəl, 'krʌmb] v. 碎裂

The Causes of Air Pollution

The major cause of air pollution is burning fuel. We burn fuel to heat and cool our homes, to drive our cars, and to produce electricity. Whenever we burn coal, oil, or gasoline, **gases** are released that can pollute the air.

Exhaust fumes from cars and trucks pollute the air we breathe.



Factories send harmful gases into the air.

fuel ['fju:əl, 'fjuəl] n. 燃料
gasoline ['gæsə'li:n, 'gæs|,in] n. 汽油
release [r'i:ls, r'lis] v. 释放

exhaust [ig'zɔ:st, ig'zɔst] n. 排气
fume [fju:m, fjum] n. 烟、气

Refrigerators, air conditioners, and even the insulation that keeps our homes warm can cause air pollution. Gases from these appliances and materials leak into the atmosphere.

Household items such as cleaning fluids and spray cans also release gases that can harm Earth's atmosphere. When foam products such as cups and plates are burned, they release dangerous gases, too.

Not all air pollution is caused by human activity. Some pollution happens naturally. Volcanoes and forest fires pollute the air with ashes, dust, and gases.



A forest fire in a pine forest in South Africa sends pollution into the air.

conditioner [kən'diʃənə, kən'diʃənə]

n. 调节器, 空调设备

insulation [ɪnsju'leɪʃən, ɪnsə'leɪʃən]

n. 绝热板

appliance [ə'plaɪəns] n. 器械, 用具

leak [li:k, lik] v. 泄露

household ['haʊshəʊld, 'haʊs.hold]

n. 家庭

item ['aɪtəm] n. 物品

fluid ['fluɪd, 'fluɪd] n. 液体

foam [fəʊm, fom]

n. 泡沫塑料, 泡沫材料

volcano [vɒl'keɪnəʊ, vɒl'keno]

n. 火山

Holes in the Ozone Layer

A layer of ozone surrounds Earth about twenty-five miles up in the atmosphere. Ozone is a gas. It has a strong odor and is pale blue in color. Although ozone gas is poisonous, the ozone layer plays an important role in protecting living things on Earth. It blocks out ninety-five to ninety-nine percent

surround [sə'raund, sə'raund] v. 围绕
odor ['əʊdə, 'ɒdə] n. 臭气

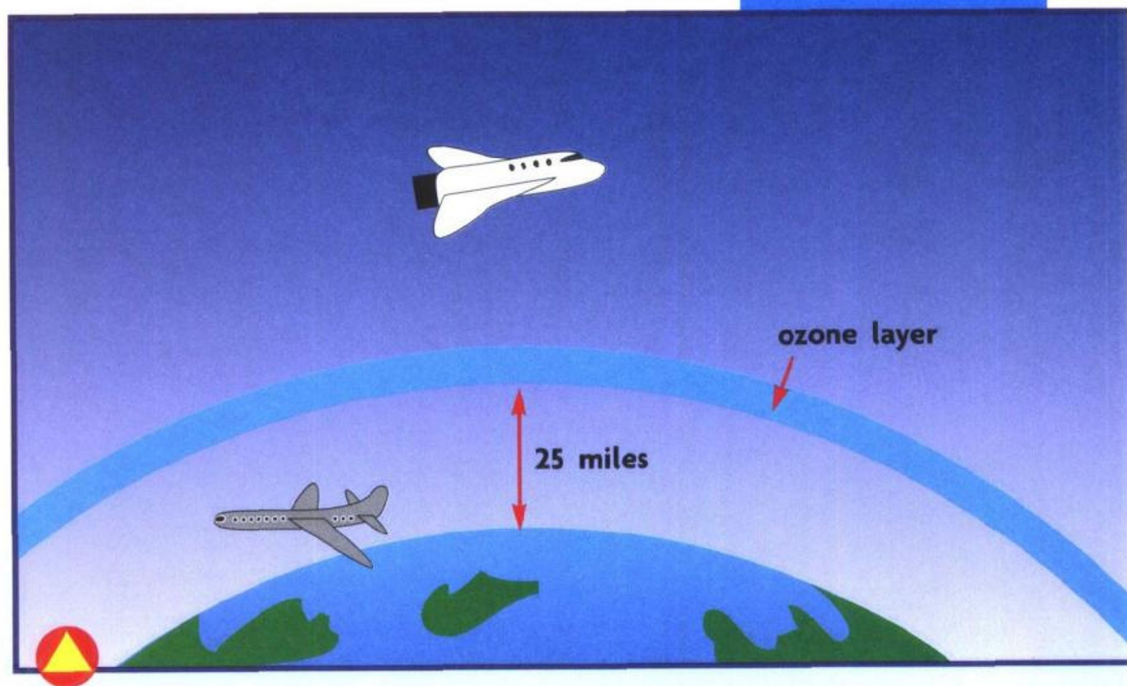
poisonous ['pɔɪznəs, 'pɔɪznəs] a. 有毒的
play a role in 在...方面起作用



of the Sun's dangerous **ultraviolet rays**. Ultraviolet rays can damage the eyes and cause skin cancer. Ultraviolet rays can also kill some of the plants that live in the ocean.

It's a
FACT!

The Greek word for ozone is "ozein," which means "to smell."

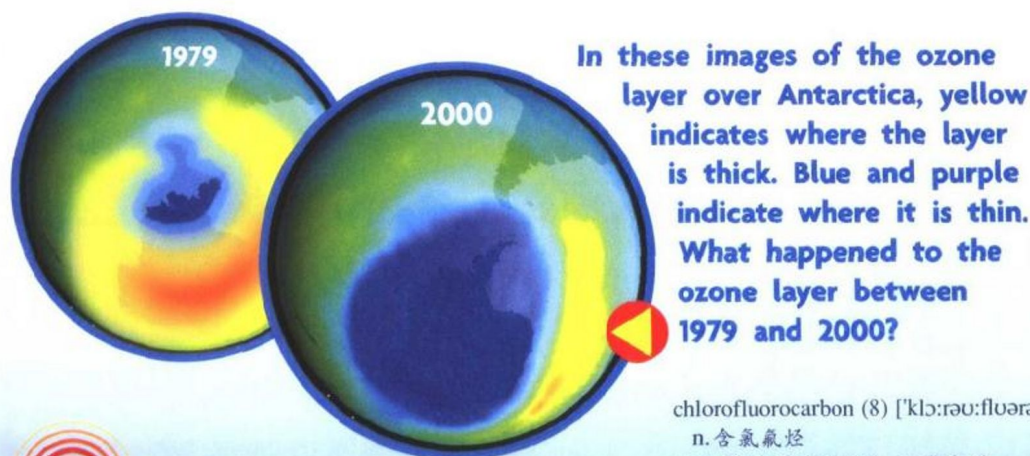


Earth's atmosphere consists of layers. These layers are based on altitude and composition. The layer in which we live is also the layer in which all of Earth's weather occurs and airplanes fly. The ozone layer is above this layer. The ozone layer surrounds and protects the entire Earth.

ultraviolet [ˌʌltrəˈvaɪələt, ˌʌltrəˈvaɪəlɪt] a. 紫外线的

In the mid-1980s, scientists discovered that there was a large hole in the ozone layer over the South Pole. More recently, they have discovered a smaller hole over the North Pole as well. This hole appears from Spring to November. The largest hole seen to date was over Antarctica on September 8, 2000. It covered an area of about 1 million square miles (28.3 million square kilometers).

Air pollution has caused these holes. Gases called **chlorofluorocarbons**, or CFCs for short, are released into the air from the use of spray cans and cleaning fluids and the burning of toxic chemicals. CFCs also enter the air when appliances such as refrigerators, freezers, and



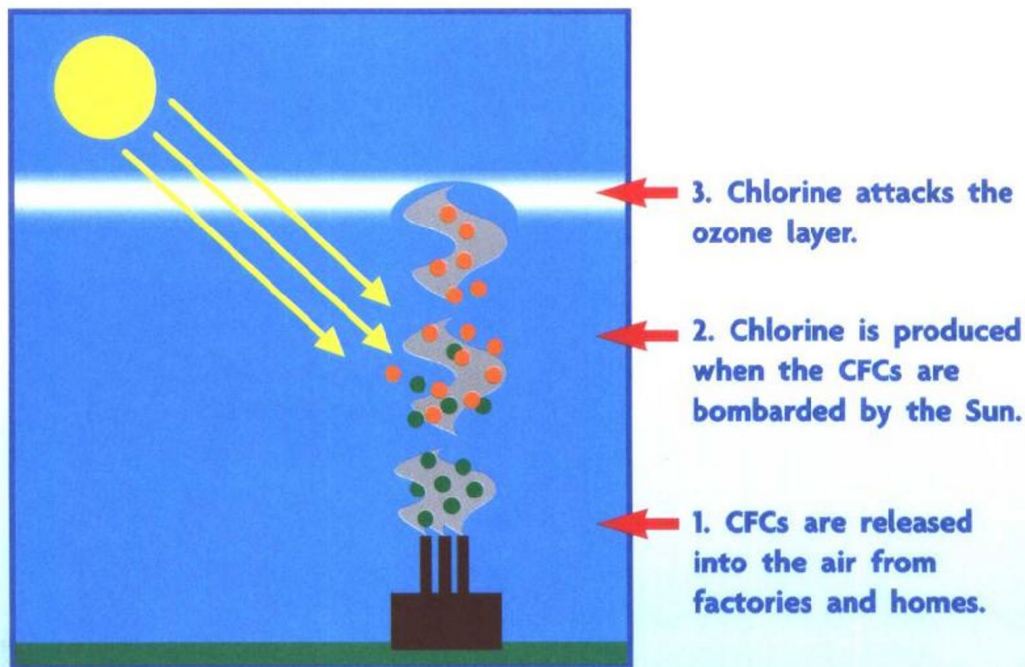
chlorofluorocarbon (8) ['klɔːrəʊːfluəəʊ'kɑːbən]

n. 含氯氟烃

toxic ['tɒksɪk, 'tæksɪk] a. 有毒的

air conditioners allow these gases to leak out. When the CFCs rise high above Earth, they are bombarded by the Sun's rays, and **chlorine** gas is produced. Chlorine destroys the ozone layer.

Scientists have produced other chemicals known as **hydrofluorocarbons**, HFCs for short, to replace harmful CFCs. They do not produce chlorine.



bombard [bɒm'ba:d, bəm'bard] v. 粒子辐射、碰撞
 chlorine ['klɔ:ri:n, 'klɒrɪn] n. 氯气
 replace [rɪ'pleɪs, rɪ'ples] v. 代替
 hydrofluorocarbon [ˌhaɪdrəʊ'fluəərəkɑ:bən]
 n. 含氟碳氢化合物

The Greenhouse Effect and Global Warming

Have you ever heard of the **greenhouse effect**? The phrase refers to the natural warming of Earth caused by special gases known as greenhouse gases. Water vapor and **carbon dioxide** are two important greenhouse gases.

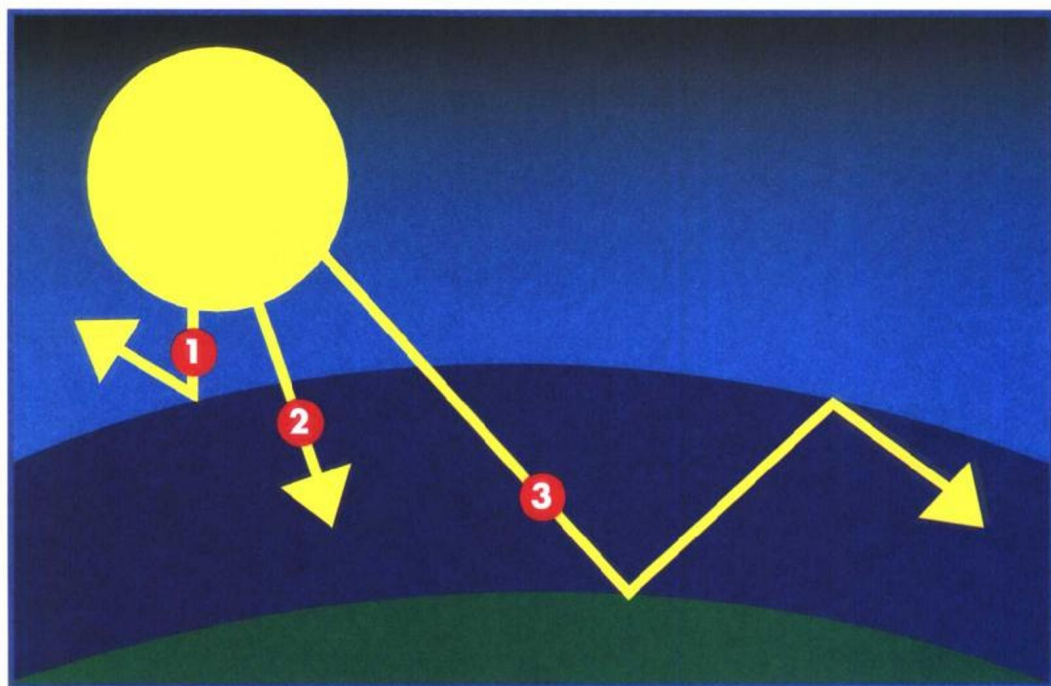
The greenhouse effect is vital to life on Earth. Without the greenhouse effect, Earth would be too cold to support most forms of life. This natural warming of Earth is called the greenhouse effect because it is similar to the way a greenhouse for growing plants works.



A greenhouse lets in heat from the Sun and traps some of it to create a warm environment that helps plants to grow.

greenhouse effect 温室效应
vapor ['veɪpə, 'vɛpə] n. 蒸气
carbon ['kɑ:bən, 'kɑrbən] n. 碳
carbon dioxide 二氧化碳
vital ['vaɪtl, 'vaɪt!] a. 致命的
similar ['sɪmələ, 'sɪmələ] a. 相似的
let in 使...进入, 放进
environment [ɪn'vaɪərənmənt, ɪn'vaɪərənment] n. 环境

This is how the greenhouse effect works. When the Sun's rays enter Earth's atmosphere, some of their energy is absorbed by the atmosphere. Some of the energy is absorbed by the land and water and then **radiated** out. This radiated energy is absorbed by the greenhouse gases in the atmosphere and helps warm Earth.



- 1 Some of the Sun's heat bounces back into outer space.
- 2 Some of the heat is absorbed by the atmosphere.
- 3 Some of the heat reaches Earth where it is absorbed and radiated back into the atmosphere. This heat is absorbed by the greenhouse gases.

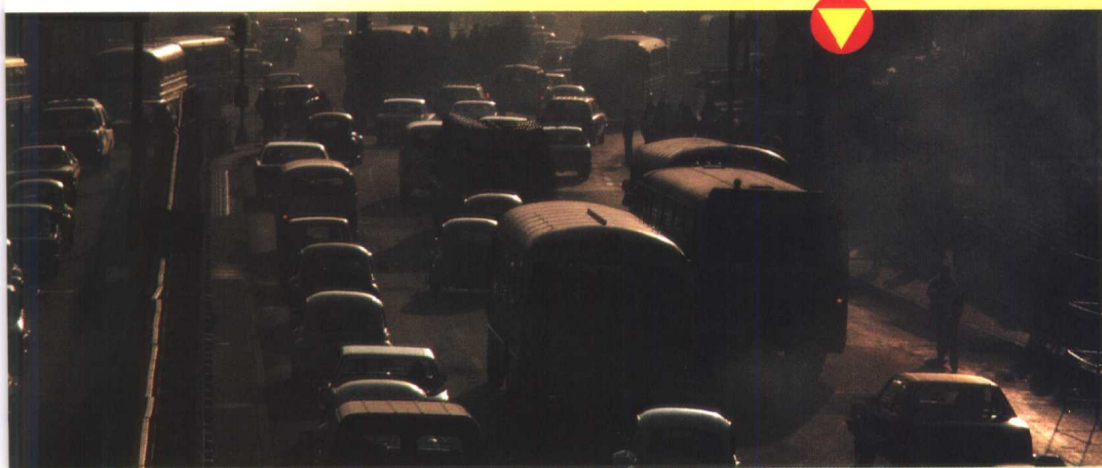
absorb [əb'sɔ:b, əb'sɔ:rb] v. 吸收
radiate ['reɪdiət, 'red.ət] v. 传播, 辐射

bounce [baʊns, baʊns] v. 弹起
outer space 外层空间

When the level of greenhouse gases in the atmosphere increases, more heat is trapped. This may cause an increase in global surface temperature, a problem known as global warming.

Human activities have caused increases in the amount of greenhouse gases in the atmosphere. Increased burning of fuels to run cars and other vehicles, to cool and heat homes and factories, and to produce electricity has produced more carbon dioxide and contributed to these increases.

**Burning fuel such as gasoline sends carbon dioxide into the air.
A major street in Mexico City is clogged with traffic and the air is filled with smog during the morning rush hour.**



vehicle ['vi:kl, 'vi:hkl] n. 车辆
clog [klog, klag] v. 障碍, 填满

smog [smɒg, smɑg] n. 烟雾
rush hour 高峰时间

Many scientists are concerned that this extra warming could have consequences for life on Earth. The additional carbon dioxide has changed our global temperature, climate, and weather.

Is there evidence that the climate is warming? Data show that since the late 1800s, there has been an average temperature increase of slightly more than half a degree. The change is not the same all over the world.

Are the polar ice caps melting? Over the past 100 years, sea level has risen about 1 to 2 millimeters per year, or 100 to 200 millimeters total.

Scientists think that in this century, it could rise another 500 millimeters.

All of these changes in climate and temperature affect plant and animal habitats.

Scientists use satellite images like this one to monitor sea ice in the polar regions. By looking at images over time, they can tell if global warming is occurring.



be concerned 担心

extra ['ekstrə, 'ekstrə] a. 额外的

consequence ['kɒnsɪkwəns, 'kɒnsəkwens]

n. 后果

additional [ə'dɪʃənl, ə'dɪʃənl] a. 附加的

evidence ['eɪdəns, 'evədəns] n. 迹象

slightly ['slaitli] ad. 少量地、微小地

habitat ['hæbɪtæt, 'hæbə'tæt] n. 栖息地、产地

occur [ə'kə:, ə'kə] v. 发生

Science Lab



UNDERSTANDING THE GREENHOUSE EFFECT

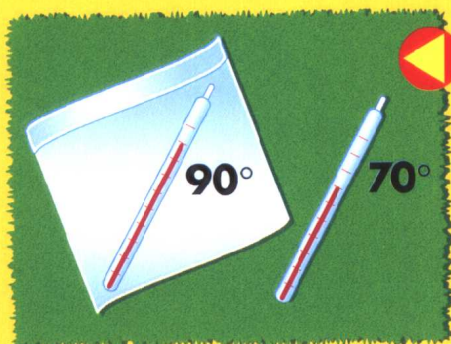
In this experiment, you will model how the greenhouse effect works.

THINGS YOU WILL NEED:

- two outdoor thermometers
- a clear, self-sealing plastic bag
- sunlight

WHAT TO DO:

1. Put one thermometer in the bag and seal the bag. Place it on a sunny windowsill.
2. Place the other thermometer next to it.
3. Note the temperatures marked on the two thermometers as you place them on the windowsill. Compare the temperatures after ten or fifteen minutes. The thermometer inside the bag will show a higher temperature. Sunlight passed through the bag and warmed the air inside. But the heat could not escape because the bag is sealed.



The temperature inside the bag is higher than the temperature outside the bag.

thermometer [θə'mɒmɪtə, θə'mamətə] n. 温度计
 self-sealing ['self'si:liŋ, self'siliŋ] a. 自动封口的
 windowsill ['windəʊ,sɪl, 'windosɪl] n. 窗槛