

# 英语科普阅读

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西安交通大学出版社  
· 西安 ·

# 《英语科普阅读》丛书

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# 前言

顾名思义《英语科普阅读》是汇集科普类题材的系列读本。编写本系列书的目的是通过精心编排的系列阅读材料,帮助读者熟悉科普文章的文体特点、科技英语常用表达法并掌握科技英语常用词汇和专业术语。同时帮助读者掌握正确的阅读方法和技巧,从而为能顺利阅读有关专业原版教科书、参考书及其他参考资料打下良好的基础。

本系列丛书由三册组成。词汇量依次为 4 200, 5 000 和 6 000。第一册共有 80 篇文章,为初级读本。内容涉及科学技术领域中的基本概念和常规性知识及其某些技术的应用。第二册共有 70 篇文章,为中级读本。内容涉及科学技术在生活各领域中的运用及一些前沿科技成果的介绍。第三册共有 55 篇文章,为高级读本,内容涉及最新科技成果介绍及对未来科技发展的展望。这三本书可分别供学习大学英语四级、六级的学生以及非英语专业硕士生使用。

本系列书力求做到寓知识性、趣味性和思想性于阅读实践中。全书内容广博,题材广泛,涉及专业面宽,有利于激发读者的学习兴趣,拓宽知识面和开阔视野。书中所用材料经过反复筛选,择优采用。为了保证语言规范,文章均选自英美等国近年出版的书籍和刊物,以反映现代科学技术的最新成果和发展趋势。同时,文章在词汇、拼写和用法等方面保留了英国英语和美国英语的特点,使读者有更多的机会接触英语的这两种主要变体。文章编排力求做到从易到难,由浅入深和循序渐进。每篇文章都配有内容提示和

难点注释,以帮助读者读者拓宽思路,加深对文章的理解,领会作者的观点和态度以及就文章的内容进行预测、分析、推理、判断和综合概括。应该说明的是:某些热门话题(如计算机、网络等)可能在三册书中重复出现,但文章难度不一,内容各异。

阅读理解是中国学生学习外语必须掌握的一项重要技能。因此,读者应通过大量阅读实践,善于把握文章的大意、发现和利用文章的冗余信息(指作者传递信息时重复的旧信息),掌握必要的英美文化背景知识和熟悉英美人独特的表达方式和惯用法等。本系列书对读者提高这方面的能力定有裨益。

由于编者水平有限,错误和疏漏之处在所难免,热诚欢迎读者批评指正。

编 者

2000年6月

## 内容简介

科学技术迅猛发展,人类已进入高科技时代。在这个时代,逃避或远离科学技术都是不现实的。基于此,我们选编了 55 篇集趣味性、实用性、知识性、思想性于一体和时代感强的现代科普文章,介绍科学技术最新成果,展望科学技术发展未来。文章涉及数十个学科,覆盖面宽泛——星际旅行与太空探索、天文与气象、科技与军事、计算机与网络世界、基因技术与案件侦破、现代通信技术与手段、文物考古、人物传记等。文章题材广泛,风格各异,语言地道纯正,专业术语注解准确规范。可供研究生、本科高年级学生、科技英语专业学生阅读。

### 图书在版编目(CIP)数据

英语科普阅读. 第 3 册/李庆明等编. —西安:西安

交通大学出版社, 2000. 8

ISBN 7-5605-1283-6

I. 英... II. 李... III. 英语-语言读物 科学知识

IV. H319.4 :N49

中国版本图书馆 CIP 数据核字(2000)第 67665 号

\*

西安交通大学出版社出版发行

(西安市咸宁西路 28 号 邮政编码:710049 电话:(029)2668316

长安县第二印刷厂印装

各地新华书店经销

\*

开本 850mm×1168mm 1/32 印张:11.125 字数:277 千字

2000 年 8 月第 1 版 2000 年 11 月第 2 次印刷

印数 5 001~8 000 定价:15.00 元

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若发现本社图书有倒页、白页、少页及影响阅读的质量问题,请去当地销售部门调换或与我社发行科联系调换。发行科电话:(029)2668357 2667874

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# 1. Start School with a Click

## ( 点击鼠标开学 )

内容提示：

因特网的出现使校园将出现突飞猛进的变化 , 对中学生的教育产生着深刻的影响。家长通过子女教育网站上网查寻孩子在校中餐菜单、阅读课堂记录、了解家庭作业布置和有关文娱活动安排等情况。网络技术走进校园 , 不仅便于更多的家长参与学校事务 , 而且极大地改善了家长与学校的关系。

Getting ready to go back to school in the good old days of , say , 1997 meant a few trips to the mall<sup>1</sup> and the stationery aisle<sup>2</sup> and a quick check of the bus route. This year , for many parents , there are some new things to remember : the teacher 's e-mail address , the school 's website<sup>3</sup> and which night online homework help chat will be offered. “ The 1990 ~ 2000 school year will be the one where the majority of parents really feel the Internet 's influence on their child 's education at the everyday level , ” says Jonathan Carson , chairman and CEO of the Family Education Co. , which offers a parenting website at familyeducation. com<sup>4</sup> and a framework for local schools to create and maintain their own sites.

This year promises to show a quantum leap<sup>5</sup> in the spread of school technology : parents in many districts can expect to be able to check the school lunch menu , read class notes , see activity calendars and view nightly homework assignments—all online. “ The schools are wired<sup>6</sup> , ” says Carson. “ A majority of parents now have access and the educators are ready to go. ”

Over the summer , parents of high school German students in Ithaca , N. Y. <sup>7</sup> got to be part of a class trip to Europe , through their home computers. The class brought a digital camera and laptop<sup>8</sup> with them to Germany and documented their visit on their web page<sup>9</sup>. Harry Ash , father of 16-year-old traveler Brian , found it reassuring to see his son 's smiling face from half a world away. Before their kids left , parents checked the site for scheduling information , a list of activities and advice on cultural differences.

When it 's designed well , a district , school or classroom website can change the relationship between the parent and the school , says Cynthia LaPier , Ithaca 's director of information and instructional technology. " The more you can involve parents in school , the better. " LaPier says. " The technology gives us another way to reach them , especially parents of secondary school students , who tend to be less involved. "

Ithaca high school physics teacher Steve Wirt gets e-mail from parents regularly , some from moms and dads he believes might otherwise not pick up the phone with a concern. Using software called Blackboard CourseInfo<sup>10</sup> , Wirt conducts online chats with his students often reviewing for a quiz or discussing homework problems.

The way things are going , by the end of this year , many parents may be fully converted — and in fact dependent upon their schools ' technological capabilities. At a recently wired school in Novi , Michigan , the school webmaster<sup>11</sup> was just a few hours late posting<sup>12</sup> the lunch-menu calendar on the website. In that time , more than a dozen parents called him by telephone to request the information. " A year ago , it never would have been there , " says Carson. And now parents are finding it 's tough to get by without

it.

注释：

1. mall 大型综合超市
2. stationery aisle 文具店
3. website 网站
4. familyeducation. com 子女教育网站
5. quantum leap 突然、巨大的进展
6. wired 上网。指计算机与因特网连接
7. N. Y. 纽约
8. laptop 膝上型电脑
9. web page 网页。home page 主页
10. Blackboard Course Info 黑板课程信息
11. webmaster 创建和维护一个互联网网站的技术专业人员
12. post 网上发布信息

## 2. A Global Challenge for the New Century

### 新世纪的全球挑战

内容提示：

新世纪在带给人类经济繁荣的同时，也提出了日益严重的环境及生态问题，如全球气候变暖所导致的洪水、干旱和疾病。此文作者美国总统克林顿在新千年第一个地球日来临时，呼吁全球的国家联合起来，为了子孙后代的幸福，创造更加绿意盎然的美好未来。

From the time I was a boy, I had dreamed of seeing elephants, giraffes and lions in the wild. But as I gazed across the lush<sup>1</sup> African plain, what amazed me even more were all the creatures I'd never known existed—the lechwe, the kudu<sup>2</sup>, the lilac-breasted roller. I watched them in wonder.

That morning two years ago in Botswana's stunning Chobe reserve, I wished every child in the world could share these magnificent sights. And I worried that in a few generations' time, they could be lost even to the children of Africa.

As we enter the 21st century, a new global economy draws nations ever closer. But our growing interdependence hinges on much more than technology and trade. For we are linked intrinsically by the physical and biological webs that sustain life on our planet—and, increasingly, by the threat of their unraveling<sup>3</sup>. Indeed, unless we reach across borders and face this threat together,

the next century may dawn on an Earth in ecological crisis , with half of all species gone , and our grandchildren enduring deadly floods , drought and disease brought on by global warming.

When millions across America celebrated the first Earth Day 30 years ago , our focus understandably was our own backyard. Our rivers were catching on fire , and our skylines were disappearing behind a veil of smog. America 's remarkable environmental progress in the years since is powerful testament<sup>4</sup> to our national will , our technological prowess<sup>5</sup> and our faith in a better future. Protecting the environment is today a bedrock American value , as important to us as safe neighborhoods and good schools. What 's more , three decades of experience have proved the naysayers<sup>6</sup> wrong. Tending to the environment has not weakened our economy. In fact , our air and water are the cleanest they have been in a generation , even as we enjoy the longest economic expansion in our nation 's history.

America 's responsibility now , as we mark the first Earth Day of a new millennium , is to bring these lessons to bear against new , more profound environmental challenges. We must look well beyond our own cities and countryside , make environment a core foreign policy objective and provide the leadership needed to put all nations on a cleaner , more sustainable path to prosperity.

In Africa , the environmental leaders I met with described how desperate shortages of human and financial capital impoverish both their peoples — and their land. The resulting loss of biodiversity , they noted , carries a price for us all. For instance , the rosy periwinkle<sup>7</sup> , a plant native to Madagascar , has proved potent against childhood leukemia<sup>8</sup>. Yet other rare species on this small island nation , most found nowhere else on Earth , are disappearing faster than scientists can catalogue them. The U.S. is working to

help developing nations build their economies by preserving , rather than destroying , their natural endowments. But we and other nations must do more.

And without question , we must do more to counter a threat that shows more clearly than any other how closely our nations ' fates are linked : the threat of global warming. As the world 's largest emitter of greenhouse gases , the U. S. has a special responsibility to lead this effort. Despite mounting evidence , too many in Congress continue to deny the problem. Instead , we must see—and seize—the opportunities in its solution. Promising new technologies , and others just over the horizon , can power our homes , factories and cars with cleaner , more efficient energy—cutting emissions while strengthening our economy.

We must ensure also that this global challenge is met with a global solution , for the heat-trapping gases warming the earth pose the same risk whether they come from the U.S. or from China. An agreement forged in 1997 in Kyoto , Japan , with critical leadership from Vice President Gore , calls for strong action by industrialized nations. But developing countries must join us.

The key , I believe , is to help these nations leapfrog into the 21st century by eschewing<sup>9</sup> the outdated Industrial Era logic that more pollution means more progress. We must help them adopt clean-energy technologies that offer both prosperity and a healthy environment. On my visit last month to India , the government there took a major step in that direction : by 2012 , it declared , at least 1 of every 10 new kilowatts of power will come from renewable energy.

Ultimately , our best hope may be that even where governments lag , their people understand both the stakes and the urgent need for

action. When I visited China , I met with environmentalists in the scenic city of Guilin. One woman spoke passionately of growing environmental awareness at the grassroots. But this movement cannot take hold<sup>10</sup> and succeed , she told me , without our help. “ If Americans don ’ t want to give up this good opportunity , ” she said , “ you have to take action now. ”

She is right. In the struggle against history ’ s most profound environmental challenges , America must lead. For the sake of our children , and our planet.

### 注释：

1. lush 青葱的
2. kudu 条纹羚
3. unravel 拆开
4. testament 信条
5. prowess 威力
6. naysayer 拒绝者
7. periwinkle 长春花属的植物 , 王黍螺
8. leukemia 白血病
9. eschew 避开
10. take hold 占主导地位