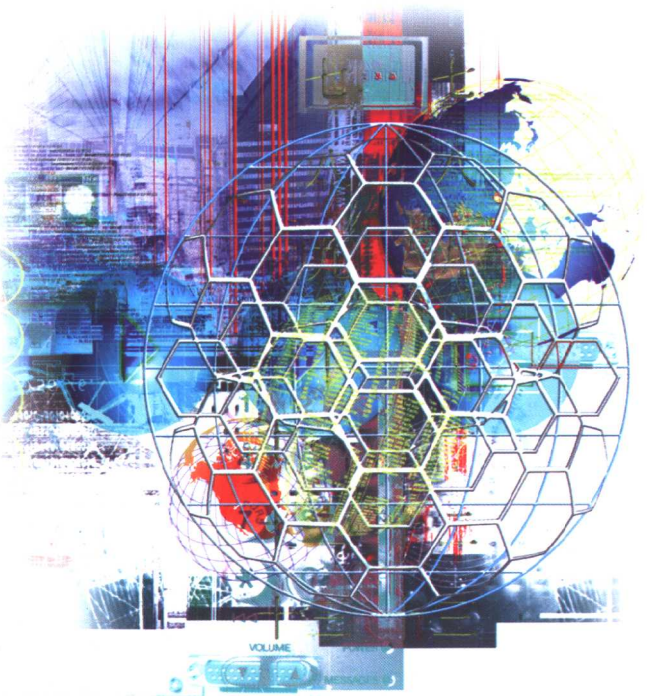
MAKING THE SWITCH

科普英语阅读文选

王士先 编　张彦斌 审校



上海科学技术出版社

MAKING THE SWITCH

——科普英语阅读文选

王士先编　张彦斌审校

上海科学技术出版社

图书在版编目（CIP）数据

科普英语阅读文选 = Making the Switch / 王士先编. 上海：上海科学技术出版社，2003.5
ISBN 7-5323-7022-4

Ⅰ.科… Ⅱ.王… Ⅲ.英语-语言读物，科学技术 Ⅳ.H319.4：N

中国版本图书馆 CIP 数据核字（2003）第027975号

上海科学技术出版社出版发行
（上海瑞金二路 450 号 邮政编码 200020）
常熟市兴达印刷有限公司印刷 新华书店上海发行所经销
2003 年 5 月第 1 版 2003 年 5 月第 1 次印刷
开本 787 × 1092 1/32 印张 9 字数 197 000
印数 1—12 000 定价：12.00 元

内 容 提 要

本书精选了60篇科普英语短文，分为精读和泛读两部分。精读部分附有练习题，书末附有生词表和练习题答案，可供查阅。所选文章紧跟科学技术的进步，学科覆盖面广泛，内容新颖有趣，文字规范，既能帮助读者提高英语的阅读和翻译能力，还能给读者一些新鲜的科技知识。

本书可供高中及选修大学英语四级和六级的学生阅读使用，也可供广大科技工作者学习提高英语水平之用。

前　言

随着 21 世纪的到来，随着国际互联网的迅速发展和世界科技文化的广泛交流，英语已被越来越多的人们认同为 21 世纪人必不可少的工具。广大青少年学习英语的热潮一浪高过一浪。近年来，随着英语水平的明显提高，他们迫切需要适合自己水平的英语阅读材料，特别是科普方面的阅读材料。为适应大中学生阅读英语科普文章的需要，在上海市青少年科技教育中心的组织下，我们选编了这本科普英语阅读文选。

本书中文章均选自近期的国外杂志或互联网上的科技新闻报道。内容力求新颖有趣，学科覆盖面力求广泛，文字力求规范，深入浅出，以使广大青少年在阅读本书时，既能提高英语水平，同时又可获得一些新的科技信息，扩大视野，为未来的事业打好基础。

在广泛征求意见的基础上，本书主要针对修读大学英语四级或四级以上的学生或相应水平的学生。全书分为两个部分：第一部分为精读(Intensive Readings)，共 50 篇，每篇篇幅在 160 至 380 英语词之间；第二部分为泛读(Extensive Readings)，共 10 篇，每篇篇幅在 400 到 900 英语词之间。精读部分每篇文章后附有阅读理解练习和英译中练习，帮助学生提高阅读技能和翻译技能；泛读部分没有练习题，只提供注释和生词。

本书可用作中学课外提高班教材，也可供修读大学英语四级或四级以上的学生用作课外阅读。对于想要提高英语水

平和愿意多接触一些英语科普文章的广大科技工作者，本书也不失为一本值得推荐的参考书。

本书不足之处，欢迎读者批评指正。

编　者

2002 年 12 月

几点说明

关于生词：

1. 全书提供超出《大学英语四级词汇表》的生词，全部列入书后的总词汇表，并注明课数，以促使读者在阅读时先尽量猜测词义，猜不出时才去查阅。
2. 泛读部分因文章较长，为便于查找，凡列入书后总词汇表的生词，文中都用黑斜体表示；凡文章后面附有注释的语言点都列为斜体，并在语言点右上角注有上标序号，如[1、2、3]。
3. 意义比较明显的复合词和派生词原则上不提供注释，要求读者自行猜测。
4. 本书出现的地名除注明国名的以外均为美国地名，一般只出现城镇名和州名。有些地方州名用了缩写，可参考书后《美国各州州名及缩写表》。
5. 专有名词如人名和学校、机构名称等一般不列入总词汇表。
6. 单词有几种读法的，一般只取常用的一种。
7. 上下文中已有英文解释的用斜体表示的专门名词和词组一般不列入总词汇表。
8. 凡编入练习要求猜测词义的生词不列入总词汇表。

关于练习：

1. 本书只提供阅读练习和翻译练习，以集中训练这两种技能。如作为教材，教师可先行介绍一些基本的阅读技能

和翻译技能，并结合阅读和翻译练习实践进行讲解。

2. 翻译练习中的黑体字在翻译时要注意其翻译技巧，可能是词义引申，可能是词类转换，也可能是需要运用合译或分译技巧，等等。

3. 多项选择阅读练习只有一种答案。

目 录

前言
几点说明

PART I INTENSIVE READINGS

Passage 1 These Boots Are Made for Power Walking 1
Passage 2 Chopping Spree 4
Passage 3 Do You Fall Asleep Uncontrollably 7
Passage 4 Robocopters 11
Passage 5 Teen's Research Wins $40,000 Prize 14
Passage 6 New Specs Help Color-blind 17
Passage 7 Coming Soon: Videos by Phone 20
Passage 8 More Accurate GPS 23
Passage 9 Secrets of Prehistoric Rocks Revealed 27
Passage 10 Unvaccinated Kids Put Themselves and Others at Risk 31
Passage 11 Extract Precious Metal from Soil 35
Passage 12 Dialing for Danger 38
Passage 13 Ghost Busted in Haunted Rooms 41
Passage 14 Name That Tune 45
Passage 15 Making Cars and Light Trucks Equal under the Law 48
Passage 16 A Car Running on Air 52
Passage 17 "Lost City" Found on Ocean Floor 55
Passage 18 The Moon's So Bright, I Gotta Wear Shades 59

Passage 19	Antimatter Might Whisk Humans into Deep Space	63
Passage 20	Blood Swap Cures Paralysis	67
Passage 21	Making the Switch	70
Passage 22	Dousing Wildfires	74
Passage 23	Happy Ending for Stale Beer and Heavy Metal	77
Passage 24	Dangerous Dogs	81
Passage 25	Frosty Space Dust May Have Seeded Life	85
Passage 26	Do Humans Have a Sixth Sense	89
Passage 27	Iguanas Experience Shrinkage	93
Passage 28	Warning: Don't Sleep Wearing Soft Contacts	97
Passage 29	Does a Dental X Ray Do Damage	101
Passage 30	New Atomic Clock	105
Passage 31	Drug-Resistant Germ Breaks Out	109
Passage 32	Some Drinkers Have Good Reason to Celebrate	113
Passage 33	Great Flood Evidence Found	117
Passage 34	Land Powered by the Rising Sun	121
Passage 35	Will Oceans Dry Up	125
Passage 36	Poisoning Blamed for Beethoven's Sickness	129
Passage 37	Candid Camera	133
Passage 38	One Brave Boy	137
Passage 39	Mars: Great Lakes	141
Passage 40	Do Bad Teeth Drive Lions Wild	145

Passage 41 Fish Is Food for Thought 149
Passage 42 Hand-Shaking Chimps Get to Grips with Culture 153
Passage 43 Alien Abductions Diagnosed as a Bad Night's Sleep 157
Passage 44 Flabby Minds 161
Passage 45 How to Stop Global Warming 165
Passage 46 Life Is Sweet 169
Passage 47 Heart Transplantation 173
Passage 48 How Does the Debris Flow 177
Passage 49 Antarctic Research 181
Passage 50 World Weather Variation 185

PART II EXTENSIVE READINGS

Extensive Reading 1 Keep an Eye on Dad 189
Extensive Reading 2 A Tenth Planet 192
Extensive Reading 3 Thick Ice Scraped Rock Bottom in Arctic 194
Extensive Reading 4 Lost Continent Found 197
Extensive Reading 5 The Day the Dynamo Died 200
Extensive Reading 6 Whizz-kid Computer 203
Extensive Reading 7 Water on Mars 206
Extensive Reading 8 Cell Phone Hang-ups 209
Extensive Reading 9 Internet, Hold the Appliance 213
Extensive Reading10 Would You Live in Space 217

KEY TO EXERCISES 223
GLOSSARY 253
附录：美国各州州名及缩写表 275

PART I

INTENSIVE READINGS

Passage 1

These Boots Are Made for Power Walking

Going for a walk or a jog isn't just good for your health. In the future, it might also charge up your cell phone or your portable CD player. A California research firm, SRI International, has invented boots that convert the mechanical energy of walking into electrical energy.

The boots have a heel made of a special elastic *polymer*—a compound with large molecules that contain many small molecules linked together. Plastics are polymers and so are many natural substances, such as rubber and starch.

The polymer used in the boots is a *dielectric elastomer*—a substance that generates electricity when it's flexed. As the heel of the boot is compressed with each step, it produces an electric current. That current might be used to run a cell phone, a

handheld computer, or a portable radio, according to Ron Pelgrine, a researcher at SRI. Pelgrine said the power boots won't hit the streets for at least another two years.

Exercises

Exercise 1 Choose the best answer from the choices given.

1. According to the passage, the energy we consume while walking is _____.

A) vital to our survival
B) essential for our existence
C) a complete waste
D) a potential power source

2. A special kind of boots is being developed which _____.

A) can make use of the heat produced
B) can make walking much easier
C) will provide cell phones with electricity
D) will generate electricity by using rubber

3. The word "flexed" (Line 2, Para.3) most probably means _____.

A) bent
B) contacted
C) heated
D) squeezed

4. The word "starch" (Line 4, Para.2) is mentioned in the passage _____.

A) as an example of large molecules
B) as an example of natural polymer

C) to explain what is dielectric elastomer

D) to show that polymers can be quite popular

5. The new product will probably be available _____.

A) pretty soon C) in less than two years

B) in a couple of months D) in more than two years

Exercise 2 Translate the following sentences into Chinese, paying attention to the translation of the words in bold type.

1. Going for a walk or a jog **isn't just** good for **your** health.

2. A polymer is a compound **with large molecules** that contain many small molecules linked together.

3. As the heel of the boot is compressed **with each step**, it produces an electric current.

4. The power boots won't **hit the streets** for at least another two years.

Passage 2

Chopping Spree

Each holiday season more than 36 million pine trees are chopped down in the U.S.—enough to blanket the state of Rhode Island! That may sound like a raw deal, but the tradition actually helps the environment, claims tree expert Craig McKinley at Michigan State University. "Trees grown for Christmas provide homes for wildlife and keep soil healthy," he says. "Plus, they're a renewable resource—unlike artificial trees, we can grow new real trees every year."

Each harvested tree is replaced by two to three seedlings. This year alone, 56 million new trees will be planted on tree farms across the country, where 98 percent of Christmas trees are grown. More than just ornament stands, trees help remove dust and pollen from the air, give off life-sustaining oxygen, and can be recycled into fertilizer or used to fuel wood-burning fireplaces.

What happens to Christmas trees after the holidays? Fifty-nine percent are recycled, says the National Christmas Tree Association.

Exercises

Exercise 1 Choose the best answer from the choices given.

1. The passage mainly deals with _____.
   A) the American custom of Christmas
   B) the problem caused by chopping trees
   C) the relationship between trees and environment
   D) the ways Americans deal with Christmas trees
2. A "raw deal" (Line 3, Para.1) most probably refers to _____.
   A) unfair treatment
   B) natural disaster
   C) unfavorable arrangement
   D) nonprofit exchange
3. From the passage we learn that _____ in the U.S..
   A) Christmas trees are an important source of wood
   B) planting Christmas trees is a constant business
   C) more artificial than real trees are used for Christmas ornament
   D) the chief purpose of growing Christmas trees is to benefit wildlife
4. According to the passage, the chopping dawn of Christmas trees in the U.S. _____.
   A) is meant to improve soil quality
   B) is meant to provide more homes for wildlife
   C) has become a booming industry
   D) has led to the increase of the number of trees
5. According to the passage, the National Christmas Tree