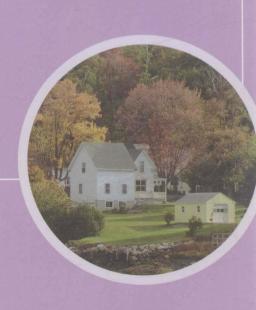


# 21世纪大学新英语 快速阅读技能训练

主编 马文颖





# 21世纪大学新英语 快速阅读技能训练



#### 图书在版编目(CIP)数据

21 世纪大学新英语快速阅读技能训练/马文颖主编. —上海:复旦大学出版社,2012.6 ISBN 978-7-309-08882-3

I.2··· II. 马··· II. 英语-阅读教学-高等学校-教材 IV. H319.4

中国版本图书馆 CIP 数据核字(2012)第 080310 号

21 世纪大学新英语快速阅读技能训练 马文颖 主编 责任编辑/倪琴芬

复旦大学出版社有限公司出版发行 上海市国权路 579 号 邮编:200433 网址:fupnet@fudanpress.com http://www.fudanpress.com 门市零售:86-21-65642857 团体订购:86-21-65118853 外埠邮购:86-21-65109143 上海春秋印刷厂

开本 890 × 1240 1/16 印张 8.75 字数 277 千 2012 年 6 月第 1 版第 1 次印刷

ISBN 978-7-309-08882-3/H・1903 定价: 28.00 元

如有印装质量问题,请向复旦大学出版社有限公司发行部调换。 版权所有 侵权必究

#### 内容提要

《21 世纪大学新英语快速阅读技能训练教程》是《21 世纪大学新英语》系列教材之一,本书旨在训练和培养学生运用各种阅读技巧,能以快速有效的方式,从浩如烟海的纸质和电子媒介中获取最重要、最有用的信息。

学习英语必须要做到"四会",即"听、说、读和写",而读又是四会中最基本也是最重要的一会。 我们大量的阅读教材只强调要快读,但没有告诉你如何才能做到快读,其实快速阅读是有技巧的,只 有掌握了一定的阅读技巧,才能使你在快速阅读中正确地理解你所阅读的材料,捕捉、获取你所需要 的信息。

本书尝试着从理论和实践两个层面系统地介绍 10 种阅读技巧,并配以大量的练习,学生通过这些技能的训练,定能快速提高英语阅读的能力。

### 《21 世纪大学新英语快速阅读技能训练》

主编 马文颖副主编 龙 芸

#### 编写委员会名单

石 坚(四川大学)
刘龙根(上海交通大学)
罗立胜(清华大学)
贾国栋(中国大学)
王秀珍(武阳医学)
陈薇葳(华中科技大学)
樊葳明(黑龙江大学)

## 目录

#### 编写大纲 1

第一章 预览(Prereading) 3

第二章 语境中的词汇(Vocabulary in Context) 18

第三章 标题(Topics) 27

第四章 中心思想和主题句(Main Ideas and Topic Sentences) 34

第五章 支持细节和信号词(Supporting Details and Signal Words) 43

第六章 文章布局模式(Patterns of Organization) 61

第七章 推理(Inferences) 76

第八章 略读(Skimming) 88

第九章 查读(Scanning) 95

第十章 阅读各种常见文章(Methods of Reading All Kinds of Articles) 100

练习答案 116

术语表 132

### 编写大纲

#### 一、教材编写宗旨

当前,世界已进入了经济全球化、科技一体化时代。在这个信息爆炸的时代里,人们需要以最快的速度从浩如烟海的纸质和电子媒介中获得最重要、最有用的信息,大学生更需如此。因此,如何在大学英语教学的课堂上,切实培养和训练学生运用各种阅读技巧进行高效率的阅读尤其重要。

根据中华人民共和国教育部新颁布的《大学英语课程教学要求(2007版)》,较高的英语阅读能力是大学基础阶段的培养目标。较高的英语阅读能力就是"能读懂一般性题材的英文文章,阅读速度达到每分钟70词;在快速阅读篇幅较长、难度较小的材料时,阅读速度达到每分钟100词;能就阅读材料进行略读和寻读;能借助词典阅读本专业英语教材和题材熟悉的英文报刊文章,掌握中心大意,理解主要事实和有关细节;能读懂工作、生活中常见的应用问题的材料;能在阅读中使用有效的阅读方法"。

根据课程要求,我们编写了《21世纪大学新英语快速阅读技能训练》一书。本书是在广泛、深入地调研和论证的基础上,对《快速阅读十技巧》(马文颖,2003,复旦大学出版社)进行改编、更新和充实而形成的。《快速阅读十技巧》自2003年出版以来,已在国内一些大学、外语院校以及部分语言培训学校中广泛使用,反响较好。本书编写之前,我们对英语四级考试阅读部分分数进行了跟踪统计,我们对学生的阅读能力进行了分析评估,找出了学生在阅读中存在的薄弱环节,深感阅读技能训练的必要性和重要性。

编写本书旨在通过系统的、科学的阅读技能训练,提高学生对阅读文章的阅读速度和理解能力。

阅读是一个积极主动地思考、理解和接受信息的过程。在阅读过程中,读者对于词语篇章的感知、理解到获得信息的过程中要完成至少四种认知活动,即:(1)生理层次——读者的视觉神经活动;(2)物理层次——读者形成温习符号的语音表象;(3)语言层次——读者对文字的语义和语法进行译码、加工的创造性思维活动;(4)心理层次——读者经过思考,进行言语译码,并理解意义。

阅读心理学家运用信息加工的认知心理学观点和方法,通过对整个阅读过程进行反复分析研究,总结提出了很多关于阅读过程的模式。这些模式大致可以分为三类,即自下而上的模式(Bottom up model, Gough, 1976)、自上而下的模式(Top down model, Goodman, 1976)和相互作用模式(Interactive model, Rumelhart, 1985)。这些模式也是本教材编写的理论依据。

(1)自下而上的模式(Bottom up model, Gough, 1976)

自下而上模式又叫数据驱动法。它强调从词汇开始到语篇意义的理解,由最底层、最具体的图式调用 开始、从具体到抽象、从低层次到高层次的过程。因此,它是从构成文章的字母—词汇—句子,最终到整个 篇章的理解。所以,文章的理解主要是对该文章语言的理解,阅读中的问题也被归结为语言问题。在阅读 过程中,读者是被动参与的,信息也是被动输入的过程。

(2) 自上而下的模式(Top down model, Goodman, 1976)

自上而下的模式又叫概念驱动法。它强调从语篇到词汇高层次的阅读过程。在阅读理解中,读者运用已有的知识、预想、经验、事物摹本和构思图式来进行信息加工。阅读过程是一个主动而非被动的过程, 是一个心理猜测游戏。阅读从高层次的图式和背景知识开始,激发先验图式,通过预测、筛选和吸收来解

#### 释输入的信息。

(3) 互动的模式(Interactive model, Rumelhart, 1985)

目前,阅读的互动模式逐渐成为英语阅读课教学中的主要方式。它结合了自下而上的过程和自上而下的过程,强调阅读的互动过程是两个方面的互动:一个是读者和文章的互动。在阅读中,读者进行着预测、筛选、验证和调整,这就像是读者和作者之间的对话。另一个是两种阅读过程的互动。读者从语篇出发,通过文章标题进行预测,然后进行筛选。在阅读过程中,两种信息处理方式在各个层面上同步进行,互相弥补。这种模式是以交互补偿论为基础的。由于经历、文化背景、知识结构以及受教育程度不同,因而对同一件事情、同一个概念的表达方式也会有所不同。阅读不仅包括对文本的识别,同样也需要了解相关的历史、文化、知识等。阅读并不单纯只是一个解码过程,也不仅仅是一个猜测过程,而是语言与图式交互作用的过程。在这一过程中,语言与图式相互补偿,既是读者与作者的交互,也是读者与文本的交互。

本书将基于认知心理学的理论,系统地介绍英语阅读的技巧,同步提供大量的、为训练各种技能所需要的练习。本书立足全新的教学理念、全新的素材而编写。新编教材力争做到体裁多样、内容丰富、科学系统,可读性强。

#### 二、教材编写框架

《21 世纪大学新英语快速阅读技能训练》选用当代英语常见的语体或问题的典型样本为素材。所选文章,不仅语言规范而且富有文采、引人人胜,读后给人以启迪;题材广泛,既能反映现实生活,也注意科普内容的比重;体裁多样;语体既顾及书面语,也注意口语以及正式和非正式语。

本教材共10章,每章的构成如下:

- 一是每一章介绍一种阅读技巧,内容包括如何理解文章的中心思想,如何确定段落主题句,如何根据 上下文构词法猜测词义等,并同步安排相应的练习,使学生在阅读后马上动手动脑,及时消化理解教学内 容,以达到事半功倍的效果。
- 二是相应的技能训练,每一章都设计了形式多样的练习题,如多项选择题、判断正误题和简答题等。 这些练习题从不同角度增强了学生对英语阅读的兴趣。

#### 三、使用说明

本教材适用于大学英语教学。建议使用者每周至少安排 2 个学时,按每学期 15—17 周计算讲授完全 书内容须两学期。具体使用时,各校可视实际情况适当调整内容和增减课时。

## 第一章 预览(Prereading)

#### I. 预览(Prereading)

预览是一种让读者在通读材料前熟悉材料的方法。该方法是指读者提前阅读文章、章节或全书中某 些能为读者提供关于阅读材料内容,并能使读者在头脑中形成提纲的部分。

#### 1. 预览的目的(Purpose of prereading)

预览的目的在于让读者在真正开始阅读前,对所读材料有一个快速的了解和整体的把握。它能够让读者迅速了解材料的基本内容和组织结构。这样,读者就能提高阅读速度,并更容易跟上作者的思路。

#### 2. 预览与阅读效率(Prereading and reading efficiency)

首先,预览能激发读者对阅读材料的兴趣。通过预览,读者能很快熟悉阅读材料,并对文章的结构和内容有一个基本的了解和把握。换言之,预览能让读者在阅读时更专注于内容。

其次,预览能给读者提供一个关于阅读材料的心理提纲。例如,当读者阅读某章节的标题时,大脑中会形成关于该章节的大纲。读者会由此推测事物的先后顺序,并理清文章中各个主题间的关系。这样,读者在阅读时就更容易理解该章节。

#### 3. 预览技巧(Prereading techniques)

读者可以在以下情况中使用预览技巧:

- (1) 阅读任何材料前;
- (2) 只搜寻材料纲要时;
- (3) 为某一特定目的挑选材料时(比如:写论文,准备研究报告等)。

"磨刀不误砍柴工"。不要认为预览是浪费时间。事实上,几分钟的预览就可以有效地提高阅读者的阅读速度和效率,从而节约大量时间。

#### II. 不同类型材料的预览(Prereading different types of materials)

#### 1. 预览书籍(Prereading books)

预览书籍指通过阅读书的前言、简介以及目录等来了解该书的结构和主要特色。具体步骤如下:

- (1) 阅读扉页(Read the title page)
  - 扉页上一般印有书名、作者、出版社和发行地的准确信息。扉页通常在书的第二页或第三页。
- (2) 阅读版权页(Read the copyright page) 版权页记录了该书的出版时间。当版权信息上列出了多个出版年份时,该书则是在所列出的年份中

#### 距当前最近一年里出版的。

版权页所给出的年份能告知读者书中的信息是否是最新的内容。例如,如果你想要了解关于癌症研究的最新信息,你就会读最近出版的书籍。但是,如果你想了解癌症研究的历史,那么,10 年前出版的书籍也许更能提供你所需的信息。

#### (3) 阅读目录(Read the contents)

书籍的目录通常在版权页、序言或简介之后,它是一个提纲式的列表,罗列了书中所包含的主要题目。 预览目录会让读者对本书的基本内容与结构编排有一个整体上的认识。

#### (4) 阅读序言或简介(Read the preface or introduction)

序言或简介一般阐述作者创作该书的原因,通常也概括该书的主旨、目的、理念和内容。

#### (5) 阅读附录(Read the appendix)

书籍的附录往往包含一些作者想要加入而又不适合加入正文的重要材料与信息。通常来说,这些材料都非常有用,能为阅读者提供有价值的信息。例如,一本历史书的附录也许包含了按年代列出的总统序列表、历史大事表以及各类地图等。附录通常紧跟在正文最后一章之后。

#### (6) 阅读词汇表(Read the glossary)

书籍的词汇表按照字母顺序罗列了书中所出现的单词和重要术语及其释义。它一般位于书的后面, 发挥着小词典的作用。浏览词汇表可以了解本书的难易程度以及本书的新词汇。

#### (7) 阅读文献索引(Read the index)

书籍的文献索引是将书中提到的具有检索意义的主题及其页码信息按字母顺序有序编排起来以供检索的列表。这一部分通常位于书籍的最后。有些书有两个索引:专名索引和主题索引。通常,专名索引位于主题索引之前。索引能帮你在书中迅速定位你想要了解的信息。

#### **Exercises**

#### Exercise 1. Read the following copyright information and answer the questions after it.

This edition is published by arrangement with Pearson Education Ltd.

Copyright © 1981, 1993 by John Edward.

The right of John Edward to be identified as the author of this work has been asserted in accordance with the UK Copyright, Designs and Patents Act 1986.

First published 1981 by Pearson Education Ltd.

Second edition 1993.

Reprinted 1998, 1999, 2001, 2006, 2011.

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without permission in writing from the publisher.

1. In what year was this book first published?

Who was the author of this work?						
xercise 2. Read the following table of contents and answer the questions after it.						
	Contents					
ntroduct	on ·····					
hapter	One Conrad and Modernist Novels					
1.1	Arising of Modernist Novels					
1.2	Conrad as the Forerunner of Modernist Novels					
hapter '	Two Modernist Features in Writing Technique					
2.1	Intricate Narrative Techniques					
	2.1.1 Chronological Dislocation ·····					
	2.1.2 Multiple Points of View					
	2.1.3 Delayed Decoding and Covert Plotting ·····					
2.2						
	2.2.1 Recurrent and Fragmentary Images					
	2.2.2 Reductive Perspective and Frustrating Context ······					
2.3	Literary Symbolic Technique ·····					
	2.3.1 Conrad's Literary Symbolism ·····					
	2.3.2 Various Symbols ·····					
hapter '						
3.1	Alienation and Loneliness ·····					
3.2	Disillusionment of Heroic Dreams ·····					
3.3						
	n					
_	phy ·····					
	edgement					
ppendi						
How ma	any chapters are there in this book?					
What a	re the titles of the chapters in the book?					
A						

	В	•			
	C				
4.	What are the subheadings under the major chapter heading "Intricate Narrative Techniques"?				
	A				
	В				
	C				

#### Exercise 3. Read the following preface and answer the questions after it.

#### **Preface**

American portraits is a two-column collection of biographical profiles designed to supplement the textbooks used in college-level survey courses. We adopted this format for several reasons. One is a belief that biography provides a particularly valuable tool for introducing students to the excitement and wonder of history. Life-writing forcefully reminds us that, beneath the abstractions, history is about the aspirations and struggles of flesh-and-blood human beings; it further enables us to identify with these individuals as they seek to give meaning to their life. In doing so, biography restores a sense of immediacy to the study of the past that is often lost in textbook generalizations. Accordingly, the articles in this anthology have been selected not only for their readability—though that was certainly a consideration—but also for the interest they are likely to generate. It is our hope that, in reading these essays, students will learn more about themselves as well as the people whose lives are profiled.

We also believe that biography provides an especially effective means of exploring the social and cultural diversity that has figures so prominently in the American experience. In the not-too-distant past, U.S. history was largely the study of middle-aged white males who has attained positions of political, military, or social distinction and whose forebears hailed from the British Isles. This is no longer the case, and the textbooks today devote increasing attention to both women and men from a variety of cultural groups and social classes.

Biography can't expand the breadth of this coverage. It can, however, deepen our understanding of these people. To cite but two examples from his anthology, Alvin M. Josephy's examination of the obstacles Tecumseh encountered in his efforts to achieve Indian sheds light on the diversity of Native American life; and Cletus Daniel's portrait of Cesar Chavez shows how factors such as religion and ethnicity shaped the development of this leader's unique brand of trade unionism.

On a related matter, biography adds depth to our understanding of major historical themes. Most of the essays selected for this anthology thus have a dual purpose; to profile the life of a given individual and to explore how that person influenced and was influenced by broader historical forces. For example, Patricia Horner's article on Mary Richardson Walker describes the trials and tribulations of a female pioneer in the Oregon Country; however, it also raises important questions about the ways in which environment and culture limited women's self-activity in frontier areas. Similarly, Lerone Bennett's essay on W. E. B. Du Bios not only examines the inner forces that drove the controversial black leader; it also shows how Du Bois adapted his views to perceived changes in domestic and international affairs.

As for the structure of American Portraits, we have divided the essays in each volume into three or four units. Each unit begins with an introductory essay that is designed to help put the portraits into topical and chronological perspective. To provide additional context for the lives profiled in the anthology, we have prepared head-

notes for every article. We also have selected a document to accompany each chapter and thus broaden the scope of coverage. Discussion questions follow, to help focus attention on the main issues raised in each chapter's portrait. Finally, each chapter concludes with a brief bibliography that offers suggestions for further reading.

- 1. What kind of book American Portraits is?
- 2. How many units does the author divide each volume?
- 3. What does the author hope from the students who will read the essays?
- 4. Compared to the textbooks in the past, what do textbooks today devote their attention to?
- 5. What's the function of introductory essay of each unit?

#### 2. 预览章节(Prereading chapters)

阅读章节时,很多读者是从头至尾一页一页地读,这样阅读和学习章节的效率较低。有经验的读者会在阅读章节前先预览,以提高阅读效率。预览章节包括阅读简介、标题和概要,也涉及观察图表、表格、图解和其他图形。步骤如下:

(1) 阅读标题和简介(Read the title and introduction)

通常,章节标题概括了章节的大意,简介会说明章节的主要目的。

(2) 阅读小结(Read the summary)

以小结结尾的章节,在阅读章节前先读小结。概要难以理解时,则先读章节。

(3) 阅读章节标题(Read the chapter headings)

章节标题包括标题和副标题。标题涉及章节的主要的主题,副标题涉及章节的副主题。阅读章节标题和副标题有助于明确章节主要的主题和副主题之间的关系,提高阅读效率。没有标题的章节,先读每一段的第一句。

例如: "The Whole Composition"中的3个主标题和12个副标题:

#### Chapter Five The Whole Composition

- I. Steps in Writing a Composition
  - 1. Planning a Composition
  - 2. Types of Outlines
  - 3. Writing the First Draft
  - 4. Revising the First Draft
  - 5. Making the Final Copy
- II. Organization
  - 1. Some Principles
  - 2. The Beginning
  - 3. The End
- III. Types of Writing
  - 1. Description

- 2. Narration
- 3. Exposition
- 4. Argumentation

#### (4) 阅读重要术语(Read terminology)

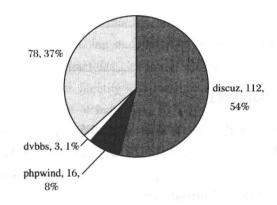
预览章节前,阅读其中的特定颜色字、黑体字或斜体字,了解应学习的重要术语。

如果作者在章节的开头或结尾列出了重要单词,最好在阅读章节前学习它们。如果作者仅用特定颜色、黑体字或斜体字的形式指出关键术语,预览章节时应先浏览它们。

#### (5) 阅读图表、表格(Read diagrams and tables)

图表是通过说明某物各个部分之间的关系来解释该物的图样。

例如:数据分析图表



#### 表格是把数据呈现在对齐的横行和纵栏中。

例如:航班时刻表

Flight	Departures	Arrivals	From	То
MU2008	6:00	18:10	Macau	Shanghai
MU5186	21 :25	00:25	Shanghai	Beijing

在一个章节中,图表和表格是用来说明或澄清章节中的信息的。它们会给读者一些有关他即将阅读的章节中的重要信息。

#### (6) 明确学习目标和复习问题(Pay attention to the aims of study and review questions)

有些章节开头有学习目标,如学习导入和学习目的;或结尾有复习问题,如思考题和讨论题。预览章节时阅读这些内容,能指导你的实际阅读。阅读章节后,再回顾这些内容,以确保你掌握了应掌握的知识。

#### **Exercises**

#### Exercise 4. Read the following chapter and answer the questions after it.

#### **Pollution**

#### Introduction

The environment we live in is important to our lives. It includes the air, land, and water around us. However, we seldom think about the air we breathe, the water we drink, the land we live on. Some people believe pollution is an inescapable result of human activity. There is no easy way to solve pollution. Making people aware of

the problem is the first step to solving it.

Three Major Pollutions

Air pollution

The causes of air pollution

When we think of pollution, we tend to think it's a problem that humans cause through ignorance or stupidity—and that's certainly true, some of the time. However, it's important to remember that some kinds of air pollution are produced naturally. Forest fires, erupting volcanoes, and gases released from radioactive decay of rocks inside Earth are just three examples of natural air pollution that can have hugely disruptive effects on people and the planet.

Forest fires (which often start naturally) can produce huge swathes of smoke that drift for miles over neighboring cities, countries, or continents. Giant volcanic eruptions can spew so much dust into the atmosphere that they block out significant amounts of sunlight and cause the entire planet to cool down for a year or more. Radioactive rocks can release a gas called radon when they decay, which can build up in the basements of buildings with serious effects on people's health.

All these things are examples of serious air pollution that happen without any help from humans; although we can adapt to natural air pollution, and try to reduce the disruption it causes, we can never stop it happening completely.

We all know that clean air is important to good health. Wherever you go and whatever you do, you are always surrounded by a sea of gases that we call air. If there are impurities in the air, they may be absorbed by our bodies and make us ill.

We need clean air, but unfortunately, air pollution is globally present, especially in cities. Every year these factories pour millions upon millions of tons of smog into air. Power plants and houses that burn coal add greatly to air pollution. Besides, there are more cars in cities now. Once out on the streets, they will take in fresh air and replace it with poisonous gases.

Air pollutants can irritate the breathing systems of people and animals. Carbon dioxide and lead fume from automobile exhaust affect breathing. Poisonous gases and soot from factory fumes weaken livestock, dirty the area around the factory, and cause acid rain. Chemical pollutants can ruin buildings, as well as threaten people's health. Whatever the cause of air pollution, the results are always bad.

Measures of combating air pollution

Generally, air pollution is tackled by a mixture of technological solutions, laws and regulations, and changes in people's behavior. Growing awareness of problems such as air pollution and global warming is slowly forcing a shift to cleaner technologies. Technology is as likely to harm the environment as to help it. That's why laws and regulations have been such an important part of tackling the problem of pollution. Many once-polluted cities now have relatively clean air and water, largely thanks to anti-pollution laws introduced during the mid-20th century.

Clean technologies can tackle dirty technologies, and laws can make polluters clean up their act — but none of this would happen without people being aware of pollution and its damaging effects. Often, people pollute the environment without even realizing it: how many people know that taking a shower or ironing a shirt can release indoor air pollution from hot water that they immediately breathe in, for example? Helping people to understand the causes and effects of pollution and what they can do to tackle the issue is very important — that's why I'm writing these words now and probably why you're reading them. Air pollution isn't someone else's problem; all of

us help to cause it and we can all help to clean it up. Starting now! Water pollution

The causes of water pollution

Most water pollution doesn't begin in the water itself. Take the oceans for example; around 80 percent of ocean pollution enters our seas from the land. Virtually any human activity can have an effect on the quality of our water environment. When farmers fertilize the fields, the chemicals they use are gradually washed by rain into the groundwater or surface waters nearby. Sometimes the causes of water pollution are quite surprising. Chemicals released by chimneys can enter the atmosphere and then fall back to earth as rain, entering seas, rivers, and lakes and causing water pollution.

With the development of modern agriculture and industry, more and more waste water is being poured into rivers. It has caused serious pollution. The river is becoming so dirty that no living things can live in it. The river is giving off a terrible smell.

Measures of combating water pollution

Making people aware of the problem is the first step to solving it. People who've grown tired of walking the world's polluted beaches often band together to organize community beach-cleaning sessions. Greater public awareness can make a positive difference.

One of the biggest problems with water pollution is its nature. Many rivers cross countries, while seas span whole continents. Pollution discharged by factories in one country with poor environmental standards can cause problems in neighboring nations, even when they have tougher laws and higher standards. Environmental laws can make it tougher for people to pollute, but to be really effective they have to operate across national and international borders. This is why we have international laws governing the oceans, which seeks to ensure the quality of the waters that people use for recreation. Most countries also have their own water pollution laws.

Most environmental experts agree that the best way to tackle pollution is through something called the polluter pays principle. This means that whoever causes pollution should have to pay to clean it up, one way or another. Polluter pays can operate in all kinds of ways. It could mean that tanker owners should have to take out insurance that covers the cost of oil spill cleanups, for example. It could also mean that shoppers should have to pay for their plastic grocery bags, as is now common in Ireland, to encourage recycling and minimize waste. Or it could mean that factories that use rivers must have their water inlet pipes downstream of their effluent outflow pipes, so if they cause pollution they themselves are the first people to suffer. Ultimately, the polluter pays principle is designed to deter people from polluting by making it less expensive for them to behave in an environmentally responsible way.

Land pollution

The causes of land pollution

There are many different ways of permanently changing the land, from soil contamination (poisoning by chemicals or waste) to general urbanization (the systematic creation of cities and other human settlements from Greenfield, virgin land). Some, such as huge landfills or quarries, are very obvious; others, such as atmospheric deposition (where land becomes contaminated when air pollution falls onto it) are much less apparent.

During the 20th century, the development of plastics, composites and other synthetic materials has produced a new generation of unnatural materials that the natural environment has no idea how to break down. It can take 500 years for a plastic bottle to biodegrade.

Although there are many responsible mining companies, and environmental laws now tightly restrict mining in some countries, mines remain among the most obvious scars on (and under) the landscape. Surface mining (sometimes called quarrying or opencast mining) requires the removal of topsoil.

If you define "land pollution" as irreversible damage to the land, you have to include soil erosion as a type of pollution too. Many people think soil is soil, always there, never changing, ever ready to grow whatever crops we choose to bury in it. In reality, soil is a much more complex growing habitat that remains productive only when it is cared for and nurtured. Too much wind or water, destruction of soil structure by excessive plowing, excessive nutrients, overgrazing, and overproduction of crops erode soil, damaging its structure and drastically reducing its productivity until it's little more than dust.

Measures of combating land pollution

What kind of solutions? Ideally, we'd look at every aspect of land pollution in turn and try to find a way of either stopping it or reducing it. With problems like waste disposal, solutions are relatively simple. We know that recycling that can dramatically reduce the need for sending waste to landfills; it also reduces the need for incineration, which can produce "fly ash" (toxic airborne dust) that blows may miles until it falls back to land or water. We'll always need mines but, again, recycling of old materials can reduce our need for new ones. In some countries, it's now commonplace to require mine operators to clean-up mines and restore the landscape after they've finished working them; sometimes mine owners even have to file financial bonds to ensure they have the money in place to do this.

New technologies will almost certainly make it easier to "recycle" polluted land in future. For example, the relatively new form of waste disposal called plasma gasification makes it possible to "mine" former landfills, converting the old waste into an energy-rich gas and a relatively safe solid waste that can be used as a building material.

#### Summary

Lining things have certain needs, such as clean air, water and land. The survival of all living things depends on meeting these needs. Therefore, environmental protection is essential.

Environmental protection is a practice of protecting the environment, on individual; organizational or governmental levels, for the benefit of the natural environment and humans.

Discussion concerning environmental protection often focuses on the role of government, legislation and enforcement. However, in its broadest sense, environmental protection may be seen to be the responsibility of all people and not simply that of government. Decisions that impact the environment will ideally involve a broad range of stakeholders, including industry, indigenous groups, and environmental group and community representatives. Gradually, environmental decision-making processes are evolving to reflect this broad base of stakeholders and are becoming more collaborative in many countries.

Environmental protection is influenced by three interwoven factors: environmental legislation, ethics and education. Each of these factors plays its part in influencing national-level environmental decisions and personal-level environmental values and behaviors. For environmental protection to become a reality, it will be important for societies to develop each of these areas that, together, will inform and drive environmental decisions. Although environmental protection is not simply the responsibility of government agencies, most people view these agencies as being of prime importance in establishing and maintaining basic standards that protect both the environment and the people interacting with it.