



普通高等教育“十一五”国家级规划教材
教育部推荐使用大学外语类教材



NATIONAL
GEOGRAPHIC

全新版大学英语 New College English 视听阅读

4

Watch, Listen and Read

教师手册

Teacher's Manual

主编 美方 Rob Waring
中方 李霄翔



上海外语教育出版社
外教社 SHANGHAI FOREIGN LANGUAGE EDUCATION PRESS
www.sflep.com



策划编辑 李法敏
责任编辑 邵海华
技术编辑 卞琪真
封面设计 马智伟

《全新版大学英语视听阅读》以教育部颁布的《大学英语课程教学要求》为指导，将英语视听说技能培训与阅读技能培训融为一体，力求从编写思想、素材选编、练习设计和版式设计上反映当代外语教育的最新研究成果，旨在探索一条教材编写新路，创新大学英语教学模式，从而提高教学的效果。

- 以高质量的语言素材和原汁原味的语境呈现为基础，完美结合视听说和阅读，能有效调动学生多种认知感官，促进多种语言认知策略的形成和发展，使教学活动沉浸在一种既有挑战又有享受的氛围中。
- 题材广泛，内容丰富，主题涉及中外文化、天文地理、自然生态、历史名胜、科技探索、风土人情等。
- 图文并茂，图解文意，新颖独特。
- 采用词汇控制的方法均衡各册教材的难易度，梯度合理。
- 每册教材均附有DVD，音视频资料同时提供美音和英音，可有效满足不同学习者的学习和训练需求。
- 教师手册提供各种音视频资料脚本和练习的参考答案，还提供文化背景介绍、教学重点注释以及教学提示和建议等。所附教学测试光盘含试卷生成软件 and 与各单元主题相关的题库，方便教师检测学生的学习效果。



特刊 HEE HIGHER ENGLISH EDUCATION
高等英语教学网
<http://hee.sflep.com>

CENGAGE
Learning™



外教社官网

ISBN 978-7-5446-3270-6



9 787544 632706 >

定价：49.00元(附光盘)



普通高等教育“十一五”国家级规划教材

教育部推荐使用大学外语类教材

全新版大学英语 New College English

视听阅读

4

Watch, Listen and Read

教师手册

Teacher's Manual

主 编 美方 Rob Waring

中方 李霄翔

本册主编 朱善华

编 者 金 曙 鲍 敏 凌建辉

图书在版编目(CIP)数据

全新版大学英语视听阅读. 4 / (英)沃林(Waring, R.), 李霄翔主编. — 2版.

—上海: 上海外语教育出版社, 2013

教师手册

ISBN 978-7-5446-3270-6

I. ①全… II. ①沃… ②李… III. ①英语—听说教学—高等学校—教学参考资料②英语—阅读教学—高等学校—教学参考资料 IV. ①H319

中国版本图书馆CIP数据核字(2013)第045353号

Copyright © 2009 by Heinle, a part of Cengage Learning.

Original edition published by Cengage Learning. All rights reserved.

本书原版由圣智学习出版公司出版。版权所有, 盗印必究。

Shanghai Foreign Language Education Press is authorized by Cengage Learning to publish and distribute exclusively this adaptation edition. This edition is authorized for sale in the People's Republic of China only (excluding Hong Kong SAR, Macao SAR and Taiwan). Unauthorized export of this edition is a violation of the Copyright Act. No part of this publication may be reproduced or distributed by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

本书改编版由圣智学习出版公司授权上海外语教育出版社独家出版发行。此版本仅限在中华人民共和国境内(不包括中国香港、澳门特别行政区及中国台湾)销售。未经授权的本书出口将被视为违反版权法的行为。未经出版者预先书面许可, 不得以任何方式复制或发行本书的任何部分。

图字: 09-2009-213

Cengage Learning Asia Pte. Ltd.

5 Shenton Way, # 01-01 UIC Building, Singapore 068808

本书封面贴有Cengage Learning防伪标签, 无标签者不得销售。

出版发行: 上海外语教育出版社

(上海外国语大学内) 邮编: 200083

电 话: 021-65425300 (总机)

电子邮箱: bookinfo@sflap.com.cn

网 址: <http://www.sflap.com.cn> <http://www.sflap.com>

责任编辑: 邵海华

印 刷: 上海先锋印刷厂

开 本: 787×1092 1/16 印张 19 字数 495千字

版 次: 2013年8月第2版 2013年8月第1次印刷

印 数: 1 100册

书 号: ISBN 978-7-5446-3270-6 / H • 1692

定 价: 49.00元 (附DVD-ROM)

本版图书如有印装质量问题, 可向本社调换

《全新版大学英语视听阅读》是一套根据美国国家地理 (National Geographic) 视听素材改编而成的创新型大学英语教材, 由上海外语教育出版社、美国国家地理和圣智学习出版公司 (Cengage Learning) 联合开发出版。本套教材以教育部颁布的《大学英语课程教学要求》为指导, 在教材设计、选材和编写中力求准确把握大学英语教学的性质和目标, 努力体现大学英语教学中以听说技能为先导、其他技能跟进的教学指导思想。它所采用的将视听与阅读技能融为一体的教材设计, 旨在探索一条教材编写新路, 创新教学模式, 从而提高教学的绩效。

《全新版大学英语视听阅读》是为我国普通高校大学生设计和编写的, 共 6 册, 每册 10 个单元。与同类教材相比, 它具有以下几个显著的特点:

1. 编写体例创新。它将英语视听说技能培训与阅读技能培训融为一体, 力求从编写思想、素材选编、练习设计和版面设计上反映当代外语教育的最新研究成果, 兼容并蓄各学术流派所提出的有益的教学理念和原则。针对我国大学英语教学和考核要求, 本套教材既体现当前英语教学中融多种技能为一体的整体性教学原则, 又在语言技能训练中突出视听说技能, 以弥补目前大学生入校前在英语视听说技能训练方面的不足。学习主题和内容的高度关联方便了英语训练中各种技能的有机转换, 同时也可借助于与视听说主题一致的阅读素材, 既保持视听说素材的真实性和原有风味, 又可有效降低视听说素材的难度, 起到了积极的协调和辅助作用。本套教材新颖独特的体例设计, 为教学方法论的探究提供了方便。在处理视、听、说与读的关系时, 既可以视听为导入, 以研究项目式的“做中学”和“视听说相连, 层层深入”为目标, 也可以“读听说相辅, 多种技能共同推进”。阅读教学过程可以作为视听说的导入, 也可以作为视听说的温习与强化。可以针对不同的学生群体和学习目标灵活安排不同的教学活动。

2. 题材广泛, 内容丰富。本套教材针对我国大学生的社会生活经历和知识结构, 广泛地选取了具有较强知识性、趣味性和针对性的视听和配套

的文字素材，主题涉及中外文化、天文地理、历史名胜、科技探索、自然生态、风土人情、生活常识、名人轶事等各个层面。题材的趣味性和多样性增强了学习素材的可视、可听和可读性，同时也可以有效地激发学生学习的积极性，有利于学习者借助于本教材这样一个窗口，拓展生活视野，丰富生活经历。

3. 高质量的语言素材，原汁原味的语境呈现。本套教材在选材内涵丰富的基础上，十分注重语言的表述和场景的呈现技巧。鲜活生动的语言加上优美的画面和纯正的语音，将学生带入一个异域的环境，这种身临其境的感觉将会有效地调动学生多种认知感官，促进多种语言认知策略的形成和发展，在感官和心理上有助于充分激发和维系学生的好奇心、求知欲和模仿内驱力，使得教学活动沉浸在一种既有挑战又有享受的氛围中。

4. 良好的梯度，有机的衔接。本套教材采用词汇控制的方法均衡各册内容的难易度，各册教材的中心词（headword）词汇量分别为：基础1：1300；基础2：1600；第1册：1900；第2册：2200；第3册：2600；第4册：3000。每册教材词汇覆盖面按梯度递增，6册教材呈现出合理的梯度和有机的承接与递进。全套教材的语速基本上保持了均衡的速度，这一方面是借鉴了交际教学法的原则，保持了语言的真实性，有利于缩短英语学习与应用之间的距离；另一方面通过词汇控制手段、视频辅助理解和文本阅读等方法，有效降低视听难度，保证了对原汁原味语言的学习、模仿和应用。

5. 多种技能训练层次分明，形式多样。本套教材练习设计体现了不同技能采用不同训练方法、突出技能转换和教学互动的三大原则。练习整体框架参照建构主义的认知原理，由多种手段辅助主题引入，体现“高质量输入为先，吸收消化为重，互动式输出为主”的练习设计指导思想。在理解环节上，遵循由总体理解向细节理解过渡；在练习环节上，体现“控制型向半控制型再向自由式”逐层递进；在信息流的流向上，由视频、音频和文本所提供的信息流向学习者，学习者不再是被动地接受信息，而是通过多种形式的交互活动，既分享教师指导下由教材所提供的信息，又参与信息的反馈、评价与补充和完善活动，充分体现教师主导和学生主体的作用。形式多样的交互式练习旨在将英语语言基础知识学习、语言应用技能训练和影响到交际效能的文化背景知识介绍有机地融合在一起，突出语言的交际语境和实用的功能意念，在强化语言基本功训练的同时，又注重语言交际技能的培养和训练，力求使英语学习做到学用结合，学以致用，学后会用。

6. 每册教材均附有含视听和语音素材的光盘。本套教材的编排图文并茂，图解文意，新颖独特。音视频资料具有很高的专业水准，令人耳目一新，给人以美的享受。视听和语音素材均提供美音和英音两种选择，有效满足不同学习者的学习和训练需求。

需要指出的是，本套教材印刷文本上的词汇拼写和表达以美式英语为准，美音的录音与印刷文本完全一致，但英音是基于英式表达来录制的，所以会出现英音中的某些表达与印刷文本不一致的情况，请注意区别。如：第1册第1单元的 carry-on 在英音中用 hand luggage。

7. 每册教材均配有教师手册，提供教学参考资料和指导，其内容除涵盖常规的视频和语音的脚本和各种练习的参考答案以外，还提供许多文化背景介绍、教学重点注释以及教学提示和建议等。教师手册还附有教学测试光盘，内含试卷生成软件和与各单元主题相关的试题库，方便教师检测学生的学习效果。

由于编者的水平有限，本套教材的不足之处在所难免，恳请各位专家、同仁和广大读者多提宝贵意见。

编者

2010年4月于南京

About the Series

New College English: Watch, Listen and Read is an exciting six-level series for English language learners based on real-life stories presented in three formats: video, print and audio. The series contains a broad collection of carefully leveled non-fiction stories and is accompanied by original video material from *National Geographic Digital Media*.

Watch, Listen and Read provides learners with opportunities to enrich their knowledge of the world and interact with fascinating information and different cultures. Based on an integrated syllabus, it includes practice in the main skills areas: vocabulary development, listening, reading, writing, pronunciation work, and communicative competence.

The series is divided into six levels — ranging from intermediate to advanced. Each level is graded according to a list of carefully selected headwords (the number of different words used) and level of grammatical complexity. This grading ensures that students are gradually exposed to new vocabulary and grammar structures at a level they can handle. The following table indicates the *Watch, Listen and Read* levels:

<i>Watch, Listen and Read</i> level	Language level	Headwords
Foundation 1	Intermediate	1300
Foundation 2	Intermediate	1600
1	Upper-Intermediate	1900
2	Upper-Intermediate	2200
3	Advanced	2600
4	Advanced	3000

Each level of the series consists of the following components:

Student's Book

The Student's Book contains ten story-based units, each of which includes a variety of activities to introduce and practice vocabulary and language patterns, and actively engage students with the video content. A full glossary including phonetic transcriptions and Chinese translations is provided at the back of each book for students' convenience when referencing new words in different contexts.

Student's Book DVD

The Student's Book DVD includes the following:

- The **video program** directly related to the story in each unit. Featuring voiceover narration carefully adapted for learners of English, the video reflects the same level of language as the printed stories in the Student's Book. The videos range in length from four to thirteen minutes per story, and contain optional subtitles for additional viewing support. Each video is available in American English and British English.
- The **audio program** in MP3 downloadable format. This includes the audio recording of each

story, the sentences for the Listen and Repeat exercises, and the audio recordings for the Home Listening section. The audio program is also available in both American and British English.

Teacher's Manual

The Teacher's Manual includes the following:

- Student's Book pages with overprinted **answer keys** for easy reference.
- Concise **story summaries**.
- Easy-to-follow, step-by-step **teaching notes** for each of the Student's Book sections.
- Photocopiable **video** and **audio scripts** that can be used as a reference while watching the video or listening to the listening passage, or for additional activities.
- **Culture salon** sections offering background information.
- **Word bank** sections providing detailed explanation of important words and expressions, and their usage, and Chinese translations of collocations.

Teacher's Manual DVD

The Teacher's Manual DVD includes an **ExamView® Assessment Suite** which offers a quick and convenient way to generate tests and quizzes based on the Student's Book content. In addition, the video and audio programs included in the Student Book DVD are also available on the Teacher's Manual DVD.

Unit flow

The *New College English: Watch, Listen and Read* series offers a unique approach to language learning. Each unit consists of four main sections and is based on the idea that you should have students (1) watch the video parts and complete the video-based activities, (2) listen to the recorded story, and (3) read the story and answer the Reading Comprehension questions. You should then (4) assign the Home Listening section for homework. However, this does not have to be a strict recipe. You can use the materials to suit your own teaching situation, the language ability of your students and the curriculum learning objectives.

Here is a detailed outline of each section that you may refer back to when teaching each unit:

Warming Up

These are introductory activities to present the topic and key language and concepts, and can be used before students watch the video or read the story. Here are some teaching suggestions:

- Ask students to look at the unit title and the photograph, and elicit unit-related words and phrases.
- Show students theme-related pictures from the story or other sources you can find.
- In pairs or groups, have students read the text on the unit-opening page and discuss the questions. Then have them share their answers with the whole class.
- Focus students' attention on the underlined words/phrases and those in the word boxes. Ensure that students are familiar with the pronunciation.
- Have students work in pairs to complete the exercises. Check answers with the whole class.
- Ask students to predict what will happen in the video. Write the best predictions on the board. You may want to check if the predictions were right after watching the video.

Watching

This section includes two main sub-sections: Parts 1/2/3/4, and Follow-Up.

Parts 1/2/3/4

These activities require students to watch the video in manageable segments and complete a variety

of activities after each part to ensure students' understanding of the video content and familiarize them with the new language. Each part also provides opportunities for communicative practice in pairs or groups.

The video is available in both American and British English. You can focus on one of the versions depending on the curriculum requirements and your students' preferences. Alternatively, you can play both versions to raise students' awareness of the differences between the two varieties of English. As the stories feature characters from different backgrounds and cultures, students are given plenty of exposure to a wide range of native and non-native English accents.

Here are some teaching suggestions:

I. Watch Parts 1/2/3/4.

- Before viewing, have students read through the questions and/or incomplete answers so they know what to focus on. Explain any unfamiliar words and phrases.
- Play the video segment with the subtitles off while students answer the questions individually. Ensure that students have enough time to complete their writing.
- Alternatively, play the video segment with the sound and subtitles off, and have students concentrate on the actions and guess the answers. Elicit students' guesses and have them give reasons for each one. Have students watch the part again with the sound on and compare their guesses with what the narrator or a character actually says.
- For weaker classes, have students view the subtitles as they watch.
- For gap-fill exercises, first explain to students the main idea of the paragraph. Play the video part and pause it at appropriate places, just before the word or phrase that students are expected to write down.
- Have students compare answers in pairs. Elicit the correct answers from the whole class and write them on the board to help students check their spelling.
- In pairs, have students summarize this part of the video and present their summaries to the class.

II. Watch again.

- Put students into pairs or small groups. Focus their attention on the questions and have each group recall as many things as possible from the first viewing.
- Play the video part and have students do the exercise individually. Ensure that they have enough time to complete their writing.
- Elicit the correct answers from the whole class and write them on the board to help students with the spelling.
- Have students go through the completed sentences, charts or paragraphs, or the true statements and try to memorize the new expressions.
- Write some of the expressions from this part on the board. In pairs, have students translate them into Chinese and make a sentence with each one.
- Put students into pairs. Have each student tell his/her partner the main points of the video part without looking in his/her books.

III. Listen and repeat.

This is an optional activity using sentences from the video to focus on features of natural English. The aim is to raise awareness of English pronunciation, intonation and stress patterns, and other features of connected speech. It also practices writing from dictation. Make sure that you have the MP3 audio files, which can be downloaded from the DVD. As the Listen and Repeat sentences are available in both American and British English, students can choose the accent they would like to practice.

- Play the audio twice. Pause after each sentence and have students repeat it out loud. Play the audio again pausing after each sentence to allow students to write it down.
- Have students listen again, and mark the word stress on content words using a stress mark (').

- Elicit from students what they know about English intonation (i.e., when their voice rises and falls to indicate different syntactic structures or pragmatic meanings).
- Explain that, in general, we use falling intonation towards the end of a statement, command or “wh”-question. Give some examples from the video.
- Explain that we usually use rising intonation within sentences that list items, and for Yes/No questions or requests. Give some examples.
- Have students listen to the sentences again and draw an upward arrow ↗ for rising intonation and a downward arrow ↘ for falling intonation.
- Explain to students that in connected speech the final sounds of a word often blend with the beginning of the next word. This leads to elision of weak syllables (e.g., What’s the time? => Whatsa time?) and liaison (i.e., the insertion of a sound as in “more (r)and more”, “not (t)at all” and “go (w) away”).
- Have students listen to the sentences again and draw a curved line ∪ to mark any words that are linked or blended together.
- Have students practice the sentences until they can say them using appropriate intonation and stress patterns.

IV. Oral work.

This is an oral task at the end of each video part, which integrates essential vocabulary, pronunciation, listening and speaking skills in a communicative activity. This provides opportunities for students to practice the new language and express ideas and opinions on the topic, and show creativity and imagination. There are a lot of images from the video and other illustrative material on the pages of the Student’s Book which can aid comprehension of vocabulary and concepts, and help students recall useful information from the story.

- Explain the context of the communicative task. Review words and expressions from the video that can help students answer the questions or do the role-play.
- Put students into pairs and have them discuss the questions and brainstorm ideas.
- Play parts of the video and encourage students to take notes of useful words and phrases.
- Encourage students to use the images on the Student’s Book pages during their discussions and brainstorming of ideas. The visual clues will also help them to better structure their oral presentations or role-plays.
- Invite pairs or groups of students to present their ideas, summaries, or role-plays to the class.

Follow-Up

These activities require students to watch the entire video and provide further opportunities to practice and consolidate the language they have learned, and discuss the video topic and build communication skills.

I. Watch the entire video.

- Have students close their books and try to recall as much information as they can from the video.
- Put students into pairs or groups. Have them discuss the questions, predict the answers, and give reasons for their choices.
- Play the entire video and have students complete the activity. Elicit the correct answers.
- Play a game. Elicit a heading for each part of the video, and write the headings on the board. Put students into groups of three. Ask each group to write the headings in big letters on three cards. Read a sentence from the video script and have students guess the part it comes from by showing the correct card. The group that makes a mistake is out of the game. Continue playing until there is only one group left. Alternatively, you can play the video at random points and have students make the guesses.

II. Oral work.

Please also refer to the oral work teaching suggestions above.

- Explain the context of the communication activity. Go through the useful words and expressions,

- or sentence patterns. Have students elicit additional words or phrases from the video.
- Put students into pairs or groups, and have them work together, and role-play the situation or dialogue.
- Have students add more information to the topic.
- Invite pairs or groups of students to present their summaries, dialogues or role-plays to the class.

III. Project.

This task provides further opportunities for students to interact with the information from the video and use their research and presentation skills. The project can be assigned as homework and the research can be done before class. If students have access to computers and an Internet connection in class, the research can be done as a classroom activity.

- Put students into groups of three or four. Explain the task and go through the information provided.
- Have students divide the work among themselves. Make sure that each group member is assigned one or two questions to research.
- Allow students enough time to do the research. In the next class, have groups work together to consolidate the information each of them has found.
- Invite a representative from each group to report their findings to the class. Encourage students to take notes on a piece of paper as they listen.
- After all groups have presented to the class, have each group compare their results to other groups' findings and report any differences.

Reading

This section can be used in two ways: as independent reading out of the classroom and as classroom reading.

As independent reading out of the classroom: this will allow students to read at their own pace, and enjoy the reading experience as well as build reading fluency and consolidate their knowledge.

As classroom reading: each student will be led through the reading by the teacher. The aim of this type of reading is to ensure a thorough understanding of the story. Use the audio recording of the story, which is available in both American and British English.

Before Reading Activity Ideas

- Write some comprehension questions on the board and have students guess the answers. In pairs, have students discuss the questions. Then elicit the answers from different pairs.
- Point out the vocabulary boxes and have students go through the pronunciations and definitions.

While Reading Activity Ideas

- Assign different paragraphs to individual students or pairs of students. Give the class 5 minutes to read their parts, then ask each student or pair to retell or summarize what they have read and report to the class.
- Play the audio as students read to help them connect the written words with their pronunciation and improve their understanding of how the text is read.
- Have students read the story as a whole class activity. Stop them before they turn a page and ask them to predict what will happen next.
- Have students read the story and discuss how the written version differs from the video.

After Reading Activity Ideas

- Have students complete the Reading Comprehension questions. Students can do this either as an individual activity or in pairs/groups. Check answers with the whole class. Ask them to refer to the story and find evidence to support their choice of answers.
- Ask students to read the entire story again, but faster. This will improve their recognition, reading speed, and fluency.
- Ask students to write a short summary of the story.

Home Listening

This section expands on the topic of the story and helps students further consolidate and recycle the new language. It can be used in two ways: as independent listening out of the classroom or as classroom listening.

As independent listening, this section will provide additional listening practice for students who want to further develop their listening comprehension skills and learn more about the topic. You can assign this section or parts of it for homework, and then review the answers and provide feedback on students' work. You need to make sure that students have the MP3 audio files, which can be downloaded from the DVD.

As classroom listening, this section will provide the opportunity to do the listening exercises and oral work in class.

I. Listen to the passage.

- Have students read through the questions and predict the answers.
- Play the audio and have students fill in the blanks individually. If students have already downloaded the MP3 files onto their MP3 players, mobile phones or other personal mobile devices, they can listen to the audio at their own pace, but you may need to set a time limit for listening.
- Have students compare the answers in pairs. Play the audio again and have them check their answers and correct any mistakes.
- Have students summarize the main idea of the listening passage.

II. Listen again.

- Have students play a guessing game. Put them into groups of three or four. Have each group read through the questions and try to recall the answers they heard during the first listening. Write down the groups' predictions on the board.
- Play the audio and have students check their answers.
- Go through the predictions on the board and identify the correct or the closest answers. Praise the winners.

III. Listen and repeat.

This is an optional activity using sentences from the listening passage to focus on features of natural English. The aim is to raise students' awareness of English pronunciation, intonation and stress patterns, and other features of connected speech. It also practices writing from dictation. Make sure that you have the MP3 audio files, which can be downloaded from the DVD. Please refer to the Listen and Repeat teaching suggestions in the Watching section.

IV. Oral work.

This is an oral task at the end of each Home Listening section based on information from the listening passage, which integrates essential vocabulary, pronunciation, listening and speaking skills in a communicative activity. This provides opportunities for students to practice the new language and express ideas and opinions on the listening passage topic, and show creativity and imagination.

- Explain the task. Have students read through the useful words and expression. Elicit any additional language that students may use in their discussions, role-plays or summaries.
- Put students into pairs or small groups. Have them ask and answer questions about different aspects of the task, brainstorm ideas and take notes.
- Remind students of some of the grammar aspects of the task, e.g., the tenses they could use when describing the events in their summaries.
- Have pairs present their summaries or role-plays to the class.

The Perfect SWARM



This story is set in the central and western U.S., particularly in the states of Texas, Oklahoma, Kansas, Nebraska, North and South Dakota, and Wyoming as well as the Rocky Mountains.

In the 1800s, the Rocky Mountain locust brought massive destruction to Western settlers. Then, the insects suddenly disappeared — almost without a trace. Now scientists hope to find a reason for the locust's extinction. What caused the Rocky Mountain locust to disappear? Where will the scientists find the answers?



I Locusts! Read the paragraph. Then match each word with the correct definition.

Many places in the world regularly experience plagues of locusts that can devastate entire countries. Locusts move in huge swarms, invade entire regions, and usually consume everything in their path. One swarm of locusts containing trillions of individual insects can eat thousands of tons of vegetation a day. Locusts are one of the world's most destructive insects, but they themselves are sometimes destroyed. In the 1800s, for example, the Rocky Mountain locust mysteriously became extinct.

- | | |
|------------------------|--|
| 1. plague <u>D</u> | A. 1,000,000,000,000 |
| 2. locust <u>G</u> | B. no longer in existence |
| 3. devastate <u>C</u> | C. cause extreme damage |
| 4. swarm <u>E</u> | D. any widespread cause of misery, suffering, or death |
| 5. trillion <u>A</u> | E. a large group, usually of insects |
| 6. vegetation <u>F</u> | F. the plant covering an area |
| 7. extinct <u>B</u> | G. an insect noted for flying in large groups and destroying crops |

II The Rocky Mountain Locust Mystery. Read the paragraph. Then complete the definitions with the basic form of the underlined words or phrases.

Dr. Jeff Lockwood is an entomologist who is particularly interested in the disappearance of the Rocky Mountain locust. The species was mysteriously wiped out in the late 1800s and there aren't many clues as to why it happened. By studying locust specimens under a microscope and by taking DNA samples from the dead locusts, Lockwood aims to find out why the Rocky Mountain locust suddenly disappeared from Earth.

1. a thing or fact that helps provide an answer to a question; evidence: clue
2. a person who studies insects: entomologist
3. an item that is an example of a larger group: specimen
4. destroy completely; cause to no longer exist: wipe out
5. a scientific instrument that uses lenses to make small objects appear larger: microscope
6. the material that carries the genetic information in the cells of each living thing: DNA

Table of Contents

Unit 1	The Perfect Swarm	1
Unit 2	The Red Devils	19
Unit 3	The Orient Express	35
Unit 4	The Varied Cultures of China	53
Unit 5	Afghanistan's Heroic Artists	69
Unit 6	Natacha's Animal Rescue	87
Unit 7	Firewalking	107
Unit 8	Living in the Slow Lane	123
Unit 9	Alternative Energy	137
Unit 10	Mars on Earth	155
Glossary		173

SUMMARY

The mystery of the Rocky Mountain locust has baffled scientists in North America for over 100 years. After locusts completely devastated many parts of the United States in 1875, the entire species vanished from the continent. Entomologist Jeff Lockwood is determined to solve this mystery. After traveling to the Rocky Mountains and studying locusts frozen in glaciers, Lockwood begins to look at the mystery from a new angle.



1. Show students some pictures of locusts from the reading passage or other sources you can find.
2. Have students guess why the locusts in this video and the reading passage are called the perfect swarm.
3. Ask questions like “Have you ever seen a locust?” and “What do you know about locusts?”

CULTURE SALON

Grasshopper

There are hundreds of species of grasshoppers. These insects belong to the suborder Caelifera in the order Orthoptera, and have antennae that are almost always shorter than their bodies, and short ovipositors—organs for laying eggs. Normally females are larger than males. Males have a single unpaired plate at the end of the abdomen. The two pairs of valves (triangles) at the end of the female abdomen are used to dig in sand by the female grasshopper when laying eggs.

Although they differ in many features, they are easily confused with another suborder of Orthoptera, Ensifera. The main distinguishing elements are the number of segments in their antennae and structure of the ovipositor. The location of the

tympana and modes of sound production are other distinguishing features. Ensiferans have antennae with at least 20—24 segments, and Caeliferans have fewer.

Butterfly

Like other holometabolous species with a complete metamorphosis where the immature insects are entirely different from the mature stages, butterflies' life cycle goes through four stages: egg, larva, pupa and adult. Their wings are large, often brightly colored, and they have conspicuous, fluttering flight.

Butterflies comprise the true butterflies, the skippers and the moth-butterflies. The very many other families within the order Lepidoptera are considered moths. Some butterflies migrate