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国家地理
英语阅读与写作训练丛书

Shaping Earth's Surface

地表形态的塑造

[美] Nash Kramer 著

适合



高中生及同等英语水平读者使用



北京大学出版社
PEKING UNIVERSITY PRESS

致读者

想在快乐阅读中轻松地提高英语写作能力吗？你会发现，这套《国家地理英语阅读与写作训练丛书》（National Geographic Theme Sets, 下称《丛书》）就是一个很好的选择。

《丛书》共14册，涵盖14个主题，每个主题下的4个相关小话题围绕着关键概念，按阅读和写作的易难程度，循序渐进地依次编排。《丛书》的“关键概念+递进阅读+任务型写作”的创新编排体例，帮助学生从培养语感和思维方式开始，在阅读过程中自然习得英语写作的规律和特点，从根本上提高学生的综合语言应用能力。此外，《丛书》紧贴高中英语教学的实际需要，在针对性和实用性方面有着无可比拟的优势：

第一，对生词进行注释。注释生词既为读者创造了猜词空间，也为读者快速查阅提供了方便，不至于被生词破坏了阅读的兴致。考虑到音标对单词记忆，以及培养学生朗读与口语能力的重要作用，我们对所有注释词汇都加注了国际音标。

第二，根据高中英语学习和高考写作的要求，对注释词汇进行三级分类。记忆词汇属于基础词汇，也是高分作文常用词汇，学习者要做到会写、会读、会听、会用；**阅读进阶词汇**是高中学生提高英语水平需要掌握的英语常用词汇，建议学习者经常使用，熟悉这类词汇有助于作文的表达；**阅读参考词汇**包括话题所涉及的专业词汇和非常用词汇，学习者了解即可，可以根据自己的实际情况各取所需。在编排中，记忆词汇在文中用加粗的字体表示。为了方便学生集中记诵，“阅读”板块的记忆词汇被放在每一个小话题的开篇页，“任务型写作”板块的记忆词汇则集中编排在书末。阅读进阶词汇和阅读参考词汇在文中分别用绿色和紫色字体表示，注释词条呈现在当前页上，以利于学生查阅。

第三，以丰富多样的主题和体裁系统地介绍了各类英语应用文的写作。写作从阅读开始，即首先了解优秀文章是什么样的。在阅读的基础上，《丛书》介绍了不同范文的体例特点和适用范围，其中包括记叙文、说明文等十几种常用作文体裁。同时，《丛书》以严谨的思路和清晰的操作步骤，把学生带进一个既有阶梯渐进的具体指引，又有充分创意空间的写作训练营。

第四，具有综合教学功能。由于在指导应用文写作方面的独特设计和精心编排，这套丛书不仅适合学生自学，更适用于课堂的写作教学。《丛书》的写作训练案例是英语教师写作教学中难能可贵的参考资料，可直接作为英语写作课程的辅助教材使用。

Try it! 你会发现，英语阅读原来可以这么轻松快乐，英语写作也不总是“头疼”、“痛苦”的代名词。

朱京力

中国人民大学附属中学
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朱京力 注

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Shaping Earth's Surface

Think of all the shapes and forms you can see on Earth's **surface**. These shapes and forms change all the time. Some changes happen quickly, as when an **earthquake** or **volcano** **jolts** the land. Other changes are slow, as when wind, water, or ice **wears away** rock. Wind, water, ice, earthquakes, and volcanoes are all forces that shape Earth's surface.



Key Concepts

1. Different forces shape the **landforms** that make up Earth's surface.
2. Earth's surface changes in different ways.
3. People try to **control**, or at least understand, the **effect** of forces that shape Earth's surface.

阅读参考词汇

earthquake	/ˈɜːθkweɪk/ n. 地震
jolt	/dʒəʊlt/ v. (使) 颠簸
landform	/ˈlændfɔːm/ n. 地形
volcano	/vɒlˈkeɪnəʊ/ n. 火山

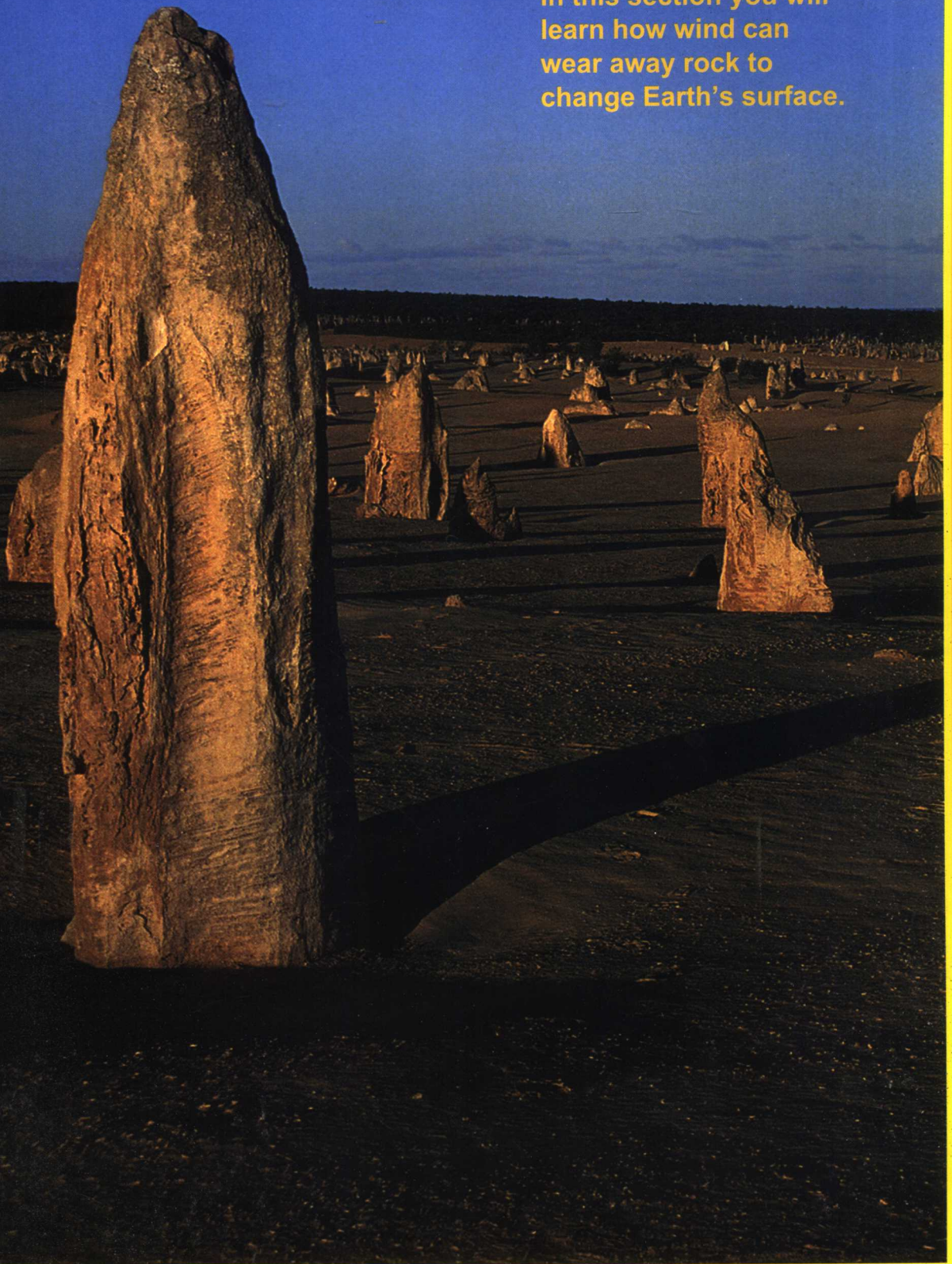
记忆词汇

consist of 由...组成
control /kənˈtrəʊl/ v. 控制
damage /ˈdæmɪdʒ/ v. 损害 & n. 损害

dusty /ˈdʌsti/ adj. 满是灰尘的
effect /ɪˈfekt/ n. 影响; 作用
gentle /ˈdʒentl/ adj. 温和的
harmful /ˈhɑːmfəl/ adj. 有害的
pleasant /plezənt/ adj. 惬意的

prevent /prɪˈvent/ v. 阻挡
surface /ˈsɜːfɪs/ n. 表面
valley /ˈvæli/ n. (山) 谷
wear away 磨损

In this section you will
learn how wind can
wear away rock to
change Earth's surface.



The Effects of Wind

Moving air is called wind. Wind can blow gently or with great strength. A **gentle** wind can make the weather **pleasant**. A strong wind can blow things over. It can move things from one place to another.

Wind can be very powerful. A strong wind can blow large amounts of soil from one place to another. Wind can even change the shape of the land.

阅读进阶词汇

windstorm
/'windsto:m/
n. 风暴



Children of a Chinese village in a strong **windstorm**



Key Concept 1 Different forces shape the landforms that make up Earth's surface.

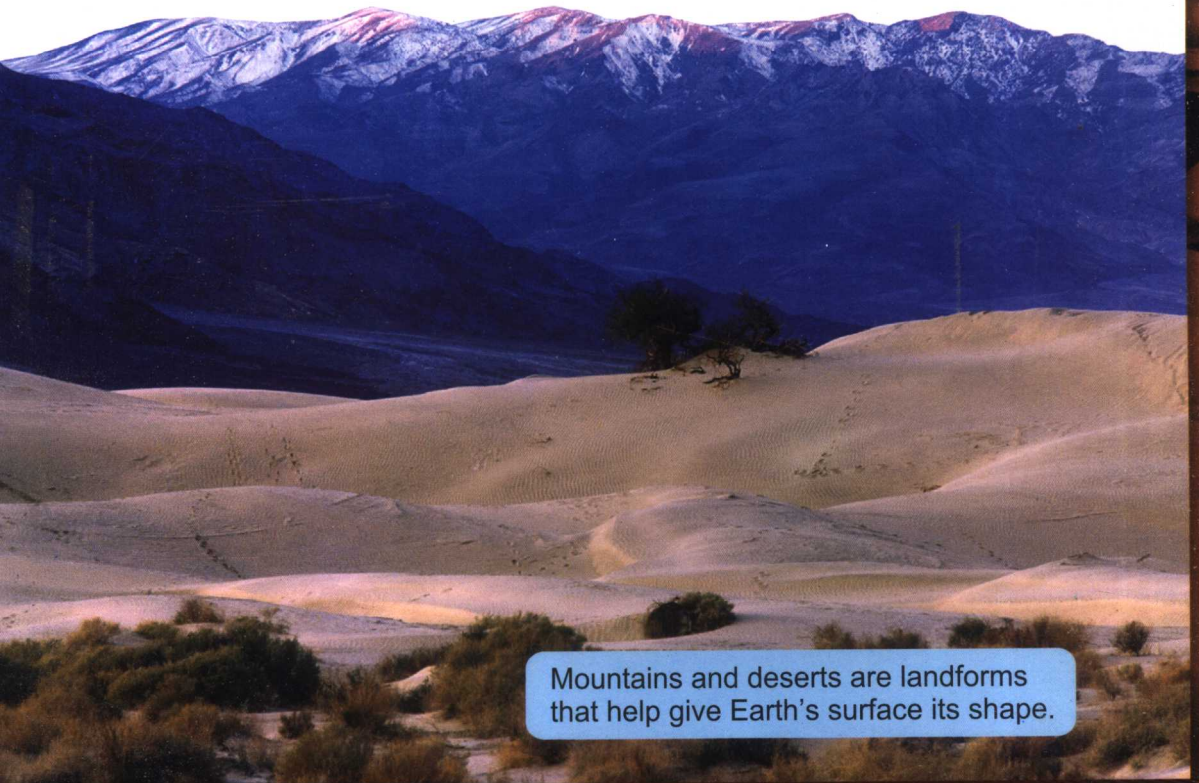
Earth's Surface

Earth's surface, or **outer layer**, consists of rocks and soils. These rocks and soils make up landforms. Landforms are things like mountains, **valleys**, deserts, and **plains**. They give Earth's surface its shape.

阅读进阶词汇 
plain /pleɪn/
n. 平原

阅读参考词汇 
outer layer
地壳

Earth's surface changes all the time. Different forces cause these changes. Wind is one of these forces.



Mountains and deserts are landforms that help give Earth's surface its shape.



Key Concept 2 Earth's surface changes in different ways.

How Wind Changes Earth's Surface

Different forces change the landforms on Earth's surface.

Two of these forces are **weathering** and **erosion**. These forces cause change over time.

阅读参考词汇

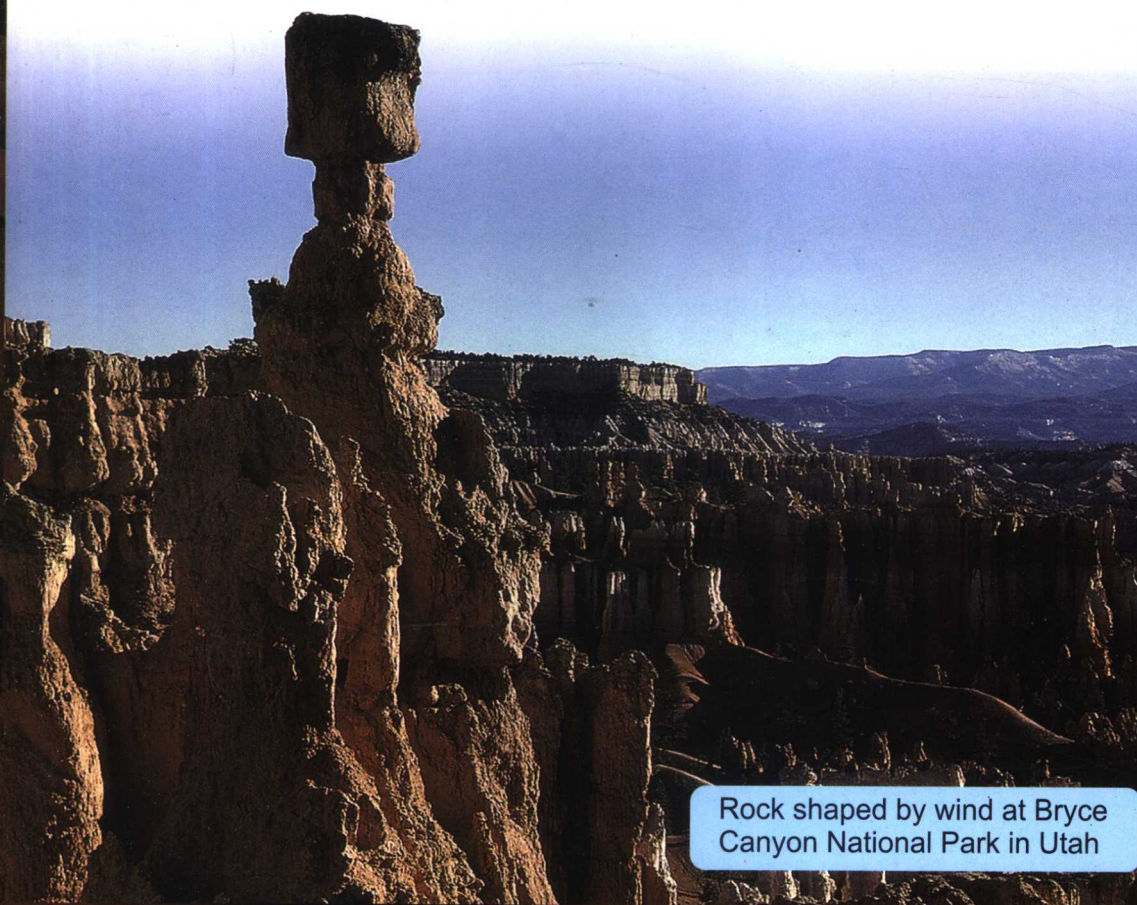
erosion

/ɪ'reʊʒən/ *n.* 侵蚀

weathering

/'weðərɪŋ/ *n.* 风化

Weathering happens when rock slowly wears away. Wind is one cause of weathering. Wind can pick up bits of soil and sand and blow them against rock. This causes the rock to wear away. The rocks in this photograph have been weathered by the wind.



Rock shaped by wind at Bryce Canyon National Park in Utah

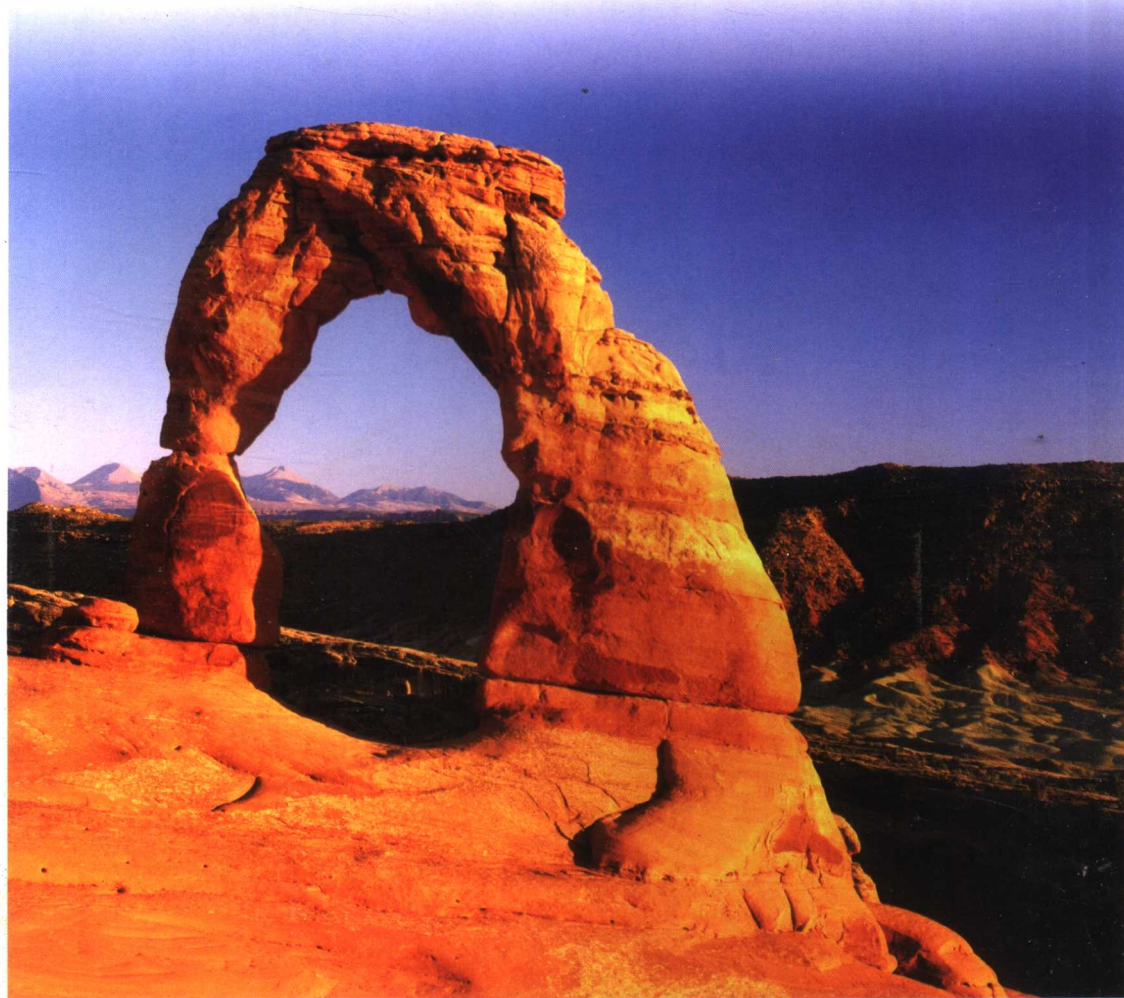
Erosion comes after weathering. It is a force that moves rocks and soils from one place to another. Wind can pick up worn-down rock **particles**. The wind then **deposits**, or drops, them in other places. Wind erosion can happen over a long time and over large distances. Sandstorms, dust storms, and **coastal** winds all change Earth's surface.

阅读进阶词汇

coastal /'kəʊstl/
adj. 沿海的
deposit /dɪ'pɒzɪt/
v. 使堆积

阅读参考词汇

particle /'pɑːtɪkəl/
n. 微粒



Wind erosion has shaped this landform at Arches National Park in Utah.

Sandstorms

Sandstorms can change Earth's surface very quickly.

Sandstorms **occur** mainly in the desert. They happen when wind blows at speeds over 16 kilometers (10 miles) per hour.

At this speed, wind can pick up the sand and move it. The stronger the wind, the farther it carries the sand. The force of the wind moves sand to a different place in the desert.

阅读进阶词汇

occur

/ə'kʊ:/ v. 出现

阅读参考词汇

Mauritania

/ˌmɒrɪ'teɪniə/

n. 毛里塔尼亚



A truck is buried by sand after a sandstorm in Mauritania, Africa.

Dust Storms

Dust storms can also change the surface of Earth very quickly. A strong wind can pick up dry, **fine** soil. The wind can move the soil in the same way it moves sand. Dust storms happen where there are few trees and little grass. They also happen in places that have had little rain.

阅读进阶词汇

fine

/faɪn/ adj. 细的



A dust storm slows down traffic in Beijing, China.



Wind has eroded most of the soil on this farm in the District of Columbia.

Coastal Winds

Winds blowing off the ocean can change landforms along the coast. These winds can form sand **dunes**.

Ocean waves wash sand up onto a beach. Wind then blows the sand **inland**. The sand piles up against rocks and plants. The wind piles up more and more sand. Soon a hill of sand is formed. This hill of sand is called a dune.

阅读参考词汇

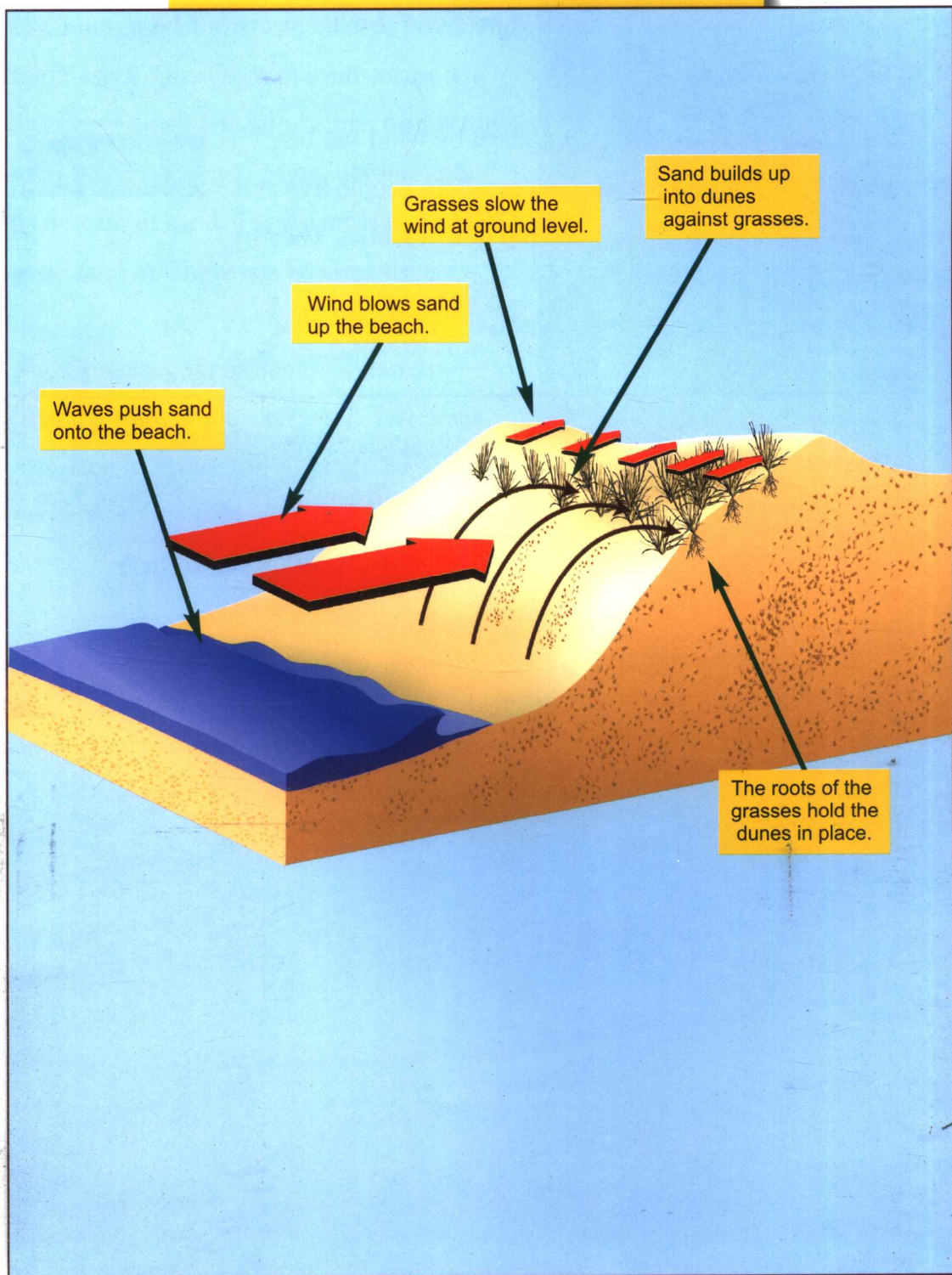
dune /dju:n/
n. 沙丘

inland /in'lænd/
adv. 向内陆



Sand piles up against grasses. Over time, dunes are formed.

How Plants Keep Sand Dunes in Place





Key Concept 3 People try to control, or at least understand, the effect of forces that shape Earth's surface.

People and Wind

Sometimes the effects, or changes, caused by wind can be **harmful**. Wind can **damage** the places where people live and work. People study wind to understand how it works. They try to **prevent** the damage it can cause.

阅读进阶词汇

threaten

/'θreɪn/ v. 威胁



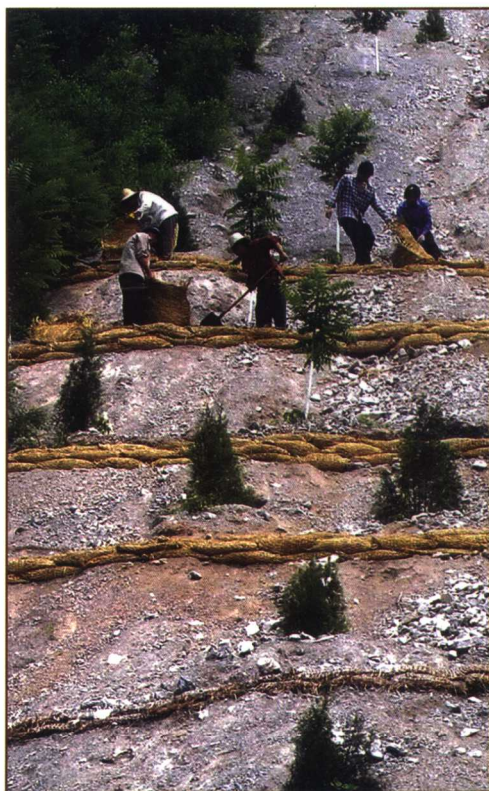
Sand dunes **threaten** a farm in China.

Desert Land

In China, sandstorms can change good land into desert. The winds in sandstorms lift and carry sand. The winds then **dump** the sand onto good land. Many plants can't grow well in sand. The effect is that much good land in China has become desert.

The Chinese government has started planting trees and grasses in desert areas that used to be good land. They hope that the roots of the plants will hold the sand in place. This will stop sand from being blown onto good farmland.

阅读进阶词汇
dump
/dʌmp/ v. 倾倒



Farmers in China plant trees to hold the sand in place.



In China, the Gobi Desert is moving toward good land.