College English
Reading for Understanding

大学英语阅读理解

第一册

李桂山 主编

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内 容 简 介

本书是为高等院校学生编写的阅读书籍。本书难度适中，英语专业与非英语专业的学生均可使用。本书取材新颖，内容丰富，收入了反映欧美国家的科技发展、文化习俗、社会问题、环保意识、自然景观、校园生活等方面的文章。这些文章均选自90年代英美等国的现行书刊，语言与内容富有现代气息，可以帮助大学生提高阅读理解能力。

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前　言

《大学英语阅读理解》是根据国家教育委员会对高等院校英语教学基础阶段阅读课程的要求而编写的，可供大学英语专业一、二年级学生，理工科院校公共英语课程的四、六级考生及广大自学者使用。阅读理解在英语学习中占有举足轻重的地位。只有通过大量阅读，才能扩大词汇量，拓展语法知识，掌握现代英语中的习语与成语。阅读理解能力的提高不是一蹴而就的。学习者应当广泛阅读用现代英语写成的各种题材的文章，并反复进行阅读理解训练。没有大量的阅读理解训练，就不可能迅速提高阅读理解能力，也就难以显著提高英语学习效果。本书形式新颖，题材多样，富有时代气息，知识覆盖面广。此外，科学性、可读性、趣味性在本书中也得到充分体现。

本书绝大部分材料选自近年英、美、加出版的书籍和报刊上的科技时文，内容包括科普知识、科技人物、计算机发展、通讯、能源、考古、医疗、建筑、短篇故事及英语国家文化习俗等各个方面。

全书共分两册，本书为第一册，共 28 课。每课的正课文 Text 配有注释和切合实用的各种练习题，其中包括正误判断、词汇练习、多种选择、问答题等形式。其目的是测试阅读理解能力，使学生对课文的内容有更深的了解。每课的副课文 Homereading 可由学生课外自行阅读，为方便学生查阅生词，书后按字母列出了生词表。

由于时间仓促，编者水平与经验有限，教材中不妥之处在所难免。希望广大读者批评指正。

编　者

1997 年 8 月于

天津理工学院科技外语系

目　录

Lesson One

TEXT

Skyscrapers

When people think of skyscrapers, they think of New York, a city with many high-rise buildings. There is no other city like New York, and this is because of its great buildings that reach up into the sky.

It comes as a surprise then to learn that Chicago, not New York, is the home of the skyscraper. The first high-rise building was built in Chicago in 1884, and it was nine stories high. This is not tall compared with today's buildings, but it was the first building over six stories. There were no tall buildings before that because the needed technology didn't exist.

For centuries, the tallest buildings were made of stone. The lower walls had to be thick enough to support the upper ones. If the building was very high, the lower walls had to be very thick.

Early in the nineteenth century, engineers developed iron frames for bridges. In the 1880s, architects started using iron and steel frames to support the walls of buildings. The buildings did not need thick walls to hold up the upper stories, so the build-

ings could be much taller.

There were other advantages to these steel frames. The building walls were thinner and could have more windows, which made the rooms much pleasanter. With thin lower walls, there was room for stores and offices on the ground floor. It was also faster to build with an iron and steel frame than with stone.

However, there was still one problem. How would people get up to the top stories in a ten-story building? We all know what the solution was — the elevator. Elisha Otis invented the elevator and first showed it to the public in 1853. By the 1880s, there were elevators run by electricity which were fast and light enough to use in skyscrapers. They were developed at just the right time.

There were other problems that architects and engineers who built high-rise buildings had to solve. They had to figure out a way to get water to all the floors. They had to prevent the buildings from moving in the wind. In addition, they wanted to make them as beautiful as possible.

At the time that architects first started designing and building high-rise buildings, thousands of immigrants were entering the United States from Europe. They all needed a place to live. Cities were growing fast, and tall buildings meant that many more people could live in a small area, so people started building skyscrapers in cities across the United States.

Over the years, the problems connected with high-rise buildings were solved. Buildings got taller and taller. In 1909, a fifty-story building was built in New York, and in 1913, one with sixty floors. In 1931, the Empire State Building in New York was

finished; it was 102 stories high. This was the tallest building in the world until 1970, when the World Trade Center was built, again in New York. It has 110 floors. Then the Sears Building was built in Chicago in 1974. It also has 110 stories, but it is taller than the World Trade Center.

Other countries were building skyscrapers too. In Europe, the centers of many cities were destroyed by bombs during World War Ⅱ. The city planners rebuilt many of the buildings exactly as they had been. In addition, they included high-rises in their plans. Most European cities today are a mixture of old and modern buildings.

Tokyo did not have tall buildings for a long time because of earthquakes. Then engineers figured out how to keep a high-rise standing during an earthquake. Today there are many tall buildings in Tokyo. In fact, there are tall buildings in cities throughout the world. As the population of cities increases, the number of high-rises increases because they take less space.

And what about the future? Architects say there is no limit to the height a building can be. An engineer in New York is designing a 150-floor building. An architect in Chicago has drawings of a 210-story building.

We have the technology for these buildings, but do we need them or want them? With the invention of computers, a company doesn't need to have all its offices in one huge building. People can communicate by computer from offices spread out all over the city, or even from their homes. And do we want 200-story buildings? Do people want to work and live that far above the ground? A skyscraper can be dangerous in a fire, or if somebody puts a

bomb in one. The architects and engineers who are planning these new skyscrapers have to think about these questions, or they may build buildings that no one will use.

NOTES

1. high-rise buildings: a multistory building tall enough to require the use of a system of mechanical vertical transportation such as elevators. The skyscraper is a very tall high-rise building. The first high-rise buildings were constructed in the United States in the 1880s. By the mid-20th century, such buildings had become a standard feature of the architectural landscape in most countries in the world.
2. Chicago:芝加哥,美国第二大城市(按人口计算),世界上最富有的工商业联合体之一.
3. iron frames for bridges:铁架桥梁.
4. iron and steel frames:钢铁结构.
5. Elisha Otis:(1811 — 1861) American inventor of the safety elevator. He was born and grew up in Halifax, Vermont and, later, moved to New York State. Through his life he invented many labour-saving machines. In 1852, he designed what he called the "safety hoist," the first elevator equipped with an automatic safety device to prevent it from falling if the lifting chain or rope broke. On March 23, 1857, he installed the first safety elevator for passenger service in the store of E. V. Haughwout & Co. in New

York City.

6. figure out: discover, solve. Examples: try to figure out a way to do it; figure out a problem.
7. immigrant: one that immigrates, i.e., a person who comes to a country to settle down.
8. the Empire State Building: 美国帝国大厦.

EXERCISES

I. Match words or expressions with similar meanings in Column A and Column B:

Column A	*Column B*
i 1. hemisphere	a. a place that belongs to another country
K 2. ashore	b. put together
g 3. blizzard	c. 100 years
h 4. border	d. person who designs buildings
l 5. superior	e. trained person in engines
a 6. colony	f. walls of buildings
e 7. interior	g. violent snowstorm
C 8. century c	h. line between two countries
d 9. architect	i. half of the earth
j 10. frame	j. inside
	k. to the shore
	l. better than the average

Ⅱ. Multiple choice:

1. When people think of skyscrapers, they think of _____.
   a. Hong Kong b. New York c. Tokyo
2. The reason there were no tall buildings before 1884 was that _____.
   a. there were not enough people
   b. reinforced concrete did not exist
   c. people did not have the advanced technology
3. Architects actually learned the technique of using iron and steel frames for skyscrapers from _____.
   a. the immigrants
   b. the engineers in the nineteenth century
   c. the other architects in the eighteenth century
4. A building with a steel frame does not need _____.
   a. stores and offices on the first floor
   b. thick walls
   c. technology
5. The first building with sixty floors was built only _____ years after a fifty-story building.
   a. five b. four c. eight
6. As population increases, _____ increases.
   a. housing problem
   b. the number of skyscrapers
   c. the number of new factories
7. A Chicago architect has designed a building with _____ stories.
   a. 150 b. 200 c. 210

Ⅲ. Comprehension questions:

1. Why do people think of New York City when they think of skyscrapers?
2. Why don't buildings with steel frames need thick lower walls?
3. Name an advantage of buildings with thin lower walls.
4. Why does the text say that elevators were invented at just the right time?
5. What effect did the arrival of thousands of immigrants to the U.S. have on skyscrapers?
6. What is the advantage of high-rise building over lower buildings?
7. Why didn't Tokyo have skyscrapers for a long time?
8. What is the disadvantage when people use 200-story buildings?

HOMEREADING A

Largest Buildings

Commercial. The greatest ground area covered by any building in the world is that by the Ford Parts Redistribution Center, Brownstown Township, Michigan. It encloses a floor area 3,100,000 square feet or 71.16 acres. It was opened on May 20, 1971, and employs 1,400 people. The fire-control system comprises 70 miles of pipelines with 37,000 sprinklers.

The building with the largest cubic capacity in the world is

the Boeing Company's main assembly plant at Everett, Washington, completed in 1968. The building, constructed for the manufacture of Boeing 747 jet airliners, has a maximum height of 115 feet and has a capacity of 200 million cubic feet.

Scientific. The most capacious scientific building in the world is the Vehicle Assembly Building (VAB) at Complex 39, the selected site for the final assembly and launching of the Apollo moon spacecraft on the Saturn V rocket, at the John F. Kennedy Space Center (KSC), near Cape Canaveral (formerly Cape Kennedy), Florida. It is a steel-framed building measuring 716 feet in length, 518 feet in width and 525 feet high. The building contains four bays, each with its own door 460 feet high. Construction began in April, 1963, by the Ursum Consortium. Its floor area is 343,500 square feet (7.87 acres) and its capacity is 129,482,000 cubic feet. The building was "topped out" on April 14, 1965, at a cost of $108,700,000.

Administrative. The largest ground area covered by any office building is that of the Pentagon, in Arlington, Virginia. Built to house the U. S. Defense Department's offices, it was completed on January 15, 1943, and cost about $83,000,000. Each of the outermost sides of the Pentagon is 921 feet long and the perimeter of the building is about 1,500 yards. The five stories of the building enclose a floor area of 6,500,000 square feet. During the day 29,000 people work in the building. The telephone system of the building has more than 44,000 telephones connected by 160,000 miles of cable and its 220 staff members handle 280,000 calls a day. Two restaurants, six cafeterias and ten snack bars and a staff of 675 form the catering department of