

中学英语拾级读物

**GRADED
ENGLISH
第十级 READERS**

**Science
in the News**

科学新知

第 2 册

华东师范大学出版社

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唐金龙 编注

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本书简介

本书旨在使读者“养护”现有阅读技能，扩充科普词汇，熟悉科技背景，进而为收听 VOA 科技报道，摄取科技信息或应试“托福”增添潜力。本书有三大特色：精选的 50 篇英语短文涉及自然科学领域里近十年来最新科技发展；所选材料，或具新意，或有趣味，或文体典型，语言规范，文笔流畅，细心读来，音像俱现。

欲穷科技新天地，本书助君一臂力。

前 言

受国家教育委员会中学司委托，由上海外国语学院、北京外国语学院、北京师范大学、华东师范大学所属的四家大学出版社联合编辑、出版的《中学英语拾级读物》(简称《拾级读物》或《GE》)与读者见面了。这是我国中学英语教学的一项重要配套工程，旨在促进中学英语教学的改革。

取名《拾级读物》，不仅因为它有十个级别五十本书，而且还寓有“循序渐进，拾级而上”之意。中学生从初二开始阅读，逐级向上攀登，便可达到借助词典读懂浅近原著的水平。

《拾级读物》每册的词汇量、字数及对应年级大致如下：

级 别	词 汇 量	每册大约字数	对 应 年 级
一	500—700	10万	初二
二	600—900	10万	初二
三	800—1200	12万	初三
四	1000—1500	12万	初三
五	1400—1800	12万	高一、高二
六	1700—2000	12万	高二、高三
七	2000—2500	14万	重点中学高三
八	2500—3000	16万	外国语学校高三
九	3000—3500	18万	高材生、中学教师
十	3000—3500	18万	高材生、中学教师

阅读是学好任何一种语言的必由之路，也是获取信息的主要渠道。只做习题，不大量阅读是学不好英语的。近年来不少学生为了应付考试，花费大量的精力和时间去做各种各样的复习题和模拟试题，但收效甚微，对英语能力的提高并无多大益处。这是英语教学中的一种偏向。《拾级读物》的出版正是为了给中学英语教学提供一套可读性与系统性相结合的课外读物。

《拾级读物》主要供学生自己阅读，但教师可根据学生的实际水平帮助他们选择使用，并进行适当的辅导。特别在阅读方法上教师可作示范性的讲示，引导学生逐步摆脱语法和汉语的束缚。在此过程中，一是要抓篇章大意和故事情节；二是要注意学过的语言现象的再现和在新环境下的发展。对不易理解之处，要启发学生先根据上下文去揣摩，实在影响阅读时再查阅词典。对不影响理解全文的语言难点则要舍得放过。只有这样，才能培养学生良好的阅读习惯，保持他们阅读的兴趣，提高他们阅读的速度。

《拾级读物》的级别是衡量中学生英语阅读水平的客观尺度。为了便于检查，我们还准备编写一套相应的测试材料和教学参考书。

《拾级读物》除供中学生使用外，还可作为中学英语教师培训、进修的教材。

本书具有如下特色：51篇由短而长的科技短文均精选自近几年英语报刊或百科年鉴，涉及自然科学领域里近十年来最新科技发展；所选短文，或具新意，或有趣味，或内容简明易懂而文体典型；短文大多为科技英语新闻报道体，熟悉其章法和语体，对于收听VOA科技报道和浏览科技书刊，摄取信息颇为受益，语言规范、文笔晓畅，绝大多数保持原文

风格，细心阅读，音像俱现，不亚于收看电视。本书对于广大中下水平读者，尤其接近大学英语四级水平的学生来说，是较合适的读物，因为本书能使读者“养护”现有阅读能力，扩充科普词汇，熟悉阅读背景，增添应试“托福”之潜力。

考虑到本书读者已有较好的语言基础和自学能力，却对各门科学的知识基础各不相同这一特点，本书注释侧重于科技术语和背景介绍。对于一般的生词和难句，不作或仅作少量注释。

编者水平有限，本读物在选材、注释等各方面肯定存在不少缺点。敬请广大师生和各界读者不吝指正，以便我们再版时改进。

《中学英语拾级读物》编辑委员会

一九八九年十月

Contents

1. Folding Machine Gun	1
2. Mystery of the Missing Snake	3
3. Father Seahorse Gives Birth to Babies.....	5
4. Super Ears for Elephants	7
5. Sea Lions Eat Stones.	10
6. Battling Bacteria Take On the Egg.....	13
7. It's Okay to Cry.	15
8. Curing Heart Attack	18
9. The Dog with Two Hearts	21
10. Volleyball Star Hyman's Death	23
11. Sphygmomanometer —Measuring Blood Pressure....	26
12. Science Shorts.....	29
13. How a Refrigerator Keeps Its Cool	32
14. Capturing Light—With Fiber Optics	35
15. Preserving Food with Radiation	39
16. Genetic Wonders.....	42
17. Why Fabrics Crease and Wrinkle	45
18. "Black Box" — Flight Recorder.....	48
19. What's New in Contact Lenses?.....	51
20. Detergents.....	56

21. Indoor Air Pollution.....	60
22. Is Acid Rain Washing Away Our Heritage?.....	65
23. Cameroon's Cloud of Death	71
24. The Roots of Famine	76
25. Too Many Vitamins Can Be Bad.....	80
26. Pains and Needles	86
27. Liver Transplants — Big News !.....	90
28. Bones Up on Basic Nutrition.....	95
29. How Swimmers Learned to Fly	99
30. Blowing Down a Skyscraper in 10 Seconds	104
31. Banking on Seeds	110
32. Controlling Pests with an Insect Army	114
33. Animal Marriage.....	119
34. Forest Fires in the U. S.	123
35. Our Future in Space.....	129
36. Pandas — Here Today, Gone Tomorrow?	133
37. Safety Questions Tie Up Genetic Engineering.....	139
38. What Is Artificial Intelligence?.....	144
39. Robot Sub Discovers <i>Titanic</i>	150
40. Dinosaur-Size Robot with Laser Eyes	156
41. AIDS — A Challenge to Science	161
42. The Science of Fighting Fires	167
43. Population Growth and Birth Control	173
44. Sick in Space	177
45. The Chernobyl Nuclear Accident.....	182
46. Identifying a War Criminal.....	188
47. Superconductors Are Revolutionary.....	193

48. A Healthy Dose of Laughter	198
49. Food and Cancer	204
50. Inside the Recording Studio	210
51. Science Quiz	217
* * * *	
Notes	226

1. Folding Machine Gun

In under three seconds an expert shooter can unfold the self-contained¹ ARES² 9mm fold machine gun (FMG) from an innocent-looking flat black box into a compact submachine gun³ capable of spitting out bullets at the cyclic rate of 650 rounds per minute. The magazine capacity⁴ is either 20 or 32 cartridges.⁵

Unfolded, the 9mm FMG is 19.8 inches long. Folded, it measures only 1.4 by 3.3 by 10.3 inches. Although the current prototype weighs about five pounds, composite materials are expected to shave at least one pound off this figure.⁷

Without a chance of its being detected as a weapon, the folded 9mm FMG can be carried in your hand, right out in the open. There's a need by undercover lawmen, security officers, and special-assignment military forces worldwide for a readily concealable, high-firepower automatic weapon. It is this requirement that the unique 9mm FMG was designed to fill. Bodyguards of heads of state should find it especially well adapted to their use. These agents' guns must not be apparent to the public — for the sake of their distinguished clients' images — but they need more firepower than any hand-

gun can deliver, in an automatic weapon less cumbersome than the typical machine pistol or submachine gun now used for such duty.

Francis Warin, senior engineer at ARES, Inc., of Port Clinton, Ohio, is the inventor of this high-tech submachine gun. It is currently under development by ARES, which is headed by Eugene Stoner, famed designer of the U.S. M-16 rifle.

Because ARES is strictly in the research and development business, another firm will manufacture the 9mm FMG when R & D work on the gun is completed. Sales, of course, will be restricted to military and law-enforcement purchasers. This is not a consumer product.

2. Mystery of the Missing Snake

Not long ago, reptile and medical experts at the Bronx Zoo in New York were confronted with a strange problem. It seems that a young forest cobra¹ — which had been living in an exhibit with its “brothers and sisters” — was suddenly missing !

The absent snake caused some alarm since the species is highly venomous (able to inflict a poisoned wound). Since the keepers didn't have a clue as to how the snake might have escaped, the situation was both a mystery and a cause for worry.

It was possible that a cagemate had eaten the missing snake. But this was not likely because all the animals were the same size and forest cobras do not tend to be cannibals (animals that consume their own kind). Besides, the snakes had all just been fed the day before, so it wasn't likely one would have been hungry enough to eat a relative, too.

But, not having any other bright ideas, Chief Veterinarian Emil Dolensek decided to test the “cannibal theory.” How ? By taking X-ray photographs of the other family members present, of course. In keeping with the routine for handling venomous reptiles, the keepers

collected their antivenin (serum that fights the effects of poisonous venom) and snakebite kits.

The snakes were transported, each in a small sack, to the zoo hospital. One by one they were placed on the examination table and x-rayed. Within a few minutes, the zoo officials had the answer to their mystery.

One of the X rays clearly showed a small snake loosely coiled inside its brother. But — wait — there was more. A tiny mouse was visible in the mouth of the ingested cobra! Apparently both snakes had started supper at the same time on opposite ends of the same mouse. The surviving snake, it seems, had simply swallowed its dinner partner along with its supper.

3. Father Seahorse Gives Birth to Babies.

This fish looks like it might have wandered off a ranch, lost two legs, found a tail, and decided to go for a swim. Scientists call it Hippocampus.¹ But with its long, tubular snout, angled head, and weird habit of swimming in an upright position, one can easily understand how it got the name seahorse.

Seahorses are warm-water fish found in oceans all over the world. Twenty separate species (kinds) of seahorses are known today. The largest of these creatures grows to about a foot in length (36 centimeters).

Most seahorses live in shallow waters, clinging to seaweed and other underwater plants with their long, monkey-like tails. They spend much of their time snapping up tiny crustaceans² (shell fish) that drift by on gentle ocean currents.

Yet, as weird as seahorses look, "looks" are not the oddest things about these fish. Female seahorses have a very unusual — and very clever — way of giving birth to live young. They let father do it!

At breeding time, a female seahorse deposits over 200 eggs into a pouch on the underside of a male seahorse. The male fertilizes the eggs, which then sink into the soft

walls of his pouch. Oxygen and food are passed to the developing eggs through a rich network of blood vessels.

A male seahorse carries his eggs for about six weeks. When they begin to hatch, the male bends and jerks — shooting out baby seahorses from the pouch with each motion.

This "labor" is very tiring. Some male seahorses have been known to die of exhaustion after "giving birth." Yet most male seahorses soon recover and begin looking around for another female to load them up with more eggs.

So, "all horsing aside," Hippocampus is still one weird fish.

4. Super Ears for Elephants¹

They say that elephants never forget. Well, now elephants may gain a new title to go along with their super memories: Super ears.

Researchers at Cornell University in Ithaca, NY, have uncovered evidence that elephants can produce infrasonic² sounds. These low-frequency sounds, just below the range of human hearing, may serve as a “secret” communication link between elephants.

Discovery of the elephant’s ability to produce infrasonic sounds began in Portland, OR. There, Dr. Katharine Payne, head of the Cornell research team, was observing caged zoo elephants. She kept feeling “something like the vibration from the lowest note on a big pipe organ, or the slight shock wave one can feel from far-off thunder.”

Later, a team returned to the zoo with sensitive sound recording equipment. The results showed that the “shock waves” Dr. Payne had felt were caused by the elephants. They were producing infrasonic sounds. Experiments with wild African elephants showed the same results. “Secret sounds” made by elephants are accompanied by a “fluttering” near the animal’s nasal opening.