

趣味英语阅读文选

英汉 科普文章 选读



宋红梅 / 编著

The Selected
Readings of
English-Chinese
Popular
Science



中国书籍出版社



● 趣味英语阅读文选

The selections from English entertaining readings

英汉 科普文章 选读



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前 言

英语阅读是学习和掌握英语的重要途径。广泛、大量的阅读可以开阔视野,丰富知识,扩大词汇量,提高语言的运用能力。本书选材注意了知识性、科学性、实用性和趣味性。文章内容丰富、题材多样、涉及面广、词汇量大、语言文字规范,有助于提高读者的阅读理解能力。另外本书选材难易适中,使用方便,对其中较难的词汇附以注译,同时附有练习、译文及参考答案。

在本书编写过程中,参考了国内外出版的有关书籍。由于科普方面的文章生词多,所以在整理、改编过程中,选用了词汇量相对较少,而又有一定难度的文章。本书适用于初、中级英语学习者。

由于编者水平有限,加之成书仓促,不妥处,恳祈不吝指正。

编 者

1998 年 12 月

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♣ 1. The World Population

A very important world problem——in fact, I think it may be the most important of all the great world problems which face us at the present time——is rapidly increasing pressure of population on the land.

Suppose we first take a look at the map of the world. The position today is very different from what it was only, shall we say, 150 or 200 years ago. If we go back to that time, there were large parts of the world which had not then been explored. For example, Australia was unknown; the great west of Canada and the United States had not been opened up; the heart of South America was almost entirely unknown; and on the map of the period you will find the heart of Africa is just marked as unexplored.

The position at the present day is absolutely different. We now know roughly the actual extent of the earth's surface. Even the outline of the Antarctic continent is shown in a solid line on the latest maps. It is only in the last two or three years that we have been able to remove the last doubtful lines, and have settled down to the idea that the earth's land surface is something fixed, and will not extend any more.

But what about population? The population of the world today is about 6000000000. That is an enormous number, yet it is known quite

accurately, because there are very few parts of the world which have not carried out a modern census. China was the big unknown quantity until 1953, when a census was carried out. The population is over 12000000000.

The important thing is not so much the actual population of the world, but its rate of increase. It works out to be about 1.6 percent annual net increase. In numbers this means something like forty to forty-five million additional people every year. Canada has a population of twenty million—rather less than six months' increase in world population. Take Australia. There are ten million people in Australia. So it takes the world less than three months to add to itself a population which peoples that vast country. Let us take our own crowded country, England and Wales—forty-five to fifty million people. This is just about a year's supply.


By this time tomorrow, and every day, there will be added to the earth about 120,000 extra people—just about the population of the city of York.

This enormous increase of population will create immense problems. By AD. 2000, unless something terrible happens, there will be as many as 70000000000 people on the surface of the earth! So this is a problem which you are going to see in your lifetime.



- (1) explore *v.* 探测
- (2) absolutely *ad.* 完全地
- (3) roughly *ad.* 大概地
- (4) accurately *ad.* 精确地
- (5) census *n.* 普查

- (6) additional *adj.* 附加的, 另外的
- (7) vast *adj.* 巨大的
- (8) immense *adj.* 重大的



请回答下列问题:

- ① What is one of our great problems?
- ② What did Europeans know about Australia two centuries ago?
- ③ Mention two areas which were unknown two centuries ago.
- ④ How do modern maps differ from old maps?
- ⑤ About how many people are there in the world now?
- ⑥ When was the first Chinese census?
- ⑦ About how many extra people are there in the world each year?
- ⑧ Give the present population of Australia and of Canada.
- ⑨ How many people will be added to the earth every day?
- ⑩ What will the population of the world probably be in the year 2000?

♠ 1. 世界人口

当前地球上的人口迅速增长的压力是一个非常重要的全球性问题。实际上,我认为这可能是我们面临的所有重大的世界性问题中最重要的一个。

我们首先来看一看世界地图。今天的状况,可以说,与仅仅 150 年或 200 年前相比就大不相同了。如果我们追溯到那个时代,当时世界上尚有大片的地区未经探测。比如,澳大利亚就无人知晓;美国和加拿大辽阔的西部也尚未开发;人们对南美洲的中部几乎一无所知。在当时的地图上,非洲的中部也被标作未经探测的地区。

今天的情况就完全不同了,我们大致已经知道地球表面的实际范围。在最新地图上,就连南极洲的轮廓也已用实线标明。仅仅在两三年前,我们才能够取消那些最后的难以确定的图线,并且确定了

这样的概念:地球的陆地面积基本是固定的,不会再扩大了。

但是,人口怎么样呢?今天,世界人口大约是 60 亿。这是一个巨大的数字,但也十分精确,因为世界上只有少数地区未进行现代人口普查。中国在 1953 年进行人口普查前,是一个巨大的未知数,中国人口目前超过了 12 亿。

重要的问题不是世界有如此之多的实际人口,而是人口的增长速度。据目前的统计,每年人口净增率为 1.6%,也就是说,每年要增加 4000 万到 4500 万人口。加拿大有 2000 万人口——还不到世界人口六个月内的增长数。拿澳大利亚来说,它有 1000 万人口,而全世界不到三个月就能增添和那样一个辽阔的国家里同样数量的人口。再拿我们自己拥挤的英格兰和威尔士来说,我们拥有 4500 万到 5000 万人口,这正好是世界人口约一年的增长数。

到明天的这个时候,而且每天如此,地球上将要额外增加 12 万人——大约正好是一个约克市的人口数字。

人口剧增会造成重大的问题,只要不发生大灾大难,到公元 2000 年,地球上将有 70 亿人口!所以这是一个在你的有生之年就要遇到的问题。



♣ 2. Bees and Colour

On our table in the garden we put a blue card, and all around this blue card we put a number of different grey cards. These grey cards are of all possible shades of grey and include white and black. On each card a watch-glass is placed. The watch-glass, on the blue card has some syrup in it, all the others are empty. After a short time bees

find the syrup, and they come for it again and again. Then after some hours, we take away the watch-glass of syrup which was on the blue card and put an empty one in its place.

Now what do the bees do? They will go straight to the blue card although there is no syrup there. They do not go to any of the grey cards, in spite of the fact that one of the grey cards is of exactly the same brightness as the blue card. Thus the bees do not mistake any shade of grey for blue. In this way we have proved that they do really see blue as a colour.

We can find out in just the same way what other colours bees can see. It turns out that bees can see various colours, but those insects differ from us as regards their colour-sense in two very interesting ways. Suppose we train bees to come to a red card, and having done so, we put the red card on the table in the garden among the set of different grey cards. This time we find that the bees mistake red for dark grey or black. They cannot distinguish between them. This means that red is not a colour at all for bees, for them it is just dark grey or black.

That is one strange fact, here is another. A rainbow is red on one edge, violet on the other. Outside the violet of the rainbow there is another colour which we cannot see at all. This colour beyond the violet, invisible to us, is called the ultra-violet. Although it is invisible, we know that the ultra-violet is there because it affects a photographic plate. Now, although we are unable to see ultra-violet light, bees can do so; for them ultra-violet is a colour. Thus bees see a colour which we cannot even imagine. This has been found out by training bees to come for syrup to various parts of a spectrum or artificial rainbow thrown by a prism on a table in a dark room. In such an experiment the insects can be taught to fly to the ultra-violet which for us is just darkness.

(1) syrup *n.* 糖浆

(2) distinguish *v.* 区分

(3) violet *n.* 紫色

(4) ultra-violet *n.* 紫外线

(5) spectrum *n.* 光谱

(6) artificial *adj.* 人造的

(7) prism *n.* 三棱镜

请回答下列问题：

① What happened when the syrup was removed?

② How do we know that bees can not see a red colour?

③ Give as many colours of the rainbow as you can.

④ How do we know that there are ultra-violet rays in the spectrum thrown by a prism?

⑤ What rays are visible to bees and invisible to men?

♠ 2. 蜜蜂和颜色

我们把一张蓝色的卡片放到花园里的桌子上,再在这张蓝色卡片的周围放上若干张不同的灰色卡片。这些灰色卡片具有各种深浅不同的色调,包括白色和黑色。在每一张卡片上,放一个玻璃罩。蓝色卡片上的玻璃罩里放一点糖浆,其他卡片上的玻璃罩都空着。不一会儿蜜蜂发现了糖浆,就一次次地飞来吃糖浆。几个小时之后,我们把蓝色卡片上有糖浆的玻璃罩拿走,换上一块空的玻璃罩。

现在,蜜蜂会怎样呢? 尽管那里已经没有了糖浆,蜜蜂还是径直飞向蓝色卡片。它们根本不会飞到任何一张灰色卡片那里去,尽管其中有一张灰色卡片同蓝色卡片的亮度是一模一样的。由此可见,蜜蜂不会把任何深浅的灰色错认为蓝色。用这种方法,我们就证明