

高中

科普
英语

阅读

前 言

《中学英语教学大纲》明确指出：中学英语教学的目的是对学生进行听、说、读、写的基本训练，培养学生在口头上和书面上初步运用英语的能力，侧重培养阅读能力。同时，大纲还规定：除课文外，补充阅读量达到一级 10 万字左右，二级 20 万字以上。由此可见，培养学生的阅读能力是中学英语教学的主要目标。

当我们跨进 21 世纪，一个高速发展的高科技时代，培养广大中学生的科技意识，普及科普知识，了解当前科技发展的新动态，仍然是中学英语教学的重要内容。纵观近几年来的高考题，不难发现，随着素质教育的不断深入，无论是阅读篇幅的数量还是科技内容的含量都在逐年增加。为此，我们编写了《高考科普英语阅读》一书。

本书根据文章内容分为六个栏目：生物乐园、科学家殿堂、计算机世界、人与自然、自然界的奥秘、科技园地。所选编的文章语言地道，题材广泛。大量篇目内容新颖，既有具有实用性、操作性的应用文章，也有反映新世纪高科技信息的文章。本书的出版将丰富目前英语教学内容，为广大师生提供一些宝贵的新素材。

由于编写时间仓促，加之水平有限，不当之处敬请广大读者指正。

编 者

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Unit 1 Biologic Paradise

Passage

1

A question often put to the specialist on fishes is "How long do fishes live?" This puts the specialist in an embarrassing (为难的) position because he is often unable to give a direct answer to this simple question.

But actually this question is not as simple as it seems. There are thousands of different kinds of fishes, and they vary (变化) a great deal in size and life span (寿命). Moreover (此外), it is not easy to find out just how a fish lives in its natural state.

We can find out how old a fish is by studying its scales (鳞), but we cannot say how long it would have lived if we had not caught it.

We may raise fishes and record their life span but we cannot be sure that this is the length of time they would have lived if they had been left alone.

We may make markings to show how fast the fishes grow so that we can calculate the age of the largest on record, but unless this large fish dies of old age we are still not in a position to know its natural life span.

Unlike human beings, fishes do not stop growing when they reach maturity (成熟). They continue to grow as long as they live, although the rate of growth slows down in mature (成熟的) fishes.

- () 1. People often ask the specialist on fishes regarding _____.
A. the size of fishes
B. the age of fishes
C. the use of fishes
D. the life span of fishes
- () 2. The specialist is embarrassed by the question because _____.
A. he does not know the answer
B. there is no straight forward answer to this question
C. there is no answer to this question
D. it is still a question
- () 3. The _____ of fishes differ a lot.
A. structure
B. growth rate
C. fins (鳍) and tail
D. size and life span
- () 4. The _____ of fish can tell us how old it is.
A. weight B. scales
C. body D. length
- () 5. If we want to record the life span of a fish, we must _____.
A. raise it
B. leave it in the natural state
C. weigh it
D. not catch it
- () 6. Human being, unlike fishes, _____.
A. stop growing when they reach maturity

- B. grow faster after maturity
C. have a short life span
D. continue to grow as long as they live
- () 7. Mature fishes _____.
A. grow more quickly than young ones
B. grow more slowly than young ones
C. stop growing entirely
D. die off

Passage

2

To discover whether bees can see colors, the following experiment is set up. A table is put in a garden, and on the table is a piece of blue cardboard with a drop of syrup(糖浆) on it. After a short time, bees come to the syrup. The bees then fly to their hive(蜂窝) and give the syrup to other bees in the hive. Then they return to the feeding-place which they have discovered. After a while, the blue cardboard with the syrup on it is taken away. Instead of this card, a blue card is now on the left side of the first feeding-place and a red card to its right. These new cards have no syrup on them. Very soon bees arrive again, and fly straight to the blue card. None to the red card.

- () 1. To do the experiment, altogether how many cards do

you need to prepare?

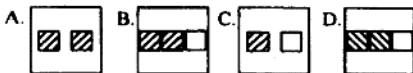
- A. Two, one blue and one red.
- B. Three, two blue and one red.
- C. Three, one blue and two red.
- D. Four, two blue and two red.

- () 2. If figure 1 below shows the table (blue card with syrup blue card red card) top during step 1 of the experiment, which picture in figure 2 represents (代表) step 2?

Figure1:



Figure2:



- () 3. During step 2 of the experiment, the bees come to ____.
- A. the original (原来的) blue card with syrup on it
 - B. the new blue card without syrup on it
 - C. the empty space where the original blue card was
 - D. the new blue card with syrup on it
- () 4. The experiment has proved that bees ____.
- A. cannot see colors
 - B. can see colors
 - C. cannot see blue
 - D. cannot see red
- () 5. Which is the best title to give the idea of the passage?
- A. Bees love blue.
 - B. Bees love syrup.
 - C. Bees, color and syrup.
 - D. Can bees see color?

Most animals have little connection with animals of a different kind, unless they hunt them for food. Sometimes, however, two kinds of animals come together in a partnership (伙伴关系) which does good to both of them. You may have noticed some birds sitting on the backs of sheep. The sheep allow the birds to do so because they remove the cause of discomfort. So although they can manage without each other, they do better together.

Sometimes an animal has a plant partner. The relationship develops until the two partners can not manage without each other. This is so in the corals (珊瑚) of the sea. In their skins they have tiny plants which act as "dustman", taking some of the waste products from the corals and giving in return oxygen which the animal needs to breathe. If the plants are killed, or even prevented from light so that they can not live normally, the corals will die.

- () 1. Some birds like to sit on a sheep because _____.
A. they can eat its parasites
B. they depend on the sheep for existence
C. they enjoy travelling with the sheep
D. they find the position most comfortable
- () 2. The underlined word "they" in the last sentence of the

first paragraph refers to _____.

- A. birds and parasites
- B. birds and sheep
- C. parasites and sheep
- D. sheep, birds and parasites

() 3. It can be learnt from the text that the coral depends on the plant for _____.

- A. comfort
- B. light
- C. food
- D. oxygen

() 4. What does the second paragraph mainly discuss?

- A. Some animals and plants depend on each other for existence.
- B. Some animals and plants develop their relationship easily.
- C. Some plants depend on each other for food.
- D. Some animals live better together.

Passage

4

Are dolphins(海豚) the only creatures, apart from human being, able to talk to each other? After all, dolphins are mammal(哺乳动物) with a large brain, and have been observed to make various sounds which might be part of a communication system. These

sounds seem to have different functions(功能), such as warning each other of danger. Sound travels much faster and much further in water than it does in air. An American scientist recently tried to answer this question. He kept two dolphins, one male(雄的), one female(雌的), in a large tank and trained them to work together. According to whether a steady or a flashing light came on they had to press one of the two levers. When they pressed the correct one they were rewarded with fish.

They were later separated by a screen so that they could not see each other. Only the female dolphin could see the lights but both had to press the same lever to get the fish. The female would have to tell the male which lever to press.

In the experiment the male succeeded in pressing the correct lever 90% of the time.

- () 1. Dolphins communicate with each other _____.
A. by making different sounds.
B. by using their own language
C. with their developed brain
D. by different lights
- () 2. Two dolphins were kept in the tank _____.
A. for fun
B. for experiment
C. for safety
D. for their making noises
- () 3. If the dolphin pressed the correct lever they would have fish _____.

- A. to talk to
- B. as a reward
- C. to play with
- D. as its friend

- () 4. In a separate part of the tank, the male could know which lever to press _____.
A. all by itself
B. by seeing the light
C. with the help of the female
D. with man's help

Passage

5

Butterflies (蝴蝶) are common all over the world but the ones in hot countries are usually bigger and more brightly coloured than those in cooler countries, and there are more different kinds. Usually the male (雄性) butterfly is more brightly coloured than the female (雌性). The females have bigger and heavier bodies, since they carry the eggs. The gay colours of the male help to attract the female and the duller (暗淡的) colours of the female make them less likely to be caught by enemies before they have laid their eggs.

Some butterflies have a bright pattern of colours on the upper surface of their wings which show when they fly, but when they rest on a tree or leaf, they close their wings. On the undersides of their wings there are green and brown markings which look like the tree

or leaves. They are then difficult to see. The best example of this is the Dead Leaf Butterfly. When its wings are closed, it looks exactly like a dead leaf. When a bird is chasing (追逐) a butterfly, and it closes its wings, it seems to have disappeared completely.

Many butterflies have round marks on their wings that look like eyes. When they are resting, and their wings are folded (摺合), the marks cannot be seen. When a bird sees a butterfly, and begins to attack it, the butterfly opens its wings. The bird thinks that it sees two eyes staring at it, and frightened, it flies away.

- () 1. Which of the following is likely to be the most brightly coloured?
- A. A male in a hot country.
 - B. A male in a cool country.
 - C. A Dead Leaf Butterfly with its wings closed.
 - D. A large, heavy butterfly.
- () 2. What is the purpose of the gay colours of a male butterfly?
- A. To frighten birds away.
 - B. To bring females to it.
 - C. To make it more difficult to see.
 - D. To protect the female.
- () 3. Female butterflies are safe from enemies because they _____.
- A. are bigger
 - B. are heavier
 - C. cannot be seen with their wings closed

- D. have colours that are not so bright
- ()4. Which of the sentences is Not true?
- A. There are not so many kinds of butterflies in cool countries.
- B. Male butterflies usually weigh less than females.
- C. All butterflies cannot be seen when they close their wings.
- D. Birds are enemies of butterflies.
- ()5. Which one of these sentences is True?
- A. The female butterfly is always brighter than the male.
- B. The Dead Leaf Butterfly has holes in its wings.
- C. All butterflies are difficult to see when resting.
- D. Some butterflies seem to have eyes on their wings.

Passage

6

All living things, whether they live on the land or in the sea, must fight to stay alive. That is to survive. Each plant and each animal has to feed on something and at the same time avoid being eaten. Therefore every plant and animal has to solve this big problem of staying alive in its own way.

The danger of being eaten in the sea is great. Those plants and animals that do survive usually reproduce very fast and in great numbers. The single-celled plant, the diatom(矽藻类), can multiply(繁

殖) itself into a billion new diatoms in one month. Certain sea animals have defensive devices which help them to survive. The sea-urchins(海胆), for example, grow spines(尖刺) to protect themselves. The sea anemone(海葵) and jelly fish have poisonous tentacles(触角) which are used for attack and defence.

Another method of survival which sea plants and animals use is disguise or camouflage. They usually have the same colour as their surroundings. The sargassum fish looks very much like the sargassum seaweed among which it lives. The sharks(鲨鱼) can hide themselves because of their colouring. They are dark on top and silver on the underside and look like the colour of the water in which they live.

In order to stay alive, animals need to have keen senses. Fishes and some shellfish have sharp eyes. Almost all animals are sensitive to touch. Fishes detect(探测) movements in the water by means of their lateral(侧面的) lines. Fishes and other sea animals can hear well and many of them can make different types of warning sounds.

- () 1. The big problem for all living things is _____.
A. how to survive
B. how to eat something
C. how to be fed well
D. how to be dangerous
- () 2. The sargassum fish _____.
A. can change its colour when in danger
B. uses its defensive devices to protect itself
C. has the same colour as the sargassum seaweed

- D. often hide itself under the seaweed when in danger
- () 3. In the last paragraph, the word "keen" has the same meaning as the words "_____".
- A. sharp and sense
- B. alive and sense
- C. warning and sensitive
- D. sharp and sensitive
- () 4. Which of the following is Not true according to the passage?
- A. Fishes use their lines at the sides to find out the movements in the water.
- B. Sharks are big animals, there is no need to disguise themselves.
- C. Some sea animals use their devices for attack and defence.
- D. There is always a hard struggle for existence among the animals living both either the land or in the sea.

Passage

7

Pruning(剪枝) involves cutting away of overgrown and unwanted branches. First, pruning may be done to make sure that trees have a desired shape or size. The object may be to get a tree of the right height, and at the same time to hope the growth of small side

branches which will thicken its appearance or give it a special shape. Secondly, pruning may be done to make the tree healthier. You may cut out diseased or dead wood(死枝), or branches that are rubbing against each other and thus causing wounds. The health of a tree may be encouraged by removing branches that are blocking up(阻碍) the center and so preventing the free movement of air.

One result of pruning is that an open wound is left on the tree and this provides an easy entry for disease, but it is a wound that will heal(愈合). Often there is a race between the healing and the disease as to whether the tree will live or die so that there is a period when the tree is at risk(危险期). It should be the aim of every gardener to reduce that risk of death as far as possible. It is essential to make the area which has been pruned smooth and clean, for healing will be slowed down by roughness(伤口粗糙). You should allow the cut surface to dry for a few hours and then paint it with one of the substances available from garden shops produced especially for this purpose. Pruning is usually done in winter, for then you can see the shape of the tree clearly without interference(干扰) from the leaves and it is, too, very unlikely that the cuts you make will bleed. If this does happen, it is, of course, impossible to paint them properly.

- () 1. Which of the following is not the advantage of pruning?
- A. To make trees have a shape or size one wants.
 - B. To ensure that the trees are healthy.
 - C. To make the trees grow as tall as possible.
 - D. To get a tree of right height and to encourage the