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课外读物 English Reader

第一册

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前言

为了配合广播函授英语课程的教学,使函授学员与广大 自学者接触更多的英语、提高阅读能力并扩大词汇量,我们 特选编了一套广播函授英语课程课外读物丛书,陆续出版。

课外阅读丛书将包括不同题材及体裁的读物;力求体现知识化,趣味化及"三个面向"。文字由浅入深,注释简明扼要。

全套广播函授英语课程课外读物由北京外国语学院陈琳 教授主编。第一册为科普知识,取材自英国瓢虫丛书,由北 京外国语学院史明选注。

由于本书使用电子计算机排版,目前无法用音标注出单词发音,敬请原谅,将在再版时设法改进。

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1. WATER

More than half world is covered by water

A spaceman sees that there is more water than land.

Where rain comes from

Air over the sea is damp. The sun warms the damp air which then rises and cools. Clouds are then formed.

(1) Clouds are made of tiny water droplets. (2) When the droplets get bigger, they fall as rain. (3)

Every living thing needs water

We cannot live without water. People, animals, birds and insects must have water. Elephants wash and cool themselves with water.

There is water in every living thing

Most of your body is flesh and blood. Most fruit and vegetables are pulp and juice. (4) Flesh and blood, pulp and juice are mostly water.

How plants and trees get water

Rain soaks into the soil. (5) Trees draw it up through their roots. (6) Flowers draw it through their roots or stems. Leaves can take in water. (7)

Plants die without water

Deserts are very dry. Only plants like the cactus can live in deserts. (8) A cactus can store water.

How people got water long ago

In olden days, people had to live near a stream or river. (9) Later some had a pump or a well. Today, water comes to us in pipes. We just turn a tap to get water. (10)

Where our water comes from

Some of our water is taken from rivers. Some comes from reservoirs. Reservoirs are lakes made by man. (11) Some valleys have been flooded to make reservoirs. (12)

Water that you drink

All drinks have water in them. (13) Milk is nearly all water. So are tea and coffee.

Water that you cannot drink

Shipwrecked sailors must not drink sea-water. (14) There is too much salt in it. They can have water all round them and still die of thirst. (15)

Water in the kitchen

Meals would be very different without water. (16) There would be no boiled eggs, no boiled vegetables and no jellies. Clothes and dishes could not be washed without water.

Water for washing

You need water to have a bath, to clean your teeth, or wash your hair.

Water for warmth

Water can keep you warm. Hot water radiators and hot water bottles give out heat. (17)

Water for cleaning

Water cleans easily! (18) We wash many things with it.

Water in factories

It takes about 15000 litres of water to make a set of heavy tyres. (19) It takes 10000 litres of water to make a car (without tyres).

Factories use millions of litres of water. More water will have to be found. (20) Pure water is getting scarce.

Water always flows down

Rivers flow down to the sea. Water from toilets and drains flows down to sewers. (22)

Power from water

Falling water can turn turbine engines to make electricity. (23)

Water can turn to steam

When water is heated it turns to steam. (24) You can see this when a kettle boils.

Power from steam

Some ships are driven by steam turbines. (25) Some trains are still pulled by steam engines. (26)

Water can freeze

Water takes up more space when it freezes. (27) This can crack a pipe. When the ice melts, the pipe leaks.

(28) Ice can be thick enough to skate on. (29)

Water can be dangerous

Boiling water is dangerous. Fog, ice and snow on the roads are dangerous. Thin ice is dangerous. Heavy rainstorms and high tides may cause flooding. (30) Homes and roads can be washed away.

Saving life from water

Here are some of the ways that life is saved from water. At dangerous places there are often life-belts or a life-line. (31)

Saving life with water

People can be trapped in burning buildings. Firemen try to put out the flames with powerful water-jets. (32)

Water for cooling

Cold water can cool your body. Water cools some car engines. (33)

Water, steam and cooling

Water is used to cool steam in the power station.

(34) The water becomes warm and is then cooled in towers.

Water for pleasure

Life would be dull without water. We would have no fishing, boating, swimming or winter sports. (35)

Snow is frozen water.

Water can be a home

Many things make their homes in water. Some can stay under the water all the time. Others come up for air.

(36) Fish can stay under water all the time because they have gills. (37) Whales, porpoises and seals have lungs. (38) They come up for air. A pond was once home for many living things.

Then people dumped rubbish in it. Now nothing can live there. (39)

Water can be beautiful

Water can be beautiful when light shines on it or through it. (40) Water droplets in the sky give us rainbows and glorious sunsets. (41) A fountain can add beauty to a town or city.

Water has a kind of 'skin'

An insect can walk on water. Even a coin can sometimes float on water, why? Because water has a kind of skin. (42)

Notes

- 1) The sun ...then formed: 太阳照暖潮湿的空气, 空气上升并冷却,于是形成云。
- 2) Clouds ... droplets: 云是由极小的水滴形成的。
- 3) When ... rain: 当微小的水滴变大一些的时候, 它们就作为雨点落下来。
- 4) Most ... juice: 大部分水果和蔬菜是肉质和汁。
- 5) Rain ... soil: 雨水渗进土里。
- 6) Trees ... roots: 树木通过其根部把水吸上来。
- 7) Leaves ... water: 树叶能够吸收水。

- 8) Only ... deserts: 只有象仙人掌这样的植物才能在 沙漠中生存。
- 9) In olden ... river: 古时候,人们不得不住在小溪 或河流附近。
- 10) We ... water: 我们只要拧开水龙头就可以得到水。
- 11) Reservoirs ... man: 水库是人工湖。
- 12) Some ... reservoirs: 有些山谷因修建水库而被淹没。
- 13) All ... them: 所有饮料都含有水。
- 14) Shipwrecked ... sea water: 遇难船只的水手千万不要喝海水。
- 15) They ... thirst: 他们周围全是水, 但是仍然渴死。
- 16) Meals ... water: 没有水, 食物就会大不一样了。
- 17) Hot ... heat: 暖气片和暖水袋放出热。
- 18) Water ... easily: 用水洗东西容易洗干净。
- 19) It takes about ... tyres: 生产一套大型汽车轮胎 大约需要一万五千升水。
- 20) More water will have to be found: 需要寻找更多的水。
- 21) Pure ... scarce: 洁净的水变得越来越少了。
- 22) Water ... sewers: 厕所和阴沟的水流入下水道。
- 23) Falling ... electricity: 下落的水可以转动涡轮机 发电。

- 24) When ... steam: 水加热后成为蒸气。
- 25) Some ...turbines: 有些船只是蒸气涡轮机推动的。
- 26) Some ... engines: 有些火车仍由蒸气机车牵引。
- 27) Water ... freezes: 水结冰时, 体积变大。
- 28) This ... leaks: 冰可以使水管破裂。冰融化时, 水管就漏水。
- 29) Ice ... on: 冰可以厚得能在上面滑行。
- 30) Heavy ... flooding: 暴风雨和涨潮可能引起水灾。
- 31) At dangerous ... life-line: 在危险的地方, 经常备有救生圈或者救生索。
- 32) Firemen ... water-jet: 消防队员试图用强有力的 喷水器扑灭火焰。
- 33) Water ... engines: 水可用来冷却汽车的发动机。
- 34) Water ... station: 在发电站, 用水来冷却蒸气。
- 35) Life ... sports: 没有水,生活就会变得沉闷。我们就不能钓鱼、划船、游泳或进行冬季运动。
- 36) Others ... air: 其他的动物则升到水面呼吸空气。
- 37) Fish ... gills: 鱼可以一直呆在水下, 因为他们有 鳃。
- 38) Whales, ...lungs: 鲸鱼、海豚和海豹有肺。
- 39) Then ... there: 后来,人们把垃圾倒在池塘里。 现在,在那里什么生物都没有了。
- 40) Water ... it: 当光线照耀在水面或者穿透它的时

候, 水是美丽的。

- 41) Water ... sunsets: 天上的微小水滴给我们带来彩虹和壮丽的落日景象。
- 42) Because . . . skin: 因为水有那么一种"皮"。

Vocabulary

desert 沙漠 / reservoir 水库 / radiator (暖气设备等的) 散热器 / porpoise 海豚 / seal 海豹 / rubbish 垃圾

2. AIR

Air is all around us (1)

We cannot see air, or smell it, or taste it, but we can tell that it is there when the wind blows. (2) When the wind blows the air is moving. (3) See how the wind blows the kite, the sailing boats and the children's hair.

Moving air

We make the air move when we cool ourselves with a fan. (4) With an electric fan we make the air move faster still. (5) When there is a hurricane the air is moving very fast. (6)

The air above us

Close to the earth's surface there is plenty of air. (7)

As we climb higher there is less and less air. (8) At the top of a high mountain there is very little air. Out in space there is no air at all.

An envelope of air

The earth is surrounded by layers of air. (9) Some keep the temperature of the earth constant. (10) Others keep out harmful rays from the sun. (11)

A planet without air

Some planets, like the moon, have no atmosphere.

(12) Man must take his own air, or oxygen, with him.

(13)

Air presses all around us (14)

Fill a glass brim full of water. (15) Slide a card over the top. Hold the card in place while you turn the glass upside down. (16) Take your hand away from under the card. The water does not fall out of the glass. It is held in place by the pressure of the air. (17)

Air pressure

We cannot usually feel the pressure of the air because it presses on the inside as well as on the outside of hollow objects. (18) If we pump the air out of a sealed metal can, the pressure of the air on the outside makes it collapse. (19)

Air pressure

Our bicycle is held up by the pressure of air in the tyre. (20) The tyre is like a thin bag of air. The car is heavier than the bicycle, so we must have a greater pressure of air in the tyre.

A cushion of air

If we have a solid rubber tyre we feel every bump.

(21) There is no cushion of air to make the ride more comfortable.

(22) Our inflated tyre moulds itself round the bumps so that we have a smooth ride.

(23)

Supporting air

The hovercraft is kept up by air blown from the big fan. (24) The hovercraft can move smoothly over water and over rough ground. (25)

Another cushion of air

An ordinary train is guided and supported by wheels which run on the rails. (26) It cannot travel very fast, and the wheels wear out in time. (27) This monorail train floats on a cushion of air between the train and the rail. (28) It can move very fast, and there are on wheels to wear out.

Air used to propel

A jet aeroplane is moved along by the jet of hot air blown out from the engines. (29) The 'Harrier' jump-jet is using its jet of hot air to move it straight up in the air. It can land and take off in a very small space.

Air that supports

Take two similar sheets of paper. Screw one into a ball. (30) Drop both pieces at the same time. The flat sheet falls slowly because it is slowed down by the air. (31) Like the sheet of paper, the parachute falls slowly because it is slowed down by the air.

Hot air rises

The fire makes the air hot. The hot air rises up the chimney, taking the smoke with it. (32) When the sun shines the the land. In land gets hot. The air above the land gets hot air that has risen. (33) Rising currents of hot air are called the that has and gliders rise in

the air on these thermals. The hot air in the balloon causes it to rise. (34) The air inside the balloon is lighter than the air outside because it has expanded.

How we breathe

Your lungs work like bellows. Your ribs and muscle called the diaphragm help the lungs to suck in (35) air and blow it out again. Normally you breathe about sixteen times every minute. (36) When you are running, you need more air. you breathe faster and the 'bellows' work harder.

When there is no air

In a fire, the air is full of smoke. Therefore firemen must wear breathing apparatus. This gives them clean air or oxygen to breathe.

Divers must have air or oxygen

It is pumped down to them through pipes, or they get it from cylinders on their backs. (37)

Where there is little air

At the top of a high mountain there is very little air. The mountaineer must get oxygen from the cylinders on his back. The high-flying aeroplane must be kept closed up so that the air does not escape from the cabin. (38)

Air in water

Put a glass of tap water (39) in a warm place. Several hours later there are tiny bubbles of air in the glass. This air was dissolved in the water. (40) Fish use