

Unit 2 Our globe is in danger!

I. Lead-in

1. Key

3-sandstorm 8-air pollution 5-deforestation 2-water pollution 7- melting
polar ice cap 4-light pollution 6-drought 1-desertification 9-littering

2. For reference

1) Open

2)

air pollution ozone depletion (臭氧层耗损) global warming

melting polar ice cap abnormal climate water pollution

toxic substances entering the water shortage of fresh water worsening of land resources

soil erosion deforestation decreasing grasslands

desertification sandstorm littering

noise pollution light pollution nuclear radiation

decrease in bio-diversification (生物多样性)

dying out of some rare and endangered animals and plants

3)Open

II. Basic listening practice

1. Script

M: Now we have satellites and high-powered microscopes, it's easy to think we know everything about the world; but we still don't understand El Nino.

W: Right. Even the scientists are uncertain about the exact cause of the warm Pacific current that brings storms or drought-the mysterious El Nino.

Q: Which of the following is true according to the dialog?

2. Script

M: Everyone is talking about environmental problems: acid rain, greenhouse effect, holes in the ozone layer. We should think positively. What can we do to improve things?

W: I agree. We could do a lot more to harness the sun's energy for heating and lighting in our homes. Millions of solar roofs are now emerging in Japan, the U.S, Italy, and Germany.

Q: How do the man and the woman view the environment?

3. Script

W: We lived in Beijing some years ago. It was always difficult to keep the house clean with the wind from the north blowing sand from the desert.

M: That's why the Chinese government has been encouraging people to plant trees along the edges of the Gobi Desert. Now those trees act as wind barriers.

Q: What have the Chinese people been encouraged to do?

4. Script

Q: Which of the following is true according to the dialog?

M: Many old refrigerators and cars are environmental hazards because they contain CFCs that destroy the ozone layer.

W: Yes, but government organizations are helping people to safely dispose of old refrigerators or, in the case of cars, to upgrade their air conditioning.

Q: What are government organizations helping people to do?

5. Script

M: Hey. That's an aerosol spray you're using on your hair! Build a bomb or set fire to the apartment to kill us quickly instead of making holes in the ozone layer, so we die of cancer.

W: Cool it. This spray doesn't contain CFCs. And you'd better read a little more.

Q: What does the man mean?

Key: B D A A C

III. Listening in

Task 1 We should have proper respect for nature!

Script

Martha: Do you think most people in your culture respect nature?

Ed: I think so. Um., more now than before.

Martha: What do you think is the most serious environmental problem in the world today?

Ed: Today... I think damage to the ozone layer is a big problem, and another problem is pollution in big cities and things like that.

Martha: How do you learn about environmental problems?

Ed: Um... through school. A lot of clubs promote environmental safety, and some TV programs, too. They talk about environmental safety and stuff like that.

Martha: Do you think students should learn more about the environment at school?

Ed: I think so. So, as they grow older, they can be more aware of all the problems that are going on, and prevent more problems from occurring

Martha: If you could create a new law to help the environment, what would it be?

Ed: A new law for the environment? Um... I'd probably say that when people throw away their cigarette butts, they have to throw them into the garbage bin, not just throw them everywhere because it's just littering and I hate that. So they should be fined if they throw them on the floor or on the ground.

Martha: That's a good idea. What do you personally do to help protect the environment?

Ed: I'm so against littering. I never litter. If I see somebody litter, I get really angry. So I always throw my trash into the garbage bin.

Key

(1) nature (2) environmental problem (3) pollution (4) promote (5) aware of
(6) from occurring (7) law (8) throw away (9) fined (10) trash

Task 2 River pollution

Script

If you see dead fish floating on the river or notice that the water is discolored and smelly, you know the river has been polluted, and there are four main possible causes for it.

First, fertilizer. If large amounts of fertilizer or farm waste drain into a river, the concentrations of nitrate and phosphate in the water increase considerably. Algae use these substances to grow rapidly, turning the water green. This massive growth of algae leads to pollution. When the algae die, they are broken down by the action of the bacteria, which quickly multiply, using up all the oxygen in the water and therefore causing the death of fish.

Second, industrial waste. Factories sometimes discharge chemical waste into rivers. Examples of such pollutants include cyanide, lead, copper, and mercury. These substances may enter the water

in such high concentrations that fish and other animals are killed immediately. Sometimes the pollutants enter the food chain and accumulate until they reach toxic levels, eventually killing fish and other animals.

Third, oil pollution. If oil enters a slow-moving river, it forms a rainbow-colored film over the entire surface, preventing oxygen from entering the water.

Fourth, warm water. Industry often uses water for cooling processes, sometimes discharging large quantities of warm water back into rivers. A higher temperature of the water lowers the level of dissolved oxygen and upsets the balance of life in the water.

Questions:

1. What is the passage mainly about?
2. Why does the river water turn green?
3. What harm does industrial waste cause?
4. Which of the following is true of oil pollution?
5. What harm can warm water in a river bring

Key: D A B C D

Task 3 Curbing carbon emissions

Script

Although it is not an easy task, China is striving to fulfill the promise to cut its carbon dioxide emissions per unit of GDP by 40 to 45 percent in the next 10 years.

Zhang Guobao, Director of the National Energy Administration, said, "The government puts great emphasis on seeking harmonious development between cities and the environment, and is readjusting the energy structure by giving priority to the development of clean and low-carbon energies, including hydroelectric, nuclear, wind, and solar power."

Government authorities have closed small, coal-fired plants with a total capacity of 60.06 million kilowatts in the past four years. This year's target of closing 10 million kilowatts of capacity will be achieved by August.

"We have promised to the international community that 15 percent of our power will be generated from non-fossil sources by 2020," Director Zhang said. At present, non-fossil energy accounts for only 7.8 percent.

China is making efforts to increase the proportion of clean energy in its total energy consumption. Statistics show that China invested US\$34.6 billion in clean energy last year, exceeding the

United States which invested US\$18.6 billion. Thus, China has become the world leader in generating clean energy. Five years earlier, China's investment in clean energy was only US\$2.5 billion.

However, China's carbon emission reduction target cannot be achieved easily. The shift to a low-carbon economy might be met at a cost to society. For instance, more than 400 000 people were laid off as a result of the shutdown of small coal-fired power plants in the past four years. Many studies indicate that the effort to curb greenhouse gas emissions may delay China's development, affect people's income, and lead to unemployment.

Questions:

- I. What is the passage mainly about?
2. From four years ago until August this year, how many kilowatts of coal-fired plant capacity will have been closed?
3. By 2020, what will be the proportion of non-fossil energy in the total power in China?
4. Which of the following is true of the investment by China and the United States in clean energy last year?
5. Which of the following is NOT mentioned in the passage as a problem arising from curbing greenhouse gas emissions?

Key: D D A B C

V. Let's talk Disappointment over climate negotiations

Script

Man 1: Well, it's aspirational language which is nice and lovely and fluffy, but doesn't really actually commit anyone to doing anything. and so it's really hard to take to the bank. I mean, people's lives are on the line in the developing world where we are seeing the impacts felt first and foremost. And obviously the atmosphere simply can't take the kind of emissions we've been seeing in the business-as-usual scenario and there's no real commitment to change that. There's no real commitment to put serious money on the table and that's a big problem.

[on-screen text: Wind Farm]

This is a great photo op for all the world leaders, but if it's not backed by action, it really doesn't mean much at the end of the day.

Man 2: What's in there is very disappointing. It does not constitute a.. a deal. It's a hollow shell that will need to be filled in, and it has some numbers, it talks about trying to avoid two degrees. That's the same language that the G8 used last July. But it lacks anything on emissions cuts as yet that would guarantee that we're actually on the, on track to get there. And the financing commitments... there is a mention of a 100-billion-dollar figure and the attempt to raise or mobilise that level of resources, but there's no guarantee that there will be new money, that the money will be real, That there's actually a commitment to get there, or that it will be channeled in new ways, as yet.

Key

(1)-b (2)-a (3)-h (4)-d (5)-g (6)-e (7)-c (8)-f

VI. Further listening and speaking

Task 1 The environment and the development

Script

Li: Hi, Professor Wang, I'm Li Lin, a correspondent for the university newspaper. The staff and students here are getting more and more interested in the relationship between the environment and economic development. What do you think is the most serious environmental problem at present? What measures should we adopt to improve the environment and develop the economy at the same time?

Wang: There are many environmental problems: air pollution, water pollution, desertification, overfishing, destruction of natural habitats, acid rain, overconsumption of wild animals and plants, etc. But lying at the center of all those problems, as I see it, is the contradiction between economic growth and the environment.

Since the United Nations Earth Summit in 1992, growing number of people and governments have adopted the new idea of "sustainable development". This means today's economic growth should not wipe out the resources and options for future generations. Planning and development should ensure not only economic growth, but also social advancement and environmental health. In other words, some economic behavior must be restricted or controlled. Instilling principles of sustainable development into government planning, resource management and economic policy is the most important step China can take to solve its environmental problems.

China has already taken some remarkable steps to reduce damage to the environment. For instance, following the huge floods of 1998, the government banned logging in the upper reaches of the Yangtze River in order to protect forests and reduce the risk of floods.

Still, the basic contradiction between the environment and development persists. Much work is to be done before we can achieve the aim of a balance between economic growth and the environment.

Key:

- (1)water pollution (2) overconsumption (3) economic growth (4) resources
(5)social advancement (6) restricted (7)government planning (8)economic policy
(9)remarkable steps (10)balance

Task 2 Thick cloud of pollution covering southern Asia

Script

A United Nations study says a thick cloud of pollution covering southern Asia threatens the lives of millions of people. Scientists say the pollution could increase lung disease and cause early death. The cloud is also damaging agriculture and affecting rainfall levels. It has affected many countries in southern Asia. The pollution cloud is three kilometers high. Scientists say it can move halfway around the world in a week.

The cloud is the result of forest fires, the burning of: agricultural waste, and huge increases in the burning of fuels by vehicles, industries, and power stations.

Pollution from millions of bad cooking stoves has made the problem worse. Many poor people burn fuels like wood and animal waste in such stoves.

Scientists say the cloud of pollution appears to cool the land and oceans by blocking sunlight. They say it reduces the amount of sunlight reaching the Earth's surface by as much as 15 percent. At the same time, heat inside the cloud warms the lower parts of the atmosphere.

Scientists say this combination could be changing winter rainfall levels in Asia. They say rainfall has increased over the eastern coast of Asia. But it has dropped sharply over parts of northwestern Asia. The report says the cloud could reduce rainfall over northwestern Pakistan, Afghanistan, and western China by up to 40 percent.

Harmful chemicals from the cloud are mixing with rainfall. This acid rain damages crops and trees and threatens public health. Scientists are concerned that the pollution will intensify during the next 30 years as the population of Asia increases to an estimated 5,000 million people.

Questions:

1. What is true of the cloud of pollution?
2. What is NOT the cause of the cloud of pollution?

3. What does the cloud of pollution bring about?
4. Why will the pollution intensify in the next 30 years?
5. What is the main idea of the passage?

Key: D B A C C

Task 3 Mountain regions face a number of dangers

Script:

Mountain people around the world are in great danger of the (S1)negative effects of the worsening environment, according to a UN (S2)report.

As global(S3)warming and deforestation accelerate and technology makes wilder places more accessible, environmental and social(S4)pressures on the world's remotest regions increase.

The UN has found that many (S5)mountainous regions-inhabited by one out of five of the world's people-are(S6)barely recognizable when they are compared to what they were like 60 years ago. This is mostly because forests were cut to (S7)make way for cattle grazing and agriculture.

The authors of the UN study (S8)expect 98 percent of the mountain areas to experience severe climate change by 2055.

Biological losses are expected to be heavy. The mountains of Europe, parts of California and the northwest Andes in South America are among the most threatened mountain areas in the world and should be given priority in conservation.

(S9)The UN is anxious to raise awareness of the problems facing mountain areas because they inhabited by some of the most vulnerable people. These people could lose their culture and their livelihood with even the smallest shifts in climate.

At the same time, many mountain regions are losing people. (10)Thousands of villages in Europe are deserted most of the year. In other areas like Nepal, people are drifting to the cities in search of work.

Viewing and speaking Santa's home town in danger

Script and key

Weather experts may have found a new problem caused by global warming, one which many people will pay attention to. There are (1)signs that Santa's home in the North may be in trouble because of (2)warmer temperatures.

The Finnish town of Rovaniemi on the Arctic Circle, which many Europeans say is the home of Santa Claus, has had its (3)warmest winter in 40 years. As a result, there has been much less snow than usual--meaning no snowmen, no snowballs, and possibly not enough (4)snow for Santa to ride his sleigh on.

More important for local residents, it may mean fewer tourists, as well. Santa's wintry home town normally (5)attracts thousands of visitors each year, and millions of dollars.

Anne Pelttari-Bergman, the town's tourist director, worries that the town could be in (6)trouble if snow levels do not return to (7)normal. She explains: "Snow is really important for us, of course, for Santa Claus, for Christmas tourism and also for our winter tourism because winter is our(8)best season. It is really important for us."

Weather experts and town residents are hoping this warm winter is a (9)one-time thing. Few people can imagine a holiday when even Santa does not have a (10)white Christmas.

2. For reference

1)The image of Santa Claus flying in a sleigh pulled by reindeer and leaving toys and gifts for every child is known worldwide, and Santa Claus has become the most beloved of Christmas symbols. But if the weather at Santa's home town were to become so warm that there was no more snow at Christmas, Santa Claus would lose his charm.

So snow is really important for Santa Claus, for his home town's Christmas tourism, and its winter tourism as winter is the best season in Santa's home town.

2) Although some people dislike severe cold winters in northern China, I hope northern China will remain cold. A warmer climate without snow in the North would be abnormal and cause problems, such as diseases and drought in spring. What's more, we would miss the beautiful snow scenes.

3) -Rises in sea level cause flooding in some coastal areas.

-Extinction of polar animals such as polar bears.

-Accelerate global warming and exert negative influences on the global climate.