

UNIT FIVE
BACK TO NATURE

Illustrative page and preview pp. 126-127

Monitor a discussion with your learners to go through the pictures.

SEQUENCE ONE: Listening and speaking pp. 128-131

ANTICIPATE p.128

Skills: - identifying types of climate areas
- identifying types of natural disasters Functions: - expressing and justifying opinion.

Key to task 1:

- The names of climate areas are mentioned on the map.
- The source is written at the bottom of the map.
- Warm temperature climate and desert climate.
- mountain – tropical.

Key to task 2:

- Drought can affect my country because it has a desert climate, especially in the South.
- Earthquakes " " because the north of ^{Algeria} is situated in a seismic zone. - Sandstorm " " owing to the desert climate.
- Floods " " because there occur sudden and heavy rainfalls in Autumn.

Key to task 3: Suggested answer (Several possible answers)

I think that the world climate is changing. It is becoming warmer. The winter seasons are becoming shorter and the summer seasons longer.

Listen and check p.129

Skills: -Listening/responding to a radio interview about pollution.

Listening Script

Part one:

Robert: This is 'Back to Nature'. I'm Robert Kidman. We're at 800-978-8254. And on the line with us now from Madison, Wisconsin, is Mike Richards, a climate specialist. Mike Richards, how are you?

Mike: Fabulous, thanks for asking.

Robert: Everybody is worried about high temperatures these days. My question then is: Is our climate really changing?

Mike: There's no doubt at all that our climate is changing. The earth is getting warmer. Our studies show that four years out of the last ten have been the hottest since records began. The cause is carbon dioxide in the air. Its volume has increased a lot because of the burning of oil, coal and wood. This carbon dioxide has enveloped the earth in a sort of greenhouse, you know the type of plastic houses where farmers grow vegetables. This greenhouse traps the heat from the sun. It doesn't let it go out, so the temperature will continue to rise if we don't reduce carbon dioxide emissions. And we believe that within the next hundred years or so, the earth will have heated up by four degrees. Yes, our climate is rapidly changing.

Part two**Robert:** But what will happen if the climate really changes?**Mike:** A lot of things will happen. You know if the earth gets hotter, the glaciers will melt. And if the glaciers melt, the volume of the water in the seas will increase, and the level of sea water will rise. This will cause flooding. As a result, vast areas of the Indian coast, Bangladesh, Holland and even London will be under water.**Robert:** Are there any other effects you haven't mentioned?**Mike:** I'm afraid there are many other effects. For example, if the climate changes, the winds and rain will change. Some regions will have more storms. These storms will destroy crops, houses and kill a lot of people. On the contrary, vast areas of the world – the United States of America and Russia, North Africa will suffer from lack of rain. This lack of rain, I mean the drought, can transform these areas into desert. As a result, we will have less food to eat and less water to drink. This is why we scientists are raising the alarm about global warming which is really a question of life and death to us humans.**Key to task 1:**

The world climate is changing because the volume of carbon dioxide in the air has increased as a result of the burning of oil, coal and wood.

Key to tasks 2/3:

The sea level will...	The food producing areas will...	The temperatures will...	The coastal areas will...
rise.	become deserts.	go up.	be under water

Key to task 4:

- The gas which is responsible for global warming is carbon dioxide.
- He compares it to a greenhouse, a type of plastic house where farmers grow vegetables.
- It is called so because carbon dioxide traps the heat from the sun, just like a greenhouse.
- We can reduce high temperatures by reducing the volume of CO₂ emissions.
- The climate specialist is worried about climate change.

Evidence from the interview: 'Everybody is worried about high temperatures these days'; 'scientists are raising the alarm about global warming'; 'a question of life and death to us humans'.

Say it clear p.130

Phonology: - intonation in yes/no questions and complex sentences.
- stress in words ending in '-tion' / '-sion'

Key to tasks 1/2:

A: Is the earth really getting warmer? ↗

B: It's absolutely certain. The earth's getting warmer. ↘ ↘

A: And why does it matter if the world gets warmer? ↘

B: Oh, it matters a lot. If the earth gets hotter, the sea level will rise. ↘ ↘

Key to task 3:

Verb	Noun		Verb	Noun
pollute	pollution		contaminate	contamination
preserve	preservation		deforest	deforestation
conserve	conservation		destroy	destruction
emit	emission		degrade	degradation

Key to task 4:

We notice that in the verbs, stress is usually on the second syllable, and in nouns (ending in – tion / sion), it is on the penultimate (second from the end) syllable.

The hidden message p.130

Gas emissions cause air pollution, and deforestation leads to the degradation of the soil.

Your turn p. 131

Skills: - talking about environmental issues

- Issuing warnings / SOS about pollution

Function: - expressing condition.

Language forms : - if-conditional

The learners will make as many dialogues as possible using the cues.

Say it in writing

Students will use the cues in **Your turn** task to issue warnings in the form of environmental SOSs. The latter are usually short.

Sequence two: Reading and writing pp.132-135

Skills: - Interpreting pictures

- Reading a newspaper article about pollution - Classifying types of pollution

Functions: - Describing - Expressing cause and effect

Anticipate p. 132

Key to task 1 :

A. Picture 1 is a photo. **(c)** Picture 2 is a cartoon. **(c)**

B. The focus in picture 1 is on the pesticide spray. **(b)**

The focus in picture 2 is on the lungs X-Ray. **(c)**

C. In the background of picture 1, there is a field. **(b)**

In the background of picture 2, there are cars and factories. **(a)**

D. In the foreground of picture 1, there is an aeroplane. **(b)** In the foreground of picture 2, there is a lungs X-Ray. **(a)**

Key to task 2: The best interpretation of the pictures is:

The two pictures above illustrate the causes and consequences of pollution.

Functions: - expressing suggestions/opinion - agreeing and disagreeing
 - arguing for and against - polite requests/interruptions
 Language forms: - I think... - In my opinion... - I agree / I disagree...
 - You're right... - I'm afraid you're wrong. - Could / can I...?

Key to task 1:

Stating words	An abrupt interruption	An expression for dealing with interruptions
Right, Well, So	I disagree with you.	Just minute. Let her
		finish, Peter.

Key to task 2:

Just a minute! / Can I come in here? / Could I say something?

Listening script: Task three

Chairman: Well, all in all, we have three suggestions. Let's discuss them in more detail and come to a decision. John?

John: To my mind, all three suggestions are good. It's OK for building car parks outside the town. But this solution alone can't work if we don't make public transport cheaper in town and parking more expensive in the centre of the town.

Mary: Could I say something?

Chairman: Yes, go on Mary.

Mary: I agree with John. I don't think any half-measures will work. Therefore, I say let's go for all three measures.

Chairman: What's your reaction to John's and Mary's suggestions, Peter?

Peter: I totally agree. It'll help a lot if we take all three measures at the same time. **Chairman:** Right, let's recapitulate. All of us agree that half measures won't work, so we have decided: One, to build cheaper car parks outside the town; two, to make public transport into and in the centre of the town less expensive; and three to make parking in town more expensive. Let's finish there.

- A- Building car parks outside the town.
- B- Making public transport cheaper in town.
- C- Making parking expensive in the centre of the town.

Key to tasks 4/5:

The topics can be as various as rubbish in the streets, open dumps, erratic building (urbanisation), noise pollution, etc...

Suggest other topics to the learners. One of the learners will conduct the meeting about the topic of the group and another one will take down the minutes. Direct the learners' attention to model meeting and minutes on page 136.

Sequence three: Developing skills pp. 138-139

Key to task 2: Suggested answers (5 = 100% certain)

All the answers are correct, but there are degrees of correctness as to what the author of the text seeks to do. The best answer is (e). The next best is (a), then come (b), (d) and (c).

Key to task 3:

It is an argumentative text because the author wants to persuade potential buyers that ECOCLEAN is a 'green' product.

Key to task 4:

- Want to do more to help the environment but not sure of? ↗
- Or think it's going to be expensive or too much time an effort? ↗

Key to task 5:

- Do you want to do more to help the environment and you don't know how?
- Or do you think it's going to be expensive or it's too much time an effort?

Key to task 6:

The author uses an informal/idiomatic register/style because s/he addresses the general public, such as housewives. S/he wants to make his/her message sympathetic. His/her purpose is to make him/herself understood and thus attract as many customers as possible.

Key to task 7:

Get the learners to follow the model given on page 138 (ECOCLEAN).

Stop and consider pp. 140-143

Language forms: - conditional types 0 / 1 / 2

- suffixes: -able/-al...
- quantifiers: all, most, half, ...

Key to tasks 1/2:

- 1- If plants do not get water, they die. (b)
- 2- If you don't wash yourself, you smell bad. (c)
- 3- If air gets hot, it rises. (a)
- 4- If you leave milk in the sun, it goes bad. (e)
- 5- If metal gets hot, it expands. (d)
- 6- If you pour water on fire, it goes out. (g)
- 7- If a car runs out of petrol, it stops. (f)

Note: If in the sentences above can be replaced by when. **Key to tasks 3/4:**

- a. **If we stop** traffic pollution, the air **will be** cleaner.
- b. **If I were** you , I **would not use** that soap. It contains many pollutants.
- c. **If we continue** to pollute our water sources, we **will die** of thirst.
- d. What **would happen if** Martians **landed** on earth?
- e. What will we do if we fail the exam this time?

Key to task 5:

If I were Prime Minister,

- | | |
|------------------------------------|---|
| a. I would/ 'd ban CFCs. | b. I'd limit toxic wastes. |
| c. I'd impose higher taxes. | d. I'd restrict traffic in towns. |
| e. I'd restore monuments. | f. I'd preserve plants and animal species. |

Key to task 6:

- A. a. Paper is a recyclable material.
- b. Co2 emissions are very toxic.
- c. Oil spills are harmful to the oceans and seas.

- d. Ecoclean isn't harmful to the environment.
- e. Noise is aggressive to the ears.
- f. The greenhouse effect is dangerous to the earth.
- g. Desertification is an ecological problem.
- h. This food is tasteless. It is not edible/eatable.

Note: There is a difference in meaning between edible and eatable. Check a dictionary and explain this difference in meaning to your learners.

- B.**
- 1- Beware! This product is **flammable/inflammable**.
 - 2- This is a **poisonous** product. Keep it out of children's reach.
 - 3- Keep off! **Radioactive** emissions!
 - 4- Never throw away this product! It's **recyclable**.

Key to task 7:

- 100% of it = all of it
- 97% of it = most of it
- 30% = some of it
- 3% = a little of it
- No water = none (of it)

Key to task 8:

- 40 of them = half of them
- the other 40 = the other half
- 60 of them = most of them
- about 10 = a few of them
- 12 of them = some of them
- no demonstrator = none of them

Sequence four: Consolidation and extension pp. 144-149

Skills: - reading articles about recycling and renewable energies - writing a letter of complaint
- writing a memo

Functions: - describing
- suggesting
- arguing

Language forms:

Morphology: prefixes: dis- / il- / im- / in- / ir- / un-

Phonology: - stress in words starting with prefixes

- problem consonants: /tj/ - /k/

Write it out pp. 144-145

Key to task1:

- a. They are called 'fossil fuels'.
- b. If we run out of the existing energy sources, there will be no fuel for our cars, buses, air planes, and no electricity for our computers and factories.
- c. Consequences of pollution mentioned in the text:
 - the environment is threatened.
 - man's existence on earth is in danger (contamination of water sources).
- d. We can solve the problem of energy shortage by using renewable energy such as the sun, the wind, the earth and the sea.
- e. The W.E.C. has identified six renewable energy sources.

Key to task 2: Suggested answers

- 1. Solar energy comes from the sun rays. **(c)**
- 2. Wind energy is derived from moving air. **(a)**
- 3. Geothermal energy is produced by heat inside the earth. **(b)**
- 4. Modern biomass energy is extracted from plant and animal residue. **(f)**
- 5. Ocean energy is generated by seawater movement and temperature changes. **(e)**

6. Small hydroelectric energy comes from small dams, such as those filled by melting snow. (d)

Key to task 3:

- a. The types of energy which can be produced in the different areas of our country are:
Solar: Algerian Sahara
Wind: Algerian coastal area ; Djurdjura; Aures; Ouarsenis ... Ocean: Algerian coastal area
Biomass: El-Harrach; Oran; Mitidja; Medjana; El-Houdna; Medea ... Geothermal: North-eastern area:
Collo; Jjel; Skikda ...
Hydroelectric: Kabylia; Khenchela; Batna; Chlef ...
- b. The most viable energy source for Algeria is solar energy because of its cleanliness and the availability of sun rays in the Sahara almost all the year round.
- c- Refer to the memo on page 148 for guiding your learners as to the layout of memorandums.

Work it out pp. 146-147

Key to task 1:

- a. Three solutions are suggested to solve the problem of rubbish: to reduce, to re-use and to recycle it.
- b. I would buy drinks in glass bottles because I can/could wash them and re-use them many times over.
- c. Re-using things reduces rubbish, and recycling others not only reduces litter but also allows us to make new products. They can add other items to the list

Key to task 2:

Monitor a discussion in class and let the learners decide on how to separate the rubbish contained in the dustbin . Some articles can be placed in different categories.

Key to task 3:

Do the same as in task 2 above.

Key to task 4:

I'm not a litter lout and I consider that it's worth making the effort of recycling my rubbish because this reduces the amount of litter in the environment. Another reason is that we can get new products from it.

Key to task 5:

I will give them to charities, like the Algerian Red Crescent, in order to help the needy.

Key to task 6:

Many alternatives can be found by the learners. (e.g., If I were a member of The Friends of the Earth, I would organise a cleaning campaign in my town. I would write a petition to the Prime Minister to ask him to ban products with heavy packaging....)

Work it out p.148

Key to task 1:

- 100% of the personnel = all - 30% = some
- 90% = most - 50%= half - 00% = none

Key to task 2:

- 1- Opening (B) 2- Problem (A)
- 3- Suggested solution (D) 4- Closing (C)

Key to task 3:

Follow the procedure recommended for the writing tasks in the second part of this book. Task 3 is a follow-up to task 2. So, refer your learners to the correction of task 2 for the plan of their memorandums .

Work it out p.149

Tasks 1 and 2

Follow the procedure indicated in the instructions.

Key to tasks 3/4/5:

Im-	In-	un-	ir-	il-	dis-	Words
x						pure
				x		legal
x						possible
				x		logical
		x				suitable
		x				drinkable
			x			responsible
x						moral
		x				effective
			x			regular
		x				significant

Key to task 6:

Pre fixes are usually not stressed. So, the stress pattern remains the same in all the transcribed words of task 3. The learners will simply add the transcriptions of the prefixes to the transcribed adjectives in the table.

Project workshop p. 150

Follow the procedure sketched out in the first two parts of this book.

Check your progress p. 151

Key to tasks 1/2:

The article will be about an environmental problem. (c)

Key to task 3:

- A. It has become an international problem because water and air pollution cross the borders of countries.
- B. Strong winds make air pollution travel very long distances.
- C. The author has mentioned acid rain **to support her/his idea that pollution is an international problem.** (a)

Key to tasks 4/5:

The author of the article will define what acid rain is and will give a concrete example of this pollution to support further her/his point of view. (b)

Key to task 6:

To understand what acid rain is and how it travels long distances, imagine a factory in Britain. The factory needs energy for its manufacturing, so it burns oil or coal. These fuels have a high Sulphur (S) content which turns into Sulphur Dioxide (SO₂) after the burning of the oil or coal. The Sulphur Dioxide goes up from the factory chimney into the air.

Though/Although some of the Sulphur Dioxide, which has come out of the factory chimney, lands in the streets around the factory, most of it will cross the English Channel to other lands far in the north and the south of the European continent because of strong winds. During its journey abroad, the Sulphur Dioxide mixes with water (H₂O). **As a result / consequence**, acid clouds (H₂SO₄) form in the air.

Key to task 7:

The author thinks that there are many factories that pollute the environment in Britain since he uses the conditional type 2. 'Only one factory' is unreal.

Key to task 8:

If there were only one factory doing this, there would be no problem. However, Europe is such an industrialised area that it sends about 20 million tons into the air every year. Each nation has thousands and thousands of factories which produce hundreds of thousands of tons of poison every year and then sends it abroad with the help of strong winds. **(b)**

Key to task 9: 1- Some/ a few 2- all 3- most 4- some

Key to task 10:

- 1- Ø 2- **the** 3- Ø 4- **the** 5- **the** 6- **the**
- 7- **the** 8- **the** 9- **the** 10- Ø 11- Ø 12- Ø
- 13- Ø 14- **a shortage of water** 15- a 16- **the**

Key to task 11: The author uses the words in bold type in the text because he enumerates/lists some different types of pollution.

Key to task 12:

Almost all industries have used poisonous chemicals for decades. **These** industries simply get rid of their toxic waste by putting it in open-air dump sites. **These** dump sites have become a real problem in some developed countries, which send their toxic waste abroad.

Nations are running out of places to bury their rubbish. **The** problem is that items of household trash, such as used batteries, are poisonous. **Some** developing countries have accepted, for a few dollars, to open dumps in their own territories for household rubbish coming from developed countries.

Key to task 13/14:

Check Daniel Jones' s, *Cambridge English Pronouncing Dictionary* (16th edition) or any other English dictionary with phonetic entries.

Key to task 15:

Conclusion **b** is more hopeful: Some countries have already promised to cut down on some sources of air and water pollution. They signed the Kyoto Treaty.

Key to task 16:

Refer to the listening script of the textbook on page 154 for ideas about climate change.

Questionnaire

Follow procedure as sketched in the first part of this book.