

SEQUENCE ONE: LISTENING & LISTENING SPEAKING

ANTICIPATE

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

Skills: -1-Identifying the word 'climate'.

Have you ever wondered why one area of the world is a desert, another a grassland, and another a rainforest? Why are there different forests and deserts, and why are there different types of life in each area? The answer is climate.

Climate is the characteristic condition of the atmosphere near the earth's surface at a certain place on earth. This includes the region's general pattern of weather conditions, seasons and weather extremes like hurricanes, droughts, or rainy periods. Two of the most important factors determining an area's climate are air temperature and precipitation.

World biomes are controlled by climate. The climate of a region will determine what plants will grow there, and what animals will inhabit it. All three components, climate, plants and animals are interwoven to create the fabric of a biome.

-2- Identifying types of climate areas.

► The different types of climate can be described as follows:

- 1- Tropical climate – hot –
- Equatorial climate / tropical continental climate/ Hot desert climate
- 2- Subtropical climate - Warm temperate –
- Mediterranean climate.
- 3- Polar climate - Cool temperate, cold –
- Arctic & Antarctic climates.

-3- Identifying types of natural disasters Functions: - expressing and justifying opinion.

1* Avalanche/Landslide* can cause extensive damage to anything in its path.

2* Blizzard

3* Drought

4* Earthquake*

5* Flood*

6* Heat Wave

7* Hurricane*

8* Typhoon

9* Cyclone

10* Mudslide* leads to financial, structural, and human losses.

11* Tsunami

12* Volcanic Eruption

13* Wildfire*

1. Look at the map and answer the questions below.

a. Say the names of climate areas in the map in your own language. Then listen and read them aloud in English.

► *Monsoon* is derived from the Arabic word "موسم" (*mawsim*'), which means season.

b. Say aloud the source of the world climate map above.

► www.worldclimate.com is the source of the world climate map above.

c. Identify the type (s) of climate areas, which you have in Algeria and in your region.

► **Tropical climate in the North & dry climate in the South**

► **Mediterranean warm temperature climate and desert climate**

d. Identify on the map the climate areas where you have rainforests.

► **There are rainforests in tropical areas in mountains.**

2. Read the definitions of the natural disasters below and say which of them can affect your country.

Justify your answer.

-**blizzard** = violent and heavy snowstorm

- **drought** = long period of dry weather

- **earthquake** = sudden movement of the earth surface

- **flood** = inundation caused by overflowing of water
- **hurricane** = violent wind storm
- **sandstorm** = violent wind carrying sand
- **tsunami** = huge tide caused by shock of waves following an earthquake

- **Drought** can affect my country **because** it has a desert climate, especially in the South.
- **Earthquakes** can affect my country **because** the north of Algeria is situated in a seismic zone.
- **Sandstorm** can affect my country **because of** the desert climate.
- **Floods** can affect my country **because of** sudden and heavy rainfalls in autumn.

3. Do you think the world climate is changing? Justify your answer.

I think / in my opinion / to my mind / according to me / from my standpoint / as far as I am concerned / that the world climate is changing. It is becoming warmer. The winter seasons are becoming shorter and the summer seasons longer.

"Whether the weather be fair or whether the weather be not, whether the weather be cold or whether the weather be hot, we'll weather the weather, whatever the weather, whether we like it or not!"

LISTENING AND SPEAKING

LISTEN AND CHECK

1. Listen to a radio interview and check your answer to question 3 on the previous page.

Unit Five / Script 1 (Listening and speaking)

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 does not let it go out, so the temperature will continue to rise if we do not 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.

The world climate is changing because the volume of carbon dioxide-CO₂ in the air has increased because of burning oil, coal and wood. This is called, pollution. It's man-made!

2. What do you expect the interviewee to say about the consequences of global warming in the second part of the interview. Tick (✓) in the right box below.

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 area 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 will kill a lot of people. On the contrary, vast areas 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 as deserts. 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

The sea level will...	The food producing areas will...	The temperatures will ...	The coastal areas will ...
rise	become deserts	go up	Become deserts

Remain the same	Be under water	Remain the same	Be under water
Drop	Produce more	Go down	Be under storms

3. Now listen to the interview again and check your answer to question 2 above

4. Listen -Unit Five/Script 1 (Listening and speaking) Part One: again to the interview and answer the questions below.

a. Which gas is responsible for global warming?

a. The gas, which is responsible for global warming, is carbon dioxide.

b. To what does Mike Richards compare the accumulation of this gas around the earth?

b. He compares it to a greenhouse, a type of plastic house where farmers grow vegetables.

c. Why is it called so? (Use the picture to explain to your classmates).

c. It is called so because carbon dioxide traps the heat from the sun, just like a greenhouse.

d. How can we reduce the high temperatures?

d. We can reduce high temperatures by reducing the volume of CO₂ emissions.

e. Is the climate specialist worried or indifferent about climate change? Pick out from the interview words and phrases that tell us about his attitude.

e. 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'.

LISTENING AND SPEAKING

YOUR TURN

Pair work: Look at the pictures and use the cues in boxes A and B to make a dialogue.

Example:

Ali: What will happen if we cut down the trees / don't stop deforestation / pollute the sea...?

Bashir: If... , fish will die.

- | | |
|--|--------------------------------------|
| - earth/ to become/ desert | - fish/to die |
| - animals/to lose/habitat | - seabirds/ get stuck/oil spill |
| - there/to be/less oxygen/atmosphere | - fishermen/to lose/jobs |
| - there/to be/more CO ₂ /atmosphere | - beaches/to be/ contaminate |
| - there/to be/less summer camping sites | - there/to be/less holidaymakers |
| - rain water /to erode/soil | - people/to have/ enough food/to eat |
| - plant species/ to disappear | |
| - climate/to change | |

CONDITIONAL TYPE 1 IF + PRESENT / WILL + VERB

SAY IT IN WRITING

Now write an SOS message (Save Our Souls = urgent call for help). Use the information contained in the boxes above.

Start like this:

Environmental threat!

- ♣ If you don't stop spilling oil into the sea now, ...
- ♣ Do you know what will happen / occur if ... ?

READING AND WRITING

ANTICIPATE

1. These pictures illustrate a magazine article. Look at them and circle the best answer in the box below.

- A. Picture 1 is: a. a cartoon.
b. a painting .
c. a photo.

- Picture 2 is: a. a poster.
b. a comic strip.

c. a cartoon

B. The focus in ...

Picture 1 is on : a the aero plane.

b. the pesticide spray.

c. the field.

Picture 2 is on : a. legs.

b. a head.

c. lungs

C. In the background of ...

Picture 1, there is: a. an ocean.

b. a field.

c. a football pitch

Picture 2, there are: a. cars and factories

b. oil refineries

c. trees

D. In the foreground of ...

Picture 1 there is: a. a stadium.

b. an aero plane / airplane

c. a pesticide spray

Picture 2 there is: a. a lung X-Ray.

b. a television screen

c. a theatre stage

2. Complete the sentence below.

☺ The two pictures above illustrate ...

a. the causes and consequences of pollution

b. the dangers of smoking

c. progress in medicine and agriculture

READING AND WRITING

READ AND CHECK

Skills: - reading and responding to a magazine article. - categorizing

Functions: - expressing cause and effect - describing

Language forms: - link words: as a result, consequently, ... - sequencers: firstly, secondly...

1 Read the text below and check your answer to exercise 2 on the previous page

Chemicals at War against Man

In the modern world, different forms of pollution take oxygen from the air, rivers and oceans. In our cities, vehicles and factories swallow oxygen, and their fumes poison the air with carbon dioxide (CO₂). This urban pollution spoils the air we breathe. It is the major cause of diseases such as lung and skin cancers. If nothing is done to reduce carbon dioxide emissions, most of us will die of these diseases.

In the countryside, fertilizers, which contain phosphorus and nitrogen, spill over into rivers. As a result, fish is dying in increasing numbers, and aquatic life is suffocating from lack of oxygen.

Rural pollution is as dangerous to man as urban pollution. For example, scientists at the University of Rochester (USA) have found that most pesticides used on food crops are toxic, and some of them are the main cause of Parkinson's disease, an incurable illness that afflicts one million Americans.

(Adapted from Paul Thacker, Popular Science, p. 35, July, 2001)

2. Read again the text above and answer these questions.

a. How do vehicles and factories poison the environment?

a- They swallow oxygen, and their fumes poison the air with carbon dioxide (CO₂).

b. Which gas is responsible for air pollution?

b- The gas responsible for air pollution is carbon dioxide - CO₂..

c. What are the main diseases caused by pollution in towns?

c- Pollution in towns causes lung and skin cancers.

d. How would you explain the negative impact of modern agriculture on people's health?

d- The negative impact of modern agriculture on people's health is that most pesticides used on food crops are toxic and can cause diseases.

3. Ask yourself some of the questions below and try to guess the meaning of the underlined words in the text above. Training sts to guess meaning of words from context.

- What **part of speech** is the word?
- It's a **verb** / a **noun** /an **adverb**.
- How do you know?
- Because it comes after "a" /It comes before a noun/It comes after a verb? It has a suffix "-ly" ...
- Look closely at the text. What help does the context provide?
-The word has a **synonym** in the text/ The word has an **antonym**/ The adjective derives from **NOUN**
disease = illness **rural pollution ≠ urban pollution** **dangerous =danger + suffix 'ous'**
- So the meaning of the word (for example swallow) in the text is a verb because **it is between two nouns**
- If you think it is necessary, look it up in the dictionary now.

READING AND WRITING

DISCOVER THE LANGUAGE

1. Read the text in the previous page & pick out two sentences, which are the close in meaning to the following:

Fish is dying because fertilizers, which contain phosphorus and sulphur, are carried into the river.

In the countryside, fertilizers, which contain phosphorus and nitrogen, spill over into rivers. As a result, fish is dying in increasing numbers, and aquatic life is suffocating from lack of oxygen.

2. Now analyze the sentence above and the sentences from the text and note how the cause-effect relationship is expressed in each sentence.

In the sentence from task 1, the cause effect relationship is expressed **through the use of the conjunction of subordination 'because'**.

- ▶ Fish is dying **because** fertilizers are carried into the river.
- ▶ Fish is dying **because of** fertilizers.

Statement because + sentence -cause / reason

Statement because of noun - cause / reason

In the sentences from the text, the cause effect relationship is expressed **through the use of the sentence connector 'as a result'. 'so', 'thus', 'consequently', 'therefore'....**

- ▶ **As a result**, fish is dying in increasing numbers, and aquatic life is suffocating from lack of oxygen.

As a result + sentence - effect / result / impact / consequence

We also notice that a reshuffling of the cause-effect relationship into an effect-cause relationship. Illustrate this reshuffling for your learners.

♣ **According to the text, causes / effects of pollution /transition to task 3**

3. Match each cause of pollution with its corresponding effect in the table below. Use the connectors and make any necessary changes in punctuation.

Cause	Connectors	Effect
a. Factories and vehicles release gases into the air.	As a result	2. The atmosphere is full of pollution.
b. CFCs destroy the ozone layer	so	1. The UV rays are not filtered
c. The atmosphere is loaded with acids	consequently	4. Acid rains destroy forests.
d. The UV rays reach the surface of the earth	Therefore / thus	3. People suffer from skin cancer.

a.	b.	c.	d.
2.	1.	4.	3.

4. Read the table below and make as many sentences as you can. Start like this:

a. The main / major / direct / cause of acid rain / water pollution / is ...

b. The main / major / direct / effect of water / air pollution / is ...

- 1- The main cause of acid rain is acid gas emission from power stations and cars.
- 2- The major cause of water pollution is sewage and oil spills.

- 3- The main effect of toxic waste is the creation of 'earth pollution'.
- 4- The major effect of factory and vehicle emissions is lung and skin diseases.

WRITE IT RIGHT

Now use the information in the box above to complete the two paragraphs below.

There are four different types of pollution. Firstly, there is air pollution. Its major cause is factory and vehicle emissions. Secondly, we have water pollution. This pollution results from sewage and oil spills. Thirdly, there is earth pollution. It comes from toxic waste. Finally, there is noise pollution. It is due mainly to cars and factories.

Pollution is a very serious problem because most of it comes from machines, which man has invented to satisfy his daily needs. For example, we use cars to travel from one place to another; however, these cars release gases into the air. Two of the consequences of this pollution are lung and skin diseases.

DEVELOPING SKILLS

1. Complete the table with information from the conversation below.

Starting words	An abrupt interruption	An expression for dealing with interruptions.
Right, well, so.	I disagree with you	Just a minute. Let him finish!

Chairman: Right. Can we start? The main purpose of this meeting is to discuss the problem of traffic pollution in our town. Would you like to begin, Mary? What have you got to say on the subject?

Mary: Well, I think that there are too many private cars in the streets. That's what causes traffic congestion and also pollution. Now the way to solve the problem in my opinion is to discourage people from using their cars in the city centre.

Chairman: So, you mean that people should use public transport in town. How do you feel about Mary's idea, John?

John: I like Mary's idea, but I can't really agree with her because many people need to use their cars, because they're dependent on them....

Peter: I disagree with you there John...

Chairman: Just a minute. Let him finish, Peter! What were you saying, John?

John: Well, I was saying that people are dependent on their cars and that's true....

2. Find in the tactics summary on the next page an expression that could make Peter's interruption in the conversation above less abrupt.

I disagree with you. / Could I say something? INTERRUPTING POLITELY

3. Now listen to the dialogue and complete the minutes below.

Unit Five / Script 2 (Developing Skills)

Chairman: Well, all in all, we've 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.

A- Building car parks outside the town.

B- Making public transport cheaper in town.

C- Making parking expensive in the centre of the town.

DEVELOPING SKILLS

Tactics summary for conducting a meeting

4. Group work: Use the tactics summary above to prepare a dialogue about any environment problem that your town or country faces. Conduct the meeting in turns.

STOP & CONSIDER

6. Read the reminder and do the exercises below.

You can derive adjectives from some English words by adding **suffixes such as:**

- able / ible – ous - al - ful /- less - ive - ic – ing

Example: fashion / fashionable courage / courageous economy-> economic / economical
wonder / wonderful care / careless attract / attractive
tradition / traditional pollute / polluting

If you know the meaning of suffixes, you will deduce the meaning of words from context.

A. Use the adjectives derived from the words in bold type to rewrite the sentences below.

- Paper is a material we can **recycle**. = Paper is a **recyclable** material.
- Co2 emissions contain many **toxins**. => CO₂ emissions are very **toxic**.
- Oil spills **harm** the oceans and seas. =>Oil spills are **harmful** to the oceans and seas.
- Ecoclean **doesn't harm** the environment. => Ecoclean is **harmless** to the environment
- A lot of noise **aggresses** the ears. =>Noise is **aggressive** to the ears.
- The greenhouse effect constitutes a **danger** to the earth. =>The greenhouse effect is **dangerous** to the earth.
- Desertification is a problem of **ecology**. => Desertification is an **ecological** problem.
- This food **has no taste**. You **cannot eat** it. => 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.

Edible = Fit to be eaten, especially by humans: edible roots; an edible mushroom.

Eatable = Fit to be eaten; edible: an eatable meal.

B. Look at the signs and write warnings using adjectives derived from the following words:

3. Radioactivity 1. flame 4. recycle 2. poison

1- Beware! This product is **flammable/inflammable**.

Flammable = Easily ignited and capable of burning rapidly; inflammable.

Inflammable = Easily ignited and capable of burning rapidly; flammable.

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**.

USAGE NOTE: Historically, **flammable** and **inflammable** mean the same thing. However, the presence of the prefix **in-** has misled many people into assuming that **inflammable** means "not flammable" or "noncombustible." The prefix **-in-** in **inflammable** is not, however, the Latin negative prefix **-in-**, which is related to the English. This prefix also appears in the word **enflame**. But many people are not aware of this derivation, and for clarity's sake it is advisable to use only **flammable** to give warnings.

CONSOLIDATION AND EXTENSION

WORK IT OUT

1. Read the text below and answer these questions:

a. What solutions to the problem of rubbish are suggested?

a. Three solutions are suggested: **Reduce, Re-use & Recycle or the 3 R's**

b. Would you buy drinks packaged in glass bottles or in plastic bottles? Why?

b. I would buy drinks in glass bottles because I can / could wash them & re-use them many times over.

c. Which of the solutions suggested suits you best? Justify.

c. The 3 R's solution is the best because we reduce the amount of rubbish by recycling and re-using it.

Don't be a litter lout!

Think about the item you plan to throw away. Maybe there's an alternative to disposal. It's true there is no solution to the problem of rubbish, but there are three things you can do to make less of it: **reduce, re-use and recycle it.**

We **reduce** the amount of trash we generate when we use fewer disposable items. For example, we can select products that have as little packaging as necessary. If we use these products, we will have less trash to dispose of.

When we **re-use** an item again and again, we also cut down on the volume of trash we discard. Pour yourself a glass of juice instead of drinking one from a juice box which you will throw away. **You can**

wash that glass and use it many times over.

When we **recycle**, we collect and separate items which we generally throw away. These items are then used to make new products. For example, we can recycle used **aluminum** into new cans... We can also recycle used plastic bottles and old newspapers. Recycling not only reduces the amount of trash we throw away but also protects the environment and conserves natural energies.

CONSOLIDATION AND EXTENSION

2. Have you really understood the text? If so, observe the contents of the dustbin below and classify them into three categories using the table below.

3. Now separate the recyclables according to the material they are made of.

Plastics	Paper	Metal	Any other
Plastic sandwich bags Plastic shopping Sacks Plastic yoghurt bottles	Old copybooks Sacks Newspapers Old books	Empty juice boxes Empty soda cans Food cans Tomato paste tins Empty used tooth paste tubes	Lettuce leaves Old vests / shoes Glass soda bottle

4. Making the best use of the information from the text, find two advantages for making an effort to recycle rubbish and complete the resolution below.

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.**

5. Now consider the reusables. How are you going to help reuse them? Choose alternatives from the checklist and justify any decision you will take.

- Reuse them myself. How?
- give them to charities like the Algerian Red Crescent
- distribute them to the needy
- Any other alternative.

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

6. Now, suppose you were a Friend of the Earth. What solutions would you suggest to solve the problem of waste products. Write a short paragraph starting like this:

If I were a Friend of the Earth , I would organize a cleaning campaign in my town. **I would write** a petition to the Prime Minister to ask him to ban products with heavy packaging.

PROJECT WORKSHOP MAKING

MAKING A CONSUMER GUIDE

Using the following notes, write a § about the following topic:

How can man save the earth from pollution and keep it blue?

- pollution / harmful effects/ man & his environment
- Solution / recycling or 3R's process / Recycle, Reuse, Reduce.
- Used materials/ plastic bottles/ collected
- Recycled in specialized factories
- New products / reused / resold /
- Quantity of rubbish reduced / less pollution
- Keep earth blue/ man to save himself