

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ «ЧЕРНІГІВСЬКА ПОЛІТЕХНІКА»**

**Кафедра іноземної філології**

**ENGLISH FOR ECOLOGY AND ENVIRONMENTAL STUDY**

Методичні вказівки  
до практичних занять та самостійної роботи  
для здобувачів вищої освіти першого (бакалаврського) рівня  
спеціальності *101 Екологія*  
Частина I

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**English for Ecology and Environmental Study.** Методичні вказівки до практичних занять та самостійної роботи для здобувачів вищої освіти першого (бакалаврського) рівня спеціальностей *101 Екологія* Частина I / Укл.: О. Б. Шендерук, В. А. Пермінова, С. В. Литвин. Чернігів : НУ «Чернігівська політехніка», 2023. 41 с.

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## Вступ

Методичні вказівки з англійської мови **English for Ecology and Environmental Study** призначені для практичних занять та самостійної роботи здобувачів вищої освіти спеціальності *101 Екологія* першого (бакалаврського) рівня вищої освіти.

Навчальний матеріал підбрано відповідно чинної робочої програми навчальної дисципліни ОК 1 - Іноземна мова зі спеціальності *101 Екологія* першого (бакалаврського) рівня вищої освіти та складається з семи розділів, в яких вивчаються екологія як наука, вплив екології на людину, проблеми екології, захист атмосфери, забруднення навколишнього середовища, забруднення води, забруднення пластиком, вторинна переробка, моніторинг навколишнього середовища тощо.

Кожен модуль містить текст для вивчаючого читання для введення фахового лексичного матеріалу та розширення професійних знань. Післятекстові вправи мають на меті розвиток усіх видів мовленнєвої діяльності студентів (читання, аудіювання, говоріння, письмо). Різноманітні вправи спрямовані на перевірку розуміння прочитаного, опанування лексики фахової тематики, формування професійної іншомовної комунікативної компетенції.

Методичні вказівки розраховані на здобувачів вищої освіти, які володіють базовим рівнем англійської мови.

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## MODULE 1

### ECOLOGY AS A SCIENCE

#### Unit 1

#### More young people suffering from 'eco-anxiety'

5th June, 2021

More and more children are suffering from "eco-anxiety". This is a condition that causes people to worry a lot about the future of Earth and the life on it. People worry about climate change, pollution and the loss of biodiversity. This has led education experts to call for more teaching in schools about climate change, wildlife and the environment. Many teachers say very little is taught in schools about climate change. Some teachers believe climate change should be taught to all year groups. The Teach the Future campaign group found that only four per cent of schoolchildren felt they knew enough about the climate crisis. The group said this is leading to more children to suffer from eco-anxiety.

Another campaign group, Earth Rangers, has taken action to address the problem of eco-anxiety. It said: "Eco-anxiety is not an official diagnosable disorder. However, it does affect children in very real ways. This includes feelings of fear, hopelessness and despair." It added: "It is important to research and understand the ways in which we can help children find effective strategies to cope with these feelings." Earth Rangers said schools should create conservation activities and help children to teach their parents about how to protect nature. The Earth Rangers president said more needed to be done to help children. She said: "Children are on the front lines of climate change."

Sources: *sky.com / globalnewswire.com / reuters.com*

#### Writing

There should be a new core subject in all schools called "How to Save Earth". Discuss.

**Chat** Talk about these words from the article.

suffering / eco-anxiety / worry / future / experts / environment / campaign / crisis / address / problem / disorder / fear / cope / feelings / conservation / nature / change

#### True / False

- 1) The article says most children suffer from ecoanxiety. T / F
- 2) Teachers want climate change to be taught more in schools. T / F
- 3) Teachers believe climate change should only be taught to teenagers. T / F
- 4) A group found only 40% of school children knew about climate change. T / F
- 5) Eco-anxiety is an official medical condition. T / F
- 6) Children feel fear and hopelessness because with eco-anxiety. T / F
- 7) A campaign group wants children to teach parents about climate change. T / F
- 8) The group said children are on the front lines of climate change. T / F

#### Synonym Match (The words are from the news article)

- |              |                  |
|--------------|------------------|
| 1. condition | a. deal with     |
| 2. loss      | b. instructed    |
| 3. experts   | c. support       |
| 4. taught    | d. specialists   |
| 5. crisis    | e. successful    |
| 6. address   | f. illness       |
| 7. affect    | g. emergency     |
| 8. effective | h. safeguard     |
| 9. protect   | i. disappearance |
| 10. help     | j. impact        |

### Discussion – Student A

- a) What is eco-anxiety?
- b) Do you think you could suffer from ecoanxiety?
- c) How much do you worry about things like climate change?
- d) How sad is it that children have eco-anxiety?
- e) What do you think about biodiversity loss?
- f) How much time should schools spend teaching about climate change?
- g) What do you know about climate change?
- h) What advice do you have for children with eco-anxiety?

### Phrase Match

- |                                       |                             |
|---------------------------------------|-----------------------------|
| 1. This is a condition that causes    | a. problem of eco-anxiety   |
| 2. pollution and the loss             | b. is taught in schools     |
| 3. education                          | c. with these feelings      |
| 4. teachers say very little           | d. and despair              |
| 5. leading to more children suffering | e. people to worry a lot    |
| 6. address the                        | f. be done to help children |
| 7. Eco-anxiety is not an official     | g. of biodiversity          |
| 8. feelings of fear, hopelessness     | h. diagnosable disorder     |
| 9. find effective strategies to cope  | i. from eco-anxiety         |
| 10. more needed to                    | j. experts                  |

### Discussion – Student B

- a) What do you think about what you read?
- b) Should eco-anxiety be an official disorder?
- c) How might eco-anxiety affect children?
- d) Are you hopeful or fearful about Earth's future?
- e) What do you think of conservation activities at school?
- f) What do you do to help protect our planet?
- g) Why are children "on the front lines of climate change"?
- h) What questions would you like to ask the Earth Rangers?

### Spelling

1. a idonocint that causes people to worry
2. worry about climate change, tpulolion...
3. the loss of isdivyiertbo
4. education trepxse
5. cagiamnp group
6. the climate iicrss
7. taken action to drsaeds the problem
8. an ilffoaic diagnosable disorder
9. fear, hopelessness and paidrse
10. find fveeftcei strategies
11. create rnsnoeioctav activities
12. how to protect artune

### Role Play

**Role A – Climate Change** You think climate change is the best school subject. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least important of these (and why): religious tolerance, business skills or nutrition.

**Role B – Religious Tolerance** You think religious tolerance is the best school subject. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least important of these (and why): climate change, business skills or nutrition.

**Role C – Business Skills** You think business skills is the best school subject. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least important of these (and why): religious tolerance, climate change or nutrition.

**Role D – Nutrition** You think nutrition is the best school subject. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least important of these (and why): religious tolerance, business skills or climate change.

### **Speaking – Schools**

Rank these with your partner. Put the best subjects to taught in schools at the top. Change partners often and share your rankings.

- Climate change
- Recycling
- Religious tolerance
- Coding
- Business skills
- Gender issues
- Nutrition
- Relationships

## **Unit 2**

### **WHO says 99% of people breathe unhealthy air**

7th April, 2022

The World Health Organization (WHO) has announced a shocking finding about the air we breathe. It has found that almost everyone on Earth breathes unhealthy air. The WHO made its air quality update ahead of World Health Day on April 7. The update reported that 99 per cent of the world's population breathes air that exceeds WHO air quality limits. It looked at data from over 6,000 cities in 117 countries. People living in lower- and middle-income countries breathe the poorest-quality air. Millions of people die in these countries because of pollution-related diseases. The WHO said: "After surviving a pandemic, it is unacceptable to still have 7 million preventable deaths...due to air pollution."

The WHO said its report highlighted the need to move away from fossil fuels. It asked governments to do more to reduce levels of air pollution. It said: "Current energy concerns highlight the importance of speeding up the transition to cleaner and healthier energy systems." It added that high gas prices, energy security, the dangers of air pollution, and climate change mean the world must be less dependent on fossil fuels. The WHO report included many recommendations for change. Among these were, "the exclusive use of clean household energy for cooking, heating and lighting," and to "build safe and affordable public transport systems and pedestrian- and cycle-friendly networks".

*Sources: who.int / abcnews.go.com / ft.com*

**Writing** There is no way we can improve air quality around the world. Discuss.

**Chat** Talk about these words from the article.

WHO / shocking / air / breathe / unhealthy / population / income / pandemic / report / fossil fuels / transition / energy / change / cooking / heating / transport

### True / False

- 1) The article says a WHO report on air quality is shocking. T / F
- 2) The WHO report looked at air quality in 117 cities. T / F
- 3) People who live in richer countries breathe the dirtiest air. T / F
- 4) The WHO said 7 million people die unnecessarily because of air pollution. T / F
- 5) The WHO said governments needed to lower their use of fossil fuels. T / F
- 6) The WHO said a move away from fossil fuels would lower gas prices. T / F
- 7) The WHO made one recommendation. T / F
- 8) The WHO wants better places for people to walk and cycle. T / F

### Synonym Match (The words are from the news article)

- |                   |                   |
|-------------------|-------------------|
| 1. finding        | a. change         |
| 2. exceeds        | b. standard       |
| 3. quality        | c. because of     |
| 4. unacceptable   | d. worries        |
| 5. due to         | e. goes over      |
| 6. highlighted    | f. suggestion     |
| 7. concerns       | g. discovery      |
| 8. transition     | h. inexpensive    |
| 9. recommendation | i. unsatisfactory |
| 10. affordable    | j. focused on     |

### Discussion – Student A

- a) What do you think about what you read?
- b) Why is air quality important?
- c) What do you think of fossil fuels?
- d) What is the best clean energy?
- e) Can you live without using fossil fuels?
- f) What will air quality be like in 25 years from now?
- g) Would you be happy to walk or cycle everywhere?
- h) What would you like to ask your government about air quality?

### Phrase Match

- |                                     |                           |
|-------------------------------------|---------------------------|
| 1. a shocking finding about         | a. WHO air quality limits |
| 2. air that exceeds                 | b. transport systems      |
| 3. lower- and middle-income         | c. pandemic               |
| 4. surviving a                      | d. friendly networks      |
| 5. 7 million preventable deaths     | e. away from fossil fuels |
| 6. the need to move                 | f. the air we breathe     |
| 7. the world must be less dependent | g. household energy       |
| 8. the exclusive use of clean       | h. due to air pollution   |
| 9. affordable public                | i. on fossil fuels        |
| 10. cycle                           | j. countries              |

### Discussion – Student B

- a) What do you know about the WHO?
- b) What do you think about air?
- c) What's the air quality like where you live?
- d) How worried are you about air pollution?
- e) How does polluted air affect our health?
- f) Who suffers most because of poor air quality?



- g) How can we make our air quality better?  
h) Do you think we will need to buy oxygen one day?

### Spelling

1. edanoncun a shocking finding
2. air that edseexc WHO air quality limits
3. middle-neoimc countries
4. because of pollution-related isesaesd
5. After surviving a eadpnicm
6. 7 million abeelperntv deaths
7. move away from ofsils fuels
8. the ntiaotnris to cleaner and healthier energy
9. be less enpedtdne
10. mcoerstmdaoenni for change
11. the eciveulxs use of clean household energy
12. dnarepeis and cycle-friendly networks

### Role Play

**Role A – Walk and Cycle More** You think walking and cycling more is the best way to save energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the worst of these (and why): using fans instead of air conditioners, using solar panels or using electric cars.

**Role B – Use Fans and Not A/C** You think using fans instead of air conditioners is the best way to save energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the worst of these (and why): walking and cycling more, using solar panels or using electric cars.

**Role C – Solar Panels** You think using solar panels is the best way to save energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the worst of these (and why): using fans instead of air conditioners, walking and cycling more or using electric cars.

**Role D – Electric Cars** You think using electric cars is the best way to save energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the worst of these (and why): using fans instead of air conditioners, using solar panels or walking and cycling more.

### Speaking – Energy Saving

Rank these with your partner. Put the best ways to save energy at the top. Change partners often and share your rankings.

- Electric cars
- Solar panels
- Less fast fashion
- LED lights
- Walk and cycle more
- Warmer clothes in winter
- Fans, not A/C
- Eat raw vegetables

## MODULE 2

### ECOLOGY PROBLEMS

#### Unit 3

##### Loss of nature will damage economies

12th May, 2010

We are causing so much damage to our planet that it will soon affect the global economy. This bleak warning is according to a new United Nations report called the Global Biodiversity Outlook (GBO). The paper says there are many important ecosystems on our planet that are in danger. These "tipping points" in our natural world are where man's negative impact on nature will start costing national economies. Examples of these are the deaths of coral reefs, the destruction of huge areas of forest, or major pollution of rivers. UN spokesman Ahmed Djoglaf said: "The news is not good. We continue to lose biodiversity at a rate never before seen in history - extinction rates may be up to 1,000 times higher than the historical...rate."

Scientists are worried that governments will not do enough to try to reduce the damage to the tipping points. World leaders will soon meet in Nairobi to discuss measures to tackle global biodiversity loss. They hope they can then create an international framework that will be adopted at a convention on biological diversity in October in Japan. The GBO report outlines how serious the threat is. It says huge numbers of species are facing extinction if we continue to pollute the environment. Over a quarter of corals may soon disappear. This will have a huge impact on marine life and many fish species will also disappear. Countries will be fighting over much smaller stocks of fish. This problem will be made worse with the increasing pollution of the world's rivers.

Sources: <http://www.breakingnewsenglish.com/1005/100511-nature.html>

**Writing.** Spend one minute writing down all of the different words you associate with the word 'ecosystem'. Share your words with your partner(s) and talk about them. Together, put the words into different categories.

**Chat.** Talk about these words from the article.

damage / our planet / biodiversity / national economies / coral reefs / extinction / scientists / international frameworks / threats / species / environment / pollution

##### True / False

1. A new United Nations report says loss of biodiversity costs economies. T / F
2. The report gives us tips on points to help nature. T / F
3. The report says all coral reefs have already died. T / F
4. The rate of biodiversity loss is 1,000 times higher than ever before. T / F
5. Scientists are confident governments will tackle the damage. T / F
6. World leaders will adopt a new biodiversity framework in October. T / F
7. The report says more than 25% of corals might soon become extinct. T / F
8. The article predicts pollution will cause fish to start fighting each other. T / F

##### Synonym Match (The words are from the news article)

- |               |                      |
|---------------|----------------------|
| 1. causing    | a. gloomy            |
| 2. bleak      | b. coming up against |
| 3. impact     | c. cut               |
| 4. huge       | d. supplies          |
| 5. extinction | e. effect            |
| 6. reduce     | f. chosen            |
| 7. tackle     | g. dying out         |

8. adopted
9. facing
10. stocks

- h. address
- i. creating
- j. enormous

### Discussion – Student A

- a) What did you think when you read the headline?
- b) What springs to mind when you hear the word ‘nature’?
- c) How important is nature to you?
- d) What do you think of man’s destruction of nature?
- e) Have you noticed any negative impact of humans on the environment?
- f) Do you take notice of these reports that environmental agencies bring out?
- g) Are you more worried about the destruction of coral reefs, forests or rivers?
- h) What do you think of the extinction rate given in the article?
- i) Do you think we can reverse the damage?
- j) What do you think of reintroducing species using their DNA?

### Phrase Match

- |                                |                             |
|--------------------------------|-----------------------------|
| 1. We are causing so much      | a. global biodiversity loss |
| 2. This bleak                  | b. impact on nature         |
| 3. there are many important    | c. seen in history          |
| 4. man’s negative              | d. facing extinction        |
| 5. a rate never before         | e. damage to our planet     |
| 6. do enough to try to         | f. on biological diversity  |
| 7. discuss measures to tackle  | g. reduce the damage        |
| 8. adopted at a convention     | h. warning                  |
| 9. huge numbers of species are | i. made worse               |
| 10. This problem will be       | j. ecosystems on our planet |

### Discussion – Student B

- a) Did you like reading this article?
- b) Is your government doing enough to protect your environment?
- c) How much of a “green” are you?
- d) What will it take for governments to get serious about biodiversity loss?
- e) Which are the worst countries for harming nature?
- f) Would you like to get back to nature?
- g) What measures should countries put in their international framework on biodiversity?
- h) Do you think there will be fish wars one day?
- i) What would you say to world leaders if you were a creature threatened with extinction?
- j) What questions would you like to ask the author of the U.N. report?

### Spelling

1. We are acusgni so much damage
2. This lbaek warning
3. ocesestyms on our planet that are in danger
4. man’s negative mipatc on nature
5. the eadhts of coral reefs
6. We continue to lose oibdiversyti
7. at a tear never before seen in history
8. to reduce the adamge
9. to discuss emasurse
10. species are facing xetinctoin

### Role Play

**Student A** strongly believe our environment will not survive.

**Student B** strongly believe it will.

**Students C - Coral reefs** Speak about the destruction of the world's coral reefs. Include imaginary interviews with the leader of your country and a fish whose coral is threatened with extinction.

**Students D - Country's leader** Give some pieces of advice on how to protect the environment.

### **Speaking - THREATS:**

What are the biggest threats to our planet? Rank these and share your rankings with your partner. Change partners and share your rankings again.

- Deforestation
- Pollution
- Nuclear war
- Climate change
- Species extinction
- Deadly viruses
- Overpopulation
- Globalization

## **Unit 4**

### **Fast fashion is harming the environment**

10th February, 2022

Environmentalists are getting more worried about the effects of fast fashion on the environment. Fast fashion is the mass production of clothes at a low cost. They are put in shops and online quickly to create a high demand. Manufacturers make 100 billion items of clothing every year. This is expected to grow by 60 per cent by 2030. The fast fashion business model is having a negative effect on the environment. Many of the clothes end up in landfills and are not recycled. Another negative effect on the environment is caused by the chemicals used to make the clothes. These cause health problems for people working in clothes factories. There are reports children make many of these clothes.

The way people are buying clothes is adding to the problem of clothing waste. Many years ago, people went to stores and tried clothes on. People took more time and thought more carefully before they bought clothes. They also wore them for longer. Today, people order cheap clothes on the Internet and if they don't like them, they send them back. Some people say this is causing a throwaway society. Some people buy clothes and never even wear them. The German media company Deutsche Welle wrote: "Every year in Europe, four million tons of clothing ends winds up in the trash. Less than one per cent of this is recycled." It seems the fashion industry is not so sustainable.

*Sources: dw.com / abc.net.au / bbc.com*

### **Writing**

We should wear clothes until they get holes in them. Discuss.

### **Chat**

Talk about these words from the article.

environmentalist / fast fashion / mass production / clothing / negative / chemicals / waste / cheap / Internet / throwaway / media / society / trash / recycled / industry

### True / False

- 1) Environmentalists are worried about fast and slow fashion. T / F
- 2) Clothes makers make 100 billion items of clothing annually. T / F
- 3) Fast fashion will be 60% bigger by the end of this decade. T / F
- 4) No children are involved in making clothes any more. T / F
- 5) Fast fashion has changed people's shopping habits. T / F
- 6) People used to take their time when they shopped for clothes. T / F
- 7) The article says we all buy clothes that we never wear. T / F
- 8) Less than 1% of clothes thrown away in Europe are recycled. T / F

### Synonym Match (The words in bold are from the news article.)

- |               |                  |
|---------------|------------------|
| 1. worried    | a. create        |
| 2. production | b. impact        |
| 3. items      | c. disposable    |
| 4. effect     | d. manufacturing |
| 5. cause      | e. inexpensive   |
| 6. bought     | f. finishes      |
| 7. cheap      | g. concerned     |
| 8. throwaway  | h. purchased     |
| 9. ends up    | i. reused        |
| 10. recycled  | j. articles      |

### Discussion – Student A

- a) What do you think about what you read?
- b) What do you know about fast fashion?
- c) What is so wasteful about fashion?
- d) What do you think of wearing something just a few times?
- e) How can we recycle clothes?
- f) Have you ever bought clothes and not worn them?
- g) What do you think of buying used clothes?
- h) What questions would you like to ask an environmentalist?

### Phrase Match

- |                                       |                          |
|---------------------------------------|--------------------------|
| 1. the mass                           | a. for longer            |
| 2. This is expected to grow by        | b. on the environment    |
| 3. a negative effect                  | c. production of clothes |
| 4. the chemicals used to              | d. clothing waste        |
| 5. children make                      | e. 60 per cent by 2030   |
| 6. adding to the problem of           | f. so sustainable        |
| 7. They also wore them                | g. many of these clothes |
| 8. this is causing a throwaway        | h. up in the trash       |
| 9. four million tons of clothing ends | i. make the clothes      |
| 10. the fashion industry is not       | j. society               |

### Discussion – Student B

- a) What do you think of fashion?
- b) What do you think of fast fashion?
- c) How important is fashion?
- d) How sustainable is fashion?
- e) How long do you keep an item of clothing for?
- f) Should we wear clothes until they get holes in them?

- g) Should we all wear the same clothes?  
h) How fashionable are you?

### Spelling

1. worried about the eeftscf of fast fashion
2. the mass opuictdonr of clothes
3. create a high dnmeda
4. Many of the clothes end up in llsdnialf
5. caused by the eahlcscim
6. working in clothes iacoerstf
7. adding to the problem of clothing aestw
8. thought more lerylafcu
9. before they hugbot clothes
10. a throwaway ticosye
11. one per cent of this is cdcelery
12. the fashion industry is not so abtsilesnau

### Role Play

**Role A – Poisonous Dyes** You think poisonous dyes are the most serious issue concerning fast fashion. Tell the others three reasons why. Tell them why their issues aren't as bad. Also, tell the others which is the least worrying of these (and why): plastic microfibres, landfills or child labour.

**Role B – Plastic Microfibres** You think plastic microfibres are the most serious issue concerning fast fashion. Tell the others three reasons why. Tell them why their issues aren't as bad. Also, tell the others which is the least worrying of these (and why): poisonous dyes, landfills or child labour.

**Role C – Landfills** You think landfills are the most serious issue concerning fast fashion. Tell the others three reasons why. Tell them why their issues aren't as bad. Also, tell the others which is the least worrying of these (and why): plastic microfibres, poisonous dyes or child labour.

**Role D – Child Labour** You think child labour is the most serious issue concerning fast fashion. Tell the others three reasons why. Tell them why their issues aren't as bad. Also, tell the others which is the least worrying of these (and why): plastic microfibres, landfills or poisonous dyes.

### Speaking – Fashion

Rank these with your partner. Put the most serious issues concerning fast fashion at the top. Change partners often and share your rankings.

- Landfills
- Child labour
- Waste
- Water usage
- Poisonous dyes
- Plastic microfibers
- Energy consumption
- Overconsumption

## MODULE 3

### ECOLOGICAL PROBLEMS OF BIG CITIES

#### Unit 5

#### Half the world in cities

Fri 18 Feb

A United Nations report on world population trends has provided some interesting food for thought on the future demographics of our planet. The world's population is currently 6.5 billion and is set to increase and level off to about 9 billion people. The report says population explosions will occur in Africa and Asia, but not in the rest of the world, "Considerable diversity exists in the expected population growth of countries. The population of many countries, particularly in Africa and Asia, will increase greatly in the coming decades." Conversely, population levels in developed countries are expected to fall, because of decreased fertility rates caused by increased contraceptive use. The report also indicates half of the world's population will be city dwellers by 2007. That is a huge jump from the figure of 30% urbanization in 1993. The five most populated cities today are Tokyo (35 million people), Mexico City (19 million), New York (18.5 million), Bombay (18.3 million) and Sao Paulo (18.3 million). In 1950 only Tokyo and New York had populations of more than 10 million people. By 2050 there will be 22 cities of that size. The report concludes, "the current population picture is one of dynamic population change, reflected in new and diverse patterns of childbearing, mortality, migration, urbanization and ageing. The continuation and consequences of these population trends present opportunities as well as challenges for all societies in the twenty-first century."

Sources: *dw.com / abc.net.au / bbc.com*

**Writing** Write about population trends in your country. Which are the biggest cities? Are people moving into the cities? Is this good?

**Chat** Talk in pairs or groups about population / living in cities / interesting statistics / mega cities / migration / urbanization / ageing / ...

**TRUE / FALSE:** Predict whether the following statements about the article are true or false:

- A United Nations report on world population trends talks about interesting food. T / F
- The world's population is currently 6.5 billion. T / F
- The report says population explosions will occur in Europe and Japan. T / F
- The population levels in developed countries will fall because of increased contraceptive use. T / F
- Half of the world's population will be city dwellers by 2007. T / F
- Bombay is currently the world's most populated city. T / F
- In 1950 only two cities had a population of over 10 million. By 2050 that number will increase to twenty-two. T / F
- Population trends will present opportunities as well as challenges for all societies in the twenty-first century. T / F

**SYNONYM MATCH:** Match the following synonyms from the article:

- |                      |               |
|----------------------|---------------|
| (a) report           | happen        |
| (b) food for thought | in contrast   |
| (c) occur            | outcomes      |
| (d) diversity        | statistics    |
| (e) conversely       | birth control |
| (f) contraceptive    | vigorous      |

- (g) dwellers
- (h) jump
- (i) dynamic
- (j) consequences

- leap
- variety
- document
- inhabitants

**DISCUSSION:**

- a. What do you think of this article – interesting food for thought?
- b. Are you pessimistic or optimistic about the future of our world?
- c. Do you prefer the city or the country?
- d. What is the attraction of cities?
- e. What problems will increased urbanization create?
- f. What will happen to the depopulated countryside?
- g. Who will grow all the food?
- h. What will be the consequences of population explosions in Africa and Asia?
- i. Would you like your city / town / village to double in size in the next ten years? j. Should contraception be encouraged to prevent population explosions?
- k. Is mass migration a good thing?
- l. If you had to, where would you migrate?
- m. Which of these cities would you most and least like to live in - Tokyo, Mexico City, New York, Bombay, Sao Paulo?
- n. What are the biggest opportunities and challenges for the world in the twenty-first century?
- o. What will you be doing in 2020, 2030, 2040, 2050?

**Phrase Match** Match the following phrases based on the article

- |                                     |  |
|-------------------------------------|--|
| (a) world population                | off to about 9 billion people            |
| (b) interesting food                | of that size                             |
| (c) set to increase and level       | jump from the figure of 30%              |
| (d) The report says population      | concludes                                |
| (e) will increase greatly in        | as challenges for all societies          |
| (f) That is a huge                  | explosions will occur in Africa and Asia |
| (g) By 2050 there will be 22 cities | trends                                   |
| (h) The report                      | for thought                              |
| (i) reflected in new and            | the coming decades                       |
| (j) present opportunities as well   | diverse patterns                         |

**FOOD FOR THOUGHT:**

Talk about the following conclusions of the report on world demographic trends:

- a. The world’s urban population is increasing rapidly, and is expected to increase from today’s 3.2 billion people to about 5 billion in 2030. Half the world’s population is expected to live in urban areas by 2007.
- b. The proportion of older people is expected to continue rising well into the twenty-first century. As the pace of population ageing is much faster in the developing countries than in the developed ones, developing countries will have less time to adjust to the consequences of population ageing.
- c. Most developed countries exhibit fertility levels at or below the replacement level. Some developing countries, mainly in Africa, still exhibit high fertility.
- d. Contraceptive use has increased significantly over the past decade, from 54 per cent in 1990 to 63 per cent in 2000.
- e. During the twentieth century, mortality experienced the most rapid decline in the history of humanity, owing to better hygiene, improved nutrition and medical practices.
- f. HIV/AIDS has already produced marked increases in mortality in Africa, the region most affected by the disease.



- g. About 175 million persons reside in a country other than the one in which they were born. The number of migrants more than doubled between 1960 and 2000.
- h. Developed and developing countries differ significantly with regard to their population concerns. High mortality, particularly infant and child mortality, maternal mortality and mortality related to HIV/AIDS, is the most significant population concern for developing countries. The most significant demographic concern of the developed countries relates to low fertility and its consequences, including population ageing and the shrinking of the working age population.

**Speaking** Create a plan of action for the doubling in population size of your city / town / village over the next ten years.

## Unit 6

### Air pollution damages intelligence, says study

1st September, 2018

Scientists have revealed that air pollution may be responsible for a significant reduction in intelligence. Research conducted for the World Health Organization (WHO) in China showed that air pollution was responsible for notable falls in student test scores for languages and arithmetic. The Chinese study is called, "The impact of exposure to air pollution on cognitive performance". It was published in a journal called, "Proceedings of the National Academy of Sciences". The study took place over a period of four years. Researchers analyzed verbal and arithmetic tests taken by 20,000 people of all ages. They said: "Polluted air may impede cognitive ability as people become older."

Researchers say their study is a warning to the rest of the world, especially to those who live in cities. The WHO says over 91 per cent of the world population live in areas with toxic air. Air pollution is currently the fourth highest cause of deaths worldwide. The researchers discovered that the longer people were exposed to polluted air, the greater was the damage to their intelligence. They equated the impact of air pollution to losing a year's worth of education. For those aged over 60, this could be the equivalent of several years of lost education. Researcher Dr Xi Chen warned: "There is no shortcut to solve this issue. Governments really need to take concrete measures to reduce air pollution."

*Sources: independent.co.uk / timesofmalta.com / sky.com*

**Writing** There is no way to win the fight against air pollution. Discuss.

**Chat** Talk about these words from the article.

scientists / reduction / responsible / test scores / impact / exposure / performance / warning / the rest of the world / population / damage / intelligence / education / issue

**True / False**

- a) Scientists say air pollution leads to big reductions in intelligence. T / F
- b) Scientists said pollution reduced language and arithmetic test scores. T / F
- c) Scientists conducted the research over a fouryear period. T / F
- d) Around 20,000 teenagers took a test in the research. T / F
- e) About 91% of people live in areas with very polluted air. T / F
- f) Air pollution is the biggest cause of death worldwide. T / F
- g) Scientists said air pollution caused a loss of 10 years' education. T / F

h) A researcher said there were plenty of shortcuts to solve this problem. T / F

**Synonym Match** (The words are from the news article)

- |                |              |
|----------------|--------------|
| 1. revealed    | a. effect    |
| 2. significant | b. lessen    |
| 3. impact      | c. hinder    |
| 4. period      | d. poisonous |
| 5. impede      | e. serious   |
| 6. warning     | f. issued    |
| 7. toxic       | g. shown     |
| 8. published   | h. work out  |
| 9. solve       | i. timeframe |
| 10. reduce     | j. caution   |

**Discussion – Student A**

- a) What is the air quality like where you live?
- b) What problems does air pollution cause?
- c) What causes air pollution?
- d) What do you do that contributes to air pollution?
- e) How would society change if people became less intelligent?
- f) How good are you at arithmetic and languages?
- g) How worried are you about air pollution?
- h) How intelligent are you?

**Phrase Match**

- |  |                         |
|--|-------------------------|
| 1. responsible for a significant reduction   | a. worth of education   |
| 2. notable falls in                          | b. period of four years |
| 3. cognitive                                 | c. become older         |
| 4. The study took place over a               | d. measures             |
| 5. impede cognitive ability as people        | e. student test scores  |
| 6. their study is a warning to the           | f. solve this issue     |
| 7. live in areas with                        | g. rest of the world    |
| 8. losing a year's                           | h. in intelligence      |
| 9. There is no shortcut to                   | i. toxic air            |
| 10. Governments really need to take concrete | j. performance          |

**Discussion – Student B**

- a) What do you think about what you read?
- b) Would you move house to avoid air pollution?
- c) Do we need to rethink the need for cities?
- d) Will air pollution get better or worse?
- e) What is your government doing about air pollution?
- f) Should people be able to sue polluters?
- g) What 'concrete measures' can governments take to cut air pollution?
- h) What questions would you like to ask the researchers?

**Spelling**

1. Scientists have edalvree that
2. a tisniacnfg reduction in intelligence
3. scores for languages and ihicaemrtt
4. oigictnve performance
5. published in a orualnj

6. dalyenza verbal tests
7. slcpiyleae to those who live in cities
8. currently the fourth highest usaec
9. They eqaeutd the impact of air pollution
10. the qvulieaten of several years
11. There is no tucorsht to solve this
12. take ctceeorn measures

### **Role Play Role**

**A – Sleep** You think sleep is the best thing for improving cognitive performance. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least effective of these (and why): exercise, diet or exam success.

**Role B – Exercise** You think exercise is the best thing for improving cognitive performance. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least effective of these (and why): sleep, diet or exam success.

**Role C – Diet** You think diet is the best thing for improving cognitive performance. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least effective of these (and why): exercise, sleep or exam success.

**Role D – Exam Success** You think exam success is the best thing for improving cognitive performance. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least effective of these (and why): exercise, diet or sleep.

### **Speaking – Cognition**

Rank these with your partner. Put the best things for improving cognitive performance at the top. Change partners often and share your rankings.

- teachers
- practice
- walking
- exam
- success
- studying
- sleep
- exercise
- diet

## MODULE 4

### DIFFERENT TYPES OF ENVIRONMENTAL POLLUTION

#### Unit 7

#### Light pollution linked to insect loss

28th August, 2021

Scientists have discovered that street lights and other forms of artificial lighting could be behind a decline in insect populations. Researchers from the UK Centre for Ecology and Hydrology conducted studies on the number of insects living near sources of white light from light-emitting diodes (LEDs). The researchers said LEDs are responsible for disrupting insect behaviour and for causing a drop in their numbers. Lead researcher Douglas Boyes said the results of his study were "eye-opening". He was surprised at the extent of the insect loss due to LEDs. He found a 47 per cent reduction in insect populations at hedgerow test sites and a 37 per cent reduction at roadside grassy areas.

Mr Boyes and his team set up LEDs at 26 roadside sites in the countryside that contained either hedges or grass verges. The researchers counted the numbers of moth caterpillars found at these sites and compared these with insects found at unlit sites. Boyes commented on the difference. He said: "We were really quite taken aback by just how stark it was." He posited that LEDs led to two drastic changes in behaviour. He said the most alarming discovery was that the lights stopped female insects laying eggs in the lit areas. Another disruption was that the lighting disturbed the feeding behaviour of the insects. The caterpillars in the unlit areas were heavier than those in the areas lit by LEDs.

Sources: *phys.org / bbc.com / msn.com*

#### Writing

We should reduce artificial lighting around the world to help insects. Discuss.

**Chat** Talk about these words from the article.

scientists / street lights / artificial / lighting / LEDs / insects / study / hedgerow / team / grass / moth / caterpillars / changes / behaviour / female / behaviour / unlit

#### True / False

- 1) Scientists say artificial lighting is cutting numbers of insects. T / F
- 2) A scientist said blue light is the biggest culprit in harming insects. T / F
- 3) The researcher said people needed to open their eyes regarding insects. T / F
- 4) The researcher said LEDs led to a 47% decline in insects at hedgerows. T / F
- 5) Researchers counted the numbers of butterfly caterpillars. T / F
- 6) A researcher said his findings did not surprise him. T / F
- 7) The researcher said LED lighting stopped insects laying eggs. T / F
- 8) Caterpillars were heavier in places with no LED lighting. T / F

**Synonym Match** (The words in bold are from the news article.)

- |                |                |
|----------------|----------------|
| 1. artificial  | a. shocked     |
| 2. decline     | b. scale       |
| 3. conducted   | c. amazing     |
| 4. eye-opening | d. disturbance |
| 5. extent      | e. fall        |
| 6. set up      | f. illuminated |
| 7. counted     | g. established |
| 8. taken aback | h. manmade     |
| 9. disruption  | i. added up    |
| 10. lit        | j. carried out |

### Discussion – Student A

- a) What do you think about what you read?
- b) What role do moths play in nature?
- c) How do caterpillars transform into moths and butterflies?
- d) What would it be like to be an insect researcher?
- e) What three adjectives best describe this story?
- f) Can you sleep if there is artificial light?
- g) Should we have street lights and other artificial lighting?
- h) What questions would you like to ask the researchers?

### Phrase Match

- |  |                             |
|--|-----------------------------|
| 1. street lights and other forms of artificial | a. behaviour of the insects |
| 2. a decline                                   | b. "eye-opening"            |
| 3. insects living near                         | c. laying eggs              |
| 4. the results of his study were               | d. of the insect loss       |
| 5. He was surprised at the extent              | e. in insect populations    |
| 6. We were really quite taken                  | f. in behaviour             |
| 7. two drastic changes                         | g. sources of white light   |
| 8. the lights stopped female insects           | h. were heavier             |
| 9. lighting disturbed the feeding              | i. aback                    |
| 10. caterpillars in the unlit areas            | j. lighting                 |

### Discussion – Student B

- a) What do you think of light pollution?
- b) What harm does light pollution do?
- c) In what ways does light pollution affect you?
- d) Why might artificial light harm insects and other creatures?
- e) What happens when the numbers of insects fall?
- f) Should we reduce the amount of artificial lighting?
- g) What do you think of bright, city lights?
- h) What do you think of insects?

### Spelling

1. other forms of ictlrafaii lighting
2. behind a neidcel in insect populations
3. white light from light-emtitnig diodes
4. ndurigptsi insect behaviour
5. surprised at the eettnx of the insect loss
6. insect populations at hodreegw test sites
7. contained either hedges or grass gevres
8. He ioeptds that
9. LEDs led to two crasitd changes
10. the most aargniml discovery
11. lighting udedsirbt the feeding behaviour
12. iarrctalleps in the unlit areas

### Role Play

**Role A – Ants** You think ants are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the worst of these (and why): worms, bees or spiders.

**Role B – Worms** You think worms are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the worst of these (and why): ants, bees or spiders.

**Role C – Bees** You think bees are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the worst of these (and why): worms, ants or spiders.

**Role D – Spiders** You think spiders are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the worst of these (and why): worms, bees or ants.

### **Speaking – Insects**

Rank these with your partner. Put the best insects at the top. Change partners often and share your rankings.

- Moths
- Ants
- Worms
- Dragonflies
- Beetles
- Bees
- Spiders
- Ladybird

## **Unit 8**

### **Groundwater pumping by humans has tilted Earth's axis**

19th June 2023

Perhaps it's only geophysicists who are aware of the importance of underground reservoirs on maintaining Earth's balance. Geophysicist KiWeon Seo from Seoul National University has discovered that humans have extracted so much groundwater from under our feet that they have changed the tilt of Earth's axis. This shift has been significant enough to physically relocate the geographic North Pole. The mass of polar ice is drifting by 4.36 centimetres a year. Professor Seo calculated that we extracted more than two trillion tons of groundwater between 1993 and 2010, causing Earth to wobble. Seo added that the pumping of groundwater has caused sea levels to rise by 6.24 millimetres.

Professor Seo explained how groundwater affects Earth's gravity. He said: "Every mass moving around on the surface of the Earth can change the rotation axis." Scientists have only recently discovered how groundwater can change Earth's axis. They previously believed water-driven shifts were caused by melting glaciers and ice caps. Seo and his colleagues were puzzled at how this could cause such a tilt. They concluded that the depletion of underground water was also a factor. Much of the extraction of groundwater is due to irrigation, especially in north-western India and western North America. Another researcher said: "The very way the planet wobbles is impacted by our activities."

*Sources: nature.com / science.org / eurekaalert.org*

**Writing** There should be limits on the amount of water we use. Discuss.

**Chat** Talk about these words from the article.

geophysicist / underground / reservoir / humans / tilt / North Pole / wobble / sea level / gravity / surface / rotation / axis / glaciers / ice caps / factor / irrigation / the plane

**True / False**

- 1) Everyone knows the importance of underground reservoirs. T / F
- 2) Underground reservoirs affect the balance of Earth. T / F
- 3) The pumping of groundwater is moving the North Pole. T / F
- 4) The pumping of groundwater has made sea levels rise. T / F
- 5) The article says groundwater has no effect on gravity. T / F
- 6) Scientists knew groundwater affected Earth's axis centuries ago. T / F
- 7) Most groundwater pumped out of the ground is for irrigation. T / F
- 8) The article says human activity makes Earth wobble. T / F

**Synonym Match** (The words in bold are from the news article.)

- |                |                 |
|----------------|-----------------|
| 1. aware       | a. using up     |
| 2. importance  | b. taken out    |
| 3. discovered  | c. turning      |
| 4. relocate    | d. significance |
| 5. extracted   | e. actions      |
| 6. affects     | f. move         |
| 7. rotation    | g. conscious    |
| 8. puzzled     | h. influences   |
| 9. depletion   | i. confused     |
| 10. activities | j. found        |

**Discussion – Student A**

- a) What do you think about what you read?
- b) What do you know about gravity?
- c) How much do you worry about melting glaciers and ice caps?
- d) What can farms do if they do not have enough water?
- e) What does it matter if the world wobbles more?
- f) What three adjectives best describe this story?
- g) What are we doing to impact Earth?
- h) What questions would you like to ask the geophysicists?

**Phrase Match**

- |  |                                |
|--|--------------------------------|
| 1. Perhaps it's only geophysicists     | a. Earth's gravity             |
| 2. they have changed the tilt          | b. of underground water        |
| 3. The mass of polar ice               | c. sea levels to rise          |
| 4. we extracted                        | d. were puzzled                |
| 5. pumping of groundwater has caused   | e. is drifting                 |
| 6. how groundwater affects             | f. impacted by our activities  |
| 7. caused by melting glaciers          | g. more than two trillion tons |
| 8. Seo and his colleagues              | h. and ice caps                |
| 9. the depletion                       | i. of Earth's axis             |
| 10. The very way the planet wobbles is | j. who are                     |

**Discussion – Student B**

- a) What do you know about groundwater?
- b) What do you know about Earth's balance?
- c) What do you know about geophysics?

- d) How important is it that Earth tilts at the correct angle?
- e) What do you know about the North Pole?
- f) What does it matter if the North Pole is drifting?
- g) Should we stop using so much groundwater?
- h) How can we conserve water?

### Spelling

1. it's only hietpcsygsosi who are aware
2. underground eorrvvssi
3. humans have extadctre so much groundwater
4. significant enough to phslcyaliy relocate
5. Seo ctcleluaad that
6. causing Earth to ewblb
7. groundwater affects Earth's igaryty
8. on the acfusre of the Earth
9. change the toiatron axis
10. his cgelseualo were puzzled
11. the itdenelop of underground water
12. due to oniraitgri

### Role Play

**Role A – Watering Flowers** You think watering flowers is the most important use of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least important of these (and why): washing the car, aquariums or water parks.

**Role B – Washing the Car** You think washing the car is the most important use of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least important of these (and why): watering flowers, aquariums or water parks.

**Role C – Aquariums** You think aquariums is the most important use of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least important of these (and why): washing the car, watering flowers or water parks.

**Role D – Water Parks** You think water parks is the most important use of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least important of these (and why): washing the car, aquariums or watering flowers.

### Speaking – Water Uses

Rank these with your partner. Put the most important at the top. Change partners often and share your rankings.

- Fountains
- Aquariums
- Watering golf courses
- Water parks
- Washing dishes
- Watering flowers
- Taking a bath
- Washing the car



## MODULE 5

### PLASTIC POLLUTION SOLUTIONS

#### Unit 9

#### Microplastics found in human heart for first time

14th August 2023

While many of us are aware of the environmental damage done by plastic, fewer people know about the threat from the ubiquity of microplastics. Scientists first found them in our bodies more than a decade ago. Worryingly, researchers have now found them in the human heart. Scientists at the Beijing Anzhen Hospital in China collected cardiac tissue samples from 15 patients undergoing heart surgery. After analyzing the samples, they discovered tiny pieces of plastic, from a multitude of sources. They included a plastic commonly used as a shatter-proof alternative to glass, a polythene widely used in clothing and food containers, and a polyvinyl chloride used in construction.

The scientists reported finding, "tens to thousands of individual microplastic pieces in most tissue samples". Chemicals from microplastics are released into the body, potentially leading to allergic reactions, cancer, cell death, and chronic inflammation, among other complications. Scientists reckon the average person consumes around five grams of microplastics a week, or 52,000 particles a year. Microplastics are so prevalent that they make up 39 per cent of dust particles in our homes. Scientists say these tiny shards are near-impossible to remove from the body. They say it is becoming critical to limit the amount of plastic we breathe in, ingest, swallow or absorb.

Sources: [dailymail.co.uk](http://dailymail.co.uk) / [people.com](http://people.com) / [iflscience.com](http://iflscience.com)

**Writing.** We need to stop using plastic immediately. Discuss.

**Chat.** Talk about these words from the article.

aware / environmental damage / threat / ubiquity / heart / tissue / plastic / clothing / scientist / allergic reaction / cancer / comp

#### True / False

- 1) The article says most of us know about the harm microplastics do. T / F
- 2) Microplastics were first found in our bodies in the 1970s. T / F
- 3) Scientists found microplastics in the hearts of heart surgery patients. T / F
- 4) Scientists found plastics from construction materials in a human heart. T / F
- 5) There were tens of thousands of microplastics in the heart tissue. T / F
- 6) Microplastics can cause allergic reactions. T / F
- 7) An average person gets 52,000 bits of microplastic a year in their body. T / F
- 8) It is relatively easy to remove microplastics from our bodies. T / F

#### Synonym Match (The words are from the news article)

- |                  |                   |
|------------------|-------------------|
| 1. aware         | a. eats or drinks |
| 2. ubiquity      | b. heart          |
| 3. cardiac       | c. building       |
| 4. alternative   | d. problems       |
| 5. construction  | e. omnipresence   |
| 6. individual    | f. commonplace    |
| 7. complications | g. substitute     |
| 8. consumes      | h. vital          |
| 9. prevalent     | i. single         |
| 10. critical     | j. conscious      |

### Discussion – Student A

- a) What damage do microplastics do?
- b) How can we reduce the amount of microplastics?
- c) What damage could microplastics do to our body?
- d) How can we live without plastic?
- e) How much plastic pollution do you see every day?
- f) Would you switch to alternatives to plastic?
- g) How do you feel about microplastics being in your body?
- h) What should governments do about microplastics?

### Phrase Match

- |   |                              |
|---|------------------------------|
| 1. the environmental damage             | a. impossible to remove      |
| 2. the threat from the ubiquity         | b. samples                   |
| 3. cardiac tissue                       | c. in construction           |
| 4. a shatter-proof alternative          | d. reactions                 |
| 5. polyvinyl chloride used              | e. ingest, swallow or absorb |
| 6. allergic                             | f. done by plastic           |
| 7. average person consumes              | g. particles                 |
| 8. dust                                 | h. to glass                  |
| 9. these tiny shards are near           | i. around five grams         |
| 10. the amount of plastic we breathe in | j. of microplastics          |

### Discussion – Student B

- a) What do you think about what you read?
- b) Would you move house to live somewhere with fewer microplastics?
- c) Do you suffer from any allergies?
- d) What do you think of your body consuming 52,000 bits of microplastic?
- e) Should we dust our homes more to remove microplastics?
- f) What will things be like in the future?
- g) What do you think of microplastics?
- h) What questions would you like to ask the scientists?

### Spelling

1. the uqbtiyui of microplastics
2. aardcci tissue samples
3. from a eulttmudi of sources
4. a shatter-proof irnativetea to glass
5. widely used in clothing and food saronnteci
6. polyvinyl chloride used in coontuncstri
7. ellgrcia reactions
8. iccrnoh inflammation
9. Microplastics are so lepavenrt
10. dust scletpair
11. becoming lirticca to limit the amount
12. plastic we breathe in, ingest, swallow or barobs

### Role Play

#### Role A – Plastic Bottles

You think plastic bottles are the most important things to recycle. Tell the others three reasons why. Tell them what problems there are with recycling their things. Also, tell the others which of these is the least important to recycle (and why): computers, clothes or cars.

#### Role B – Computers

You think computers are the most important things to recycle. Tell the others three reasons why. Tell them what problems there are with recycling their things. Also, tell the others which of these is the least important to recycle (and why): plastic bottles, clothes or cars.

### **Role C – Clothes**

You think clothes are the most important things to recycle. Tell the others three reasons why. Tell them what problems there are with recycling their things. Also, tell the others which of these is the least important to recycle (and why): computers, plastic bottles or cars.

### **Role D – Cars**

You think cars are the most important things to recycle. Tell the others three reasons why. Tell them what problems there are with recycling their things. Also, tell the others which of these is the least important to recycle (and why): computers, clothes or plastic bottles.

### **Speaking – Recycle**

Rank these with your partner. Put the most important things to recycle at the top. Change partners often and share your rankings.

- cars
- clothes
- mobile phones
- cups and plates
- plastic bottles
- books
- computers
- furniture

## **Unit 10**

### **Raw sewage keeps swimmers away from UK beaches**

10th August 2023

The UK is experiencing "poonami" - a sewage crisis. The environmental group Greenpeace said water companies poured toilet waste into rivers and seas for more than 300,000 hours in 2022. Many people have complained about becoming sick after swimming in the sea. Others expressed concerns about the terrible smell on beaches, or the horrible brown colour of the water. The research company Savanta conducted a poll about people's opinions on the poor quality of water. Almost a quarter of swimmers said they might not swim in the sea this year because of the risk. Last week, at least 57 people got diarrhoea after competing in sea swimming events at a World Triathlon Championship.

England and Wales are the only countries in the world to have privatized their water and sewage services. The UK government sold its water to private companies in 1987. The companies promised to spend billions of pounds on making services better. However, many Britons have complained that things have become much worse. The privatized companies have not invested enough money in stopping leaks or in modernizing systems. Since 1991, they have paid over £2 billion a year to their shareholders. Water campaigner and ex-rock star Feargal Sharkey is angry with the water companies. He said they have failed to create a quality system. He also blamed the UK government for not acting.

*Sources: [theguardian.com](http://theguardian.com) / [greenpeace.org](http://greenpeace.org) / [independent.co.uk](http://independent.co.uk)*

### **Writing**

Water, electricity, gas and the Internet should be government-owned. Discuss.

## Chat

Talk about these words from the article.

poonami / sewage / toilet waste / sick / swimming in the sea / smell / water / risk / privatized / government / billions / invest / leaks / money / shareholders / angry

## True / False

- 1) The article says a "poonami" is a sewage crisis. T / F
- 2) Water companies poured waste in the seas for 300,000 hours this year. T / F
- 3) The water in seas around England has turned yellow. T / F
- 4) More than 57 people got diarrhoea swimming in the sea at a triathlon. T / F
- 5) England and Wales are the only countries not to own their water. T / F
- 6) People in the UK say water services are worse now than in 1987. T / F
- 7) Water companies have stopped all the leaks in the UK's water pipes. T / F
- 8) An ex-rock star blames the UK government for poor water services. T / F

## Synonym Match (The words are from the news article)

- |               |                    |
|---------------|--------------------|
| 1. crisis     | a. pledged         |
| 2. complained | b. beliefs         |
| 3. sick       | c. handed over     |
| 4. opinions   | d. corporations    |
| 5. risk       | e. protested       |
| 6. companies  | f. doing something |
| 7. promised   | g. danger          |
| 8. invested   | h. disaster        |
| 9. paid       | i. put money into  |
| 10. acting    | j. ill             |

## Discussion – Student A

- a) What do you think about what you read?
- b) Should water and sewage be run by private companies?
- c) Why did the UK government sell its water?
- d) How safe is the water in your country?
- e) Why do companies care more about profit than people?
- f) Should the UK take back its water and sewage services?
- g) Would you go swimming in England?
- h) What questions would you like to ask the private water companies?

## Phrase Match

- |  |                             |
|--|-----------------------------|
| 1. water companies poured                | a. of swimmers              |
| 2. the horrible brown colour             | b. become much worse        |
| 3. conducted a poll                      | c. billions of pounds       |
| 4. Almost a quarter                      | d. toilet waste into rivers |
| 5. at least 57 people got                | e. to their shareholders    |
| 6. privatized                            | f. of the water             |
| 7. companies promised to spend           | g. diarrhoea                |
| 8. complained that things have           | h. for not acting           |
| 9. they have paid over £2 billion a year | i. about people's opinions  |
| 10. He also blamed the UK government     | j. their water              |

## Discussion – Student B

- a) What do you know about Greenpeace?
- b) What do you think of pouring human sewage into the sea?

- c) What's the best way to deal with sewage?
- d) Should the UK government give people money who got sick?
- e) What would you do if beaches smelled really bad?
- f) What do you think of swimming in the sea?
- g) What are rivers and beaches like in your country?
- h) What do you think of the word 'poonami'?

### Spelling

1. a sewage riciss
2. The tioenvneanlmr group Greenpeace
3. people have mnioadclep about becoming sick
4. Others edrxsseep concerns
5. the lobhierr brown colour of the water
6. Almost a tarqure of swimmers
7. companies promised to spend bsiilonl of pounds
8. companies have not eesityvdn enough money
9. stopping keasl
10. Water grepnmaaic and ex-rock
11. failed to create a quality tseyms
12. He also lmaebd the UK government

### Role Play

**Role A – Hose Pipes** You think hose pipes are the biggest waste of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least wasteful of these (and why): swimming pools, golf courses or bottled water.

**Role B – Swimming Pools** You think swimming pools are the biggest waste of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least wasteful of these (and why): hose pipes, golf courses or bottled water.

**Role C – Golf Courses** You think golf courses are the biggest waste of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least wasteful of these (and why): swimming pools, hose pipes or bottled water.

**Role D – Bottled Water** You think bottled water is the biggest waste of water. Tell the others three reasons why. Tell them what is wrong with their uses. Also, tell the others which is the least wasteful of these (and why): swimming pools, golf courses or hose pipes.

### Speaking – Water uses

Rank these with your partner. Put the worst uses of water at the top. Change partners often and share your rankings.

- Golf courses
- Bottled water
- Water pistols
- Fountains
- Hose pipes
- Swimming pools
- Car washes
- Water parks

## MODULE 6

### RECYCLING

#### Unit 11

#### Recycling

When I was young, we never used the word recycling. It wasn't important. People would think you were crazy for recycling things. Today, things are different. We now know we have a problem. We use too much stuff and throw everything away. Lots of the stuff we throw away is very useful. It can be used again, recycled. This is good for the environment because we use fewer natural resources. I love recycling. It makes me feel as though I'm helping the Earth. I even buy things like used furniture and clothes. This also recycles. Some of the countries I've lived in are experts at recycling. There are giant bottle banks at the end of the street and places to leave newspapers, clothes, batteries and metal.

Sources: <http://www.listenaminute.com/r/recycling.html>

#### DISCUSSION (Write your own questions) STUDENT A's QUESTIONS:

1. \_\_\_\_\_?
2. \_\_\_\_\_?
3. \_\_\_\_\_?
4. \_\_\_\_\_?
5. \_\_\_\_\_?
6. \_\_\_\_\_?

**Write** five special questions about recycling. Do this in pairs. Each student must write the questions on his / her own paper. When you have finished, interview other students. Write down their answers.

#### RECYCLING DISCUSSION STUDENT A's QUESTIONS (Do not show these to student B)

- 1) What comes to mind when you hear the word 'recycling'?
- 2) How does recycling benefit the planet?
- 3) Are you good at recycling things?
- 4) Does your town do enough recycling?
- 5) What would the world be like without recycling?
- 6) Do you think recycling is here to stay or will we go back to a disposable goods lifestyle?
- 7) What would you think if your neighbours never recycled anything?
- 8) How much good do you think you're doing when you recycle things?
- 9) What things do you throw away that you think should be recycled?
- 10) What do you think of the idea of water recycled from sewage?

#### STUDENT B's QUESTIONS (Do not show these to student A)

- 1) Should recycling be mandatory?
- 2) What fines should people have to pay if they do not recycle?
- 3) Do you think only 'educated' people recycle?
- 4) Have you been to other countries where recycling is much better or worse than in your country?
- 5) What should schools teach children about recycling?
- 6) What kinds of things do you think cannot be recycled?
- 7) What are your feelings towards the recycling of nuclear waste?
- 8) Should there be a reward system for people who recycle things?
- 9) What do you think of the idea of having a special minister for recycling in the government?
- 10) Which is better, recycling or buying only the things we really need?

**Write** about recycling for 10 minutes. Show your partner your paper. Correct each other's work.

### **Word Order**

When I was young, never we recycling word the used. It wasn't important. would People crazy were you think for recycling things. Today, things are different. We now know we have a problem. and stuff much too use We throw everything away. we away of stuff throw Lots the is very useful. It can be used again, recycled. This is environment we good the because use for fewer natural resources. I love recycling. It makes me feel as though I'm helping the Earth. things buy even I used like furniture and clothes. This also recycles. Some of the countries recycling at experts are in lived I've. There are giant bottle and street the of end the at banks places to leave newspapers, clothes, batteries and metal.

**VOCABULARY EXTENSION:** Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

### **Spelling**

When I was young, we never used the word recycling. It wasn't ainmrtopt. People would think you were zyrca for recycling things. Today, things are frtfinede. We now know we have a problem. We use too much stuff and throw everything away. Lots of the stuff we rotwh away is very useful. It can be used again, recycled. This is good for the environment because we use fewer ulrtana resources. I love recycling. It makes me feel as though I'm hilgpen the Earth. I even buy things like used furniture and clothes. This also clesecyr. Some of the countries I've lived in are txerpes at recycling. There are giant tbeolt banks at the end of the street and places to leave newspapers, clothes, rabisetet and metal.

**INTERNET INFO:** Search the Internet and find more information about recycling. Talk about what you discover with your partner(s) in the next lesson.

**RECYCLING POSTER** Make a poster about recycling. Show it to your classmates in the next lesson. Give each other feedback on your posters.

## **Unit 12**

### **Global Recycling Day?**

Global Recycling Day is an annual event that aims to raise awareness of the importance of recycling and encourage people to take action to reduce waste and protect the environment. The day brings together individuals, organizations, and governments from around the world to promote sustainable practices and highlight the benefits of recycling. Global Recycling Day is celebrated every year on March 18th. In 2023, the event will fall on a Saturday, providing an opportunity for people to participate in local events and activities.

Here are some ways to get involved in Global Recycling Day:

1. Learn about recycling: Take some time to learn about the recycling process, what can and cannot be recycled, and how recycling helps to reduce waste and conserve resources.
2. Take action: Start by making small changes in your daily routine, such as using reusable bags and water bottles, reducing food waste, and properly disposing of hazardous materials. You can also participate in local recycling programs and volunteer for community clean-up events.
3. Spread the word: Use social media to share information about recycling and promote the importance of sustainable practices. Encourage your friends and family to get involved and make a difference.
4. Attend local events: Check your local events calendar for Global Recycling Day activities and events, such as recycling drives, workshops, and community clean-up efforts. You can also organize your own event or activity to promote recycling in your community.

Global Recycling Day was first established in 2018 by the Global Recycling Foundation, a non-profit organization that aims to promote the importance of recycling and support sustainable development. The day is recognized by the United Nations and is celebrated around the world.

The first Global Recycling Day was celebrated on March 18, 2018, and it has since become an annual event that brings together individuals, organizations, and governments to promote recycling and sustainable practices. The day is an opportunity to raise awareness of the impact of waste on the environment and encourage people to take action to protect the planet for future generations.

Sources: <https://www.awarenessdays.com/awareness-days-calendar/global-recycling-day-2023/#:~:text=When%20is%20Global%20Recycling%20Day,in%20local%20events>

**PHRASE MATCH** Match the following phrases from the article.

- |  |                            |
|--|----------------------------|
| 1. an annual event that aims to        | a. from around the world   |
| 2. encourage people                    | b. to raise awareness      |
| 3. The day brings together individuals | c. to reduce waste         |
| 4. recycling helps                     | d. sustainable development |
| 5. support                             | e. that aims to promote    |
| 6. a non-profit organization           | f. to take action          |

**Put the words into the gaps in the text.**

*spread, recycling, sustainable, to reduce, clean-up, reusable, hazardous, workshops, local recycling programs*

Learn about recycling: Take some time to learn about the \_\_\_\_\_ process, what can and cannot be recycled, and how recycling helps \_\_\_\_\_ waste and conserve resources.



Take action: Start by making small changes in your daily routine, such as using \_\_\_\_\_ bags and water bottles, reducing food waste, and properly disposing of \_\_\_\_\_ materials. You can also participate in \_\_\_\_\_ and volunteer for community \_\_\_\_\_ events.

\_\_\_\_\_ the word: Use social media to share information about recycling and promote the importance of \_\_\_\_\_ practices. Encourage your friends and family to get involved and make a difference.

Attend local events: Check your local events calendar for Global Recycling Day activities and events, such as recycling drives, \_\_\_\_\_, and community clean-up efforts. You can also organize your own event or activity to promote recycling in your community.

### **CHOOSE THE CORRECT WORD**

Global Recycling Day was first established *in/on* 2018 by the Global Recycling Foundation, a *reusable /non-profit* organization that aims to promote the importance of *recycling/workshops* and support *sustainable/recycling* development. The day is recognized by the United Nations and is celebrated around the world.

The first Global Recycling Day was celebrated *on/in* March 18, 2018, and it has since become an annual *event/clean-up* that brings together individuals, organizations, and governments to promote recycling and sustainable practices. The day is an opportunity to raise *awareness/activity* of the impact of waste on the environment and *encourage/discourage* people to take action to protect the planet for future generations.

### **Spell the jumbled words (from the text) correctly.**

1. that aims to raise ssawarene
2. protect the neviromnent
3. brings otgehtre individuals
4. to promote sutsainabel practices
5. highlight the senefitb of recycling
6. providing an ypportunito
7. alocl recycling programs
8. daily eoutinr

**VOCABULARY EXTENSION:** Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

**INTERNET:** Search the Internet and find more information about World Environment Day. Talk about what you discover with your partner(s) in the next lesson.

**POSTER:** Make your own poster about World Environment Day. Write about will happen on this day around the world. Read what you wrote to your groupmates in the next lesson. Give each other feedback on your articles.

## MODULE 7

### POLLUTION CONTROL

#### Unit 13

#### Scientists warn "insect apocalypse" is coming

17th November, 2019

Scientists say that global warming isn't the only serious threat to humans. Another major threat is the falling numbers of insects and the extinction of many species. Scientists say that half of all insects worldwide have been declining since the 1970s. A new warning is that over 40 per cent of insect species could die out in our lifetime. Researchers said the number of insects is decreasing by 2.5 per cent every year. The scientists are calling it an "insect apocalypse". Many species of butterflies, bees and other bugs are now extinct. In the U.K. researchers say 23 bee and wasp species have gone extinct in the past century. Scientists say the apocalypse could trigger, "a catastrophic collapse of Earth's ecosystems".

Lead researcher Professor Dave Goulson said a lot of insects are being killed by pesticides used for farming and gardening. He said fewer numbers of insects might mean we cannot feed people. He told reporters: "Three quarters of our crops depend on insect pollinators. Crops will begin to fail. We won't have things like strawberries. We can't feed 7.5 billion people without insects." He said one of the most worrying trends is the decline of honeybees. In the USA, the number of honeybee colonies dropped from six million in 1947 to just 2.5 million in 2014. Professor Goulson warned people that: "We can't wait another 25 years before we do anything because it will be too late."

Sources: *cnn.com / natureworldnews.com / businessinsider.com*

**Writing** It should be made illegal to kill insects. Discuss.

**Chat** Talk about these words from the article.

scientists / global warming / threat / humans / extinction / species / century / Earth / researcher / pesticide / farming / gardening / crops / honeybee / trends / six million

#### True / False

- Scientists said insect extinction is a bigger threat than global warming. T / F
- A third of insects around the world have died since the 1970s. T / F
- The number of insects is decreasing at a rate of 2.5 per cent a year. T / F
- The article says there are only 23 species of bee left in the UK. T / F
- A professor said pesticides used on farms and gardens are killing insects. T / F
- The article said 75% of our crops depend on insect pollinators. T / F
- There are only 2.5 million honeybee colonies in the USA today. T / F
- A professor said it is too late to wait another 25 years to act. T / F

**Synonym Match** (The words are from the news article.)

- |                 |                |
|-----------------|----------------|
| 1. threat       | a. concerning  |
| 2. extinction   | b. falling     |
| 3. worldwide    | c. agriculture |
| 4. decreasing   | d. dying out   |
| 5. catastrophic | e. rely        |
| 6. farming      | f. hold on     |
| 7. depend       | g. danger      |
| 8. worrying     | h. fell        |
| 9. dropped      | i. globally    |
| 10. wait        | j. disastrous  |

### Discussion – Student A

- a) What do you think of an insect apocalypse?
- b) What are serious threats to humans?
- c) Would the earth be better without humans?
- d) What do you think of insects?
- e) What is your favourite insect and why?
- f) What is the danger of fewer insects?
- g) How big a threat is an insect apocalypse?
- h) How can we save our insects?

### Phrase Match

- |                                       |                               |
|---------------------------------------|-------------------------------|
| 1. global warming isn't the only      | a. killed by pesticides       |
| 2. Another major threat is the        | b. and other bugs             |
| 3. insect species could die           | c. trends                     |
| 4. species of butterflies, bees       | d. falling numbers of insects |
| 5. a catastrophic collapse            | e. colonies dropped           |
| 6. a lot of insects are being         | f. serious threat to humans   |
| 7. Three quarters of our crops depend | g. before we do anything      |
| 8. one of the most worrying           | h. on insect pollinators      |
| 9. the number of honeybee             | i. of Earth's ecosystems      |
| 10. We can't wait another 25 years    | j. out in our lifetime        |

### Discussion – Student B

- a) What do you think about what you read?
- b) How can we use fewer pesticides?
- c) What can farmers do to help the insects?
- d) What happens when we cannot feed everyone?
- e) What do you think of strawberries?
- f) What can you do to help insects?
- g) Do you think it is too late?
- h) What questions would you like to ask the researchers?

### Spelling

1. the only serious haterat to humans
2. eldnicing since the 1970s
3. insect cepises could die out
4. bugs are now tenixct
5. could trigger a catastrophic llcaospe
6. Earth's yosscetems
7. insects are being killed by istcedipes
8. Three quarters of our orcps
9. feed 7.5 lbilion people
10. one of the most worrying retdns
11. the number of honeybee onolices
12. Professor Goulson rawn people

### Role Play

**Role A – Honeybees** You think honeybees are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the least useful of these (and why): ants, spiders or worms.

**Role B – Ants** You think ants are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the least useful of these (and why): honeybees, spiders or worms.

**Role C – Spiders** You think spiders are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the least useful of these (and why): ants, honeybees or worms.

**Role D – Worms** You think worms are the best insects. Tell the others three reasons why. Tell them what is wrong with their insects. Also, tell the others which is the least useful of these (and why): ants, spiders or honeybees.

### **Speaking – Insects**

Rank these with your partner. Put the best insects at the top. Change partners often and share your rankings.

- ants
- worms
- butterflies
- honeybees
- spiders
- cockroaches
- ladybirds / ladybugs
- praying mantis

## **ENVIRONMENTAL PROBLEMS DISCUSSION**

### STUDENT A's QUESTIONS (Do not show these to student B)

- 1) What do you think when you hear the words 'environmental problem'?
- 2) Do you add to the environment's problems in your daily life?
- 3) What can you do every day to help the environment?
- 4) Will the problems get worse or will they slowly disappear?
- 5) What is the biggest environmental problem? Why do you think so?
- 6) Which do you think is worse, litter in the countryside or coral bleaching?
- 7) How eco-friendly is your country?
- 8) What causes climate change and how can we reverse it?
- 9) What problems do you know of about water?
- 10) Will we (humans) kill the Earth one day?

### STUDENT B's QUESTIONS (Do not show these to student A)

- 1) Why is an environmental problem a problem?
- 2) What makes environmental problems?
- 3) Do you think animals are angry with humans for destroying the Earth?
- 4) Which do you think is worse, desertification or noise pollution?
- 5) How would you explain to someone who doesn't know what global warming is?
- 6) How would you feel if all the pandas died and became extinct?
- 7) Who is most responsible for creating environmental problems?
- 8) Is it better if we all went back to nature (left the cities and moved to the countryside)?
- 9) Is it possible for everyone to change their lifestyle to help the Earth?
- 10) Shopping increases environmental problems. Should we stop shopping?

**Unit 14**  
**Pollution**

I hate pollution. It makes me really angry. I think pollution is greed. People don't care about the environment so they pollute the air just to make lots of money. Big companies are the worst. They pretend they're not polluting. They have the money to say they are "green". Pollution affects us all. We are all less healthy because of companies that pollute the air or our rivers. Everybody needs to think about how we can reduce the amount of pollution we create. Not using the car when we can walk is one way. Turning off lights we don't need is another. Barack Obama says he's going to do his best to help the Earth. I really hope he does because if pollution gets any worse, we'll be in seriously big trouble.

Sources: <http://www.listenAminute.com/p/pollution.html>

**Correct the spelling**

I hate pollution. It makes me really agrny. I think pollution is greed. People don't care about the environment so they lpeotul the air just to make lots of money. Big companies are the worst. They rdneep they're not polluting. They have the money to say they are "green". Pollution casffet us all. We are all less healthy because of companies that pollute the air or our revris. Everybody needs to think about how we can reduce the amount of pollution we react. Not using the car when we can walk is one way. Turning off tihgsl we don't need is hnertao. Barack Obama says he's going to do his best to help the Earth. I really hope he does because if pollution gets any worse, we'll be in lyeiruooss big luetbro.

**Unjumble the words**

I hate pollution. makes It angry really me. I think pollution is greed. People don't care about the environment they the just so pollute air to make lots of money. Big companies are the worst. They pretend they're not polluting. to they have money say They the are "green". Pollution affects us all. We are all less companies pollute healthy of that the because air or our rivers. Everybody needs to think about how we can create reduce the amount of pollution we. Not using the we when car way one is walk can. Turning off lights we don't need is another. Barack Obama says he's going to help his the best Earth to do. I really hope he does pollution if because worse any gets, we'll be in seriously big trouble.

**DISCUSSION (Write your own questions)**

**STUDENT A's QUESTIONS (Do not show these to student B)**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

**STUDENT B's QUESTIONS (Do not show these to student A)**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

## **POLLUTION DISCUSSION**

### STUDENT A's QUESTIONS

- 1) What comes to mind when you hear the word 'pollution'?
- 2) What different forms of pollution do you know of?
- 3) How bad is pollution in your town?
- 4) What do you do every day that adds to pollution?
- 5) What do you do every day that helps to reduce pollution?
- 6) Is there a lot of pollution in your country?
- 7) What do you think of people who buy big, gas-guzzling 4WDs when they don't really need them?
- 8) How does pollution affect our health?
- 9) Do you think pollution will be a bigger issue in fifty years than it is now?
- 10) The former US president Ronald Reagan once said: "Cars don't cause pollution, trees do." Do you think US presidents understand a little more about pollution now?

### STUDENT B's QUESTIONS

- 1) What is pollution?
- 2) What harm does pollution do to the environment?
- 3) What do you get most angry about when you think about pollution?
- 4) Do you think the Kyoto Protocol and international meetings help reduce pollution?
- 5) Which bothers you more, noise pollution from traffic or environmental pollution from traffic?
- 6) What do you know about air, marine and river pollution?
- 7) What are the worst pollutants and who are the worst polluters?
- 8) What simple, everyday thing could help reduce pollution most?
- 9) What do you think about noise pollution?
- 10) The famous marine biologist Jacques Cousteau said: "Water and air...have become global garbage cans." What do you think of his words?

**Write** five GOOD questions about pollution in the table. Do this in pairs. Each student must write the questions on his / her own paper.

When you have finished, interview other students. Write down their answers.

	STUDENT 1 _____	STUDENT 2 _____	STUDENT 3 _____
Q.1.			
Q.2.			
Q.3.			
Q.4.			
Q.5.			

- Now return to your original partner and share and talk about what you found out. Change partners often.
- Make mini-presentations to other groups on your findings.

**Write** about pollution for 10 minutes. Show your partner your paper. Correct each other's work.

**VOCABULARY EXTENSION:** Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

**INTERNET INFO:** Search the Internet and find more information about pollution. Talk about what you discover with your partner(s) in the next lesson.

**ONLINE SHARING:** Use your blog, wiki, Facebook page, MySpace page, Twitter stream, Delicious / StumbleUpon account, or any other social media tool to get opinions on pollution. Share your findings with the class.



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