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 спеціальності 101 Екологія першого (бакалаврського) рівня вищої освіти Частина ІІ

Обговорено і рекомендовано на засіданні кафедри іноземної філології протокол № 11 від 23.10.2023р.

English for Ecology and Environmental Study. Методичні вказівки до практичних занять та самостійної роботи для здобувачів вищої освіти спеціальностей *101 Екологія* першого (бакалаврського) рівня вищої освіти. Частина ІІ / Укл.: О. Б. Шендерук, А. І. Сікалюк, С. В. Литвин. Чернігів : НУ «Чернігівська політехніка», 2023. 55 с.

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Вступ

Методичні вказівки з англійської мови **English for Ecology and Environmental Study (Частина II)** призначені для практичних занять та самостійної роботи здобувачів вищої освіти спеціальності *101 Екологія* першого (бакалаврського) рівня вищої освіти задля удосконалення мовних компетентностей у руслі професійно-орієнтованої комунікації і є продовженням методичних вказівок з англійської мови English for Ecology and Environmental Study (Частина I).

Навчальний матеріал підібрано відповідно чинної робочої програми навчальної дисципліни ОК 1 - Іноземна мова зі спеціальності 101 Екологія першого (бакалаврського) рівня вищої освіти та складається з дев'яти розділів, в яких вивчаються екологія лісів та птахів, вода в житті людини, грунт, раціональне використання природних ресурсів, захист навколишнього середовища в Україні та у Великій Британії, діяльність організації «Грінпіс» тощо.

Мета методичних вказівок — сприяти формуванню у здобувачів першого рівня вищої освіти спеціальності 101 Екологія комунікативної компетентності в сферах усного, письмового професійного та ситуативного спілкування, навичок практичного володіння іноземною мовою в різних видах мовленнєвої діяльності в межах профільної тематики, обумовленої професійними потребами; оволодінню новітньою інформацією з іноземних джерел.

Структура розділів та розроблений комплекс вправ спрямовані на ознайомлення і поступове засвоєння студентами матеріалу на підготовчому етапі при опрацюванні лексичного матеріалу; при ознайомлювальному та вивчаючому читанні базових текстів задля первинного знайомства з матеріалом та подальшої роботи з лексико-граматичними одиницями; під час виконання комунікативних завдань з обговорення проблемних ситуацій.

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

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Module 8

Unit 15

Brazil sends security force to fight deforestation

13th February, 2020

Brazil has asked its security forces to help fight deforestation in the Amazon. The Brazilian government is worried that a dangerous level of trees is being cut down in the world's largest rainforest. There are fears that there could be a big increase in deforestation in 2020. The year has already started badly for the trees and our environment. Deforestation in the Amazon doubled in January compared with the same month in 2019. A new report says that many areas of the Amazon produce more CO2 than oxygen. The reverse is meant to happen. The Amazon is often called "the lungs" of the planet. It plays a vital role in helping the Earth's environment as it changes CO2 into oxygen.

Brazil's Justice Minister, Sergio Moro, approved the setting up of a special security force to help track down and stop illegal loggers. There was a big increase in the amount of illegal logging in 2019. This happened at the same time as damaging fires that swept across large swathes of the rainforest. The security force will consist of police with special military-style training. They will work with environmental agency officials. Change also needs to come from regional governments. Some governments in the region are selling off land to developers. This is accelerating the pace of deforestation. To make things worse, the regional governments are doing little to replenish the jungle.

Sources: reuters.com / smh.au / foreignaffairs.com

Writing Illegal deforestation should be made a crime against humanity. Discuss.

Chat Talk about these words from the article.

Brazil / security / Amazon / trees / rainforest / environment / CO2 / oxygen / lungs / track down / illegal / logging / fires / military / training / deforestation / land / jungle

True / False

- a) Brazil's security force will help fight deforestation in Indonesia. T/F
- b) Deforestation doubled in the Amazon in January compared to last year. T/F
- c) Many areas of the Amazon now produces more CO2 than oxygen. T/F
- d) The Amazon is often called the earth's lungs. T / F
- e) Brazil's justice minister will track down illegal loggers. T / F
- f) The amount of illegal logging fell in 2019. T / F
- g) Police with military-style training will help to find the illegal loggers. T/F
- h) Regional governments are planting millions and millions of new trees. T/F

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

1. asked	a. establishing
2. worried	b. regions
3. increase	c. speed
4. areas	d. concerned
5. vital	e. engulfed
6. setting up	f. requested
7. track down	g. speeding up
8. swept across	h. important
9. accelerating	i. find
10. pace	j. rise

Discussion – Student A

- a) What do you know about the Amazon?
- b) How much do you care about the Amazon rainforest?
- c) Why is there so much deforestation in the Amazon?
- d) What negative effects does deforestation have?
- e) Why do governments allow deforestation?
- f) Do you think the Amazon security force will work?
- g) Why is the Amazon called 'the lungs' of the planet?
- h) What would you do for a week in the Amazon?

Phrase Match

- 1. there could be a big increase in
- 2. Deforestation in the Amazon
- 3. many areas of the Amazon produce more
- 4. The Amazon is often called "the lungs"
- 5. It plays a vital role in helping the
- 6. help track down and
- 7. fires that swept across large
- 8. police with special military
- 9. selling off land
- 10. accelerating the

- a. swathes of the rainforest
- b. Earth's environment
- c. to developers
- d. doubled in January
- e. stop illegal loggers
- f. CO2 than oxygen
- g. style training
- h. pace of deforestation
- i. of the planet
- j. deforestation in 2020

Discussion - Student B

- a) What do you think about what you read?
- b) Why is the Amazon rainforest so important?
- c) What would you like to ask the illegal loggers?
- d) Can we ever reverse the damage done to the Amazon?
- e) How will the security forces catch the illegal loggers?
- f) Why are regional governments selling of Amazon land?
- g) Should illegal logging be a crime against humanity?
- h) What questions would you like to ask the security force?

Spelling

- 1. a dangerous leelv
- 2. Deforestation in the Amazon ebdudlo
- 3. cmreaodp with the same month
- 4. produce more CO2 than gexony
- 5. The <u>veserre</u> is meant to happen
- 6. It plays a ltvai role
- 7. poeradpy the setting up
- 8. the amount of gaelill logging
- 9. The security force will sncsiot of police
- 10. work with environmental gcynae officials
- 11. This is accelerating the paec
- 12. the aiglnero governments

Role Play

Role A – Illegal Logging You think illegal logging is the biggest threat to the Amazon. Tell the others three reasons why. Tell them why their threats aren't as bad. Also, tell the others which is the least worrying of these (and why): pollution, corruption or fires.

Role B – Pollution You think pollution is the biggest threat to the Amazon. Tell the others three reasons why. Tell them why their threats aren't as bad. Also, tell the others which is the least worrying of these (and why): illegal logging, corruption or fires.

Role C – Corruption You think corruption is the biggest threat to the Amazon. Tell the others three reasons why. Tell them why their threats aren't as bad. Also, tell the others which is the least worrying of these (and why): pollution, illegal logging or fires.

Role D – Fires You think fires are the biggest threat to the Amazon. Tell the others three reasons why. Tell them why their threats aren't as bad. Also, tell the others which is the least worrying of these (and why): pollution, corruption or illegal logging.

Speaking – Threats

Rank these with your partner. Put the biggest threats to the Amazon at the top. Change partners often and share your rankings.

- Illegal logging
- Fires
- Pollution
- Overconsumption
- Eating meat
- Global warming
- Poaching
- Corruption

Unit 16 Birds' stomachs too full of plastic to eat

25th June, 2018

A BBC team has filmed disturbing footage of the devastating impact plastic pollution is having on seabirds in the Tasman Sea, which is between Australia and New Zealand. The film crew was working on the remote Lord Howe Island for a new wildlife documentary called "Drowning in Plastic". They filmed many birds that had died because their stomachs were literally too full of plastic to be able to eat any food. The birds starved to death because there was no room in their stomachs for food. The documentary team filmed marine biologists working on the island to try and save the birds. The scientists captured hundreds of chicks and physically removed plastic from their stomachs to give them a chance of survival.

Marine biologist Jennifer Lavers explained what was happening to the birds. She said the birds were predators that will eat anything. She said: "When you put plastic in the ocean, it means they have no ability to detect plastic form non-plastic, so they eat it." Adult birds feed the plastic to their chicks, oblivious to what they are feeding them. Professor Lavers lamented that most of the plastic is "entirely preventable". She said: "We find plastic clothes pegs and plastic tooth brushes. Those could easily be swapped out for other materials - aluminium or wood. My own toothbrush is made of bamboo." TV presenter Liz Bonnin said: "We saw...90 pieces of plastic come out of one of the chicks."

Sources: bbc.com/smh.com/mercopress.com

Writing Plastic should be banned. Discuss.

Chat Talk about these words from the article.

BBC / impact / plastic / pollution / wildlife / documentary / stomach / island / birds / biologist / predators / ability / chicks / preventable / toothbrush / materials / bamboo

True / False

- a) A documentary about seabirds was made by National Geographic. T/F
- b) The documentary looked at seabird's on Australia's east coast. T / F
- c) The documentary is called "Drowning in Plastic". T / F
- d) The researchers could not remove the plastic from the chicks' stomachs. T / F
- e) The birds in the documentary were not predators. T / F
- f) The seabirds did not know whether or not what they ate was plastic. T/F
- g) A scientist said she used a bamboo and not a plastic toothbrush. T/F
- h) A TV presenter counted 90 pieces of plastic in a chick's stomach. T/F

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

1. disturbing	a. actually
2. crew	b. exchanged
3. literally	c. opportunity
4. save	d. notice
5. chance	e. rescue
6. explained	f. worrying
7. detect	g. unaware
8. oblivious	h. bits
9. swapped	i. team
10. pieces	j. described

Discussion - Student A

- a) How damaging is plastic to the environment?
- b) What can we do to reduce our use of plastic?
- c) What would it be like to be on the documentary team?
- d) To what degree are we "drowning in plastic"?
- e) How sad is this news?
- f) Should anyone be punished for the plastic problem?
- g) Who has the biggest responsibility to reduce plastic use?
- h) What do you think of the chances of the birds surviving?

Phrase Match

- 1. filmed disturbing footage of the
- 2. The film crew was working on the
- 3. The birds starved
- 4. physically removed
- 5. give them a chance
- 6. the birds were predators
- 7. they have no ability
- 8. oblivious to what they
- 9. entirely
- 10. My own toothbrush

- a. plastic
- b. of survivalc. is made of bamboo
- d. to detect plastic
- e. remote Lord Howe Island
- f. preventable
- g. to death
- h. devastating impact
- i. that will eat anything
- j. are feeding them

Discussion – Student B

- a) What do you think about what you read?
- b) What do marine biologists do?
- c) How can we better protect seabirds?
- d) How easy is it to live without plastic?
- e) Will you buy bamboo toothbrushes from now?
- f) Why is plastic so damaging?
- g) Is it too late to reverse the damage done by plastic to wildlife?

h) What questions would you like to ask the researchers?

Spelling

- 1. disturbing oogtafe
- 2. the devastating pmitac
- 3. their stomachs were <u>rylaitell</u> too full of plastic
- 4. marine stliibsogo
- 5. scientists rectpadu hundreds of chicks
- 6. give them a chance of uislrvva
- 7. the birds were dtaporsre
- 8. no ability to dceett plastic
- 9. oiuolbsvi to what they are feeding
- 10. the plastic is <u>erinytle</u> preventable
- 11. Those could easily be dpspwea
- 12. made of omabob

Role Play

Role A – Toothbrushes You think toothbrushes are the biggest plastic things that should be replaced. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the last of these to be replaced of these (and why): water bottles, pipes or straws.

Role B – Water Bottles You think water bottles are the biggest plastic things that should be replaced. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the last of these to be replaced of these (and why): toothbrushes, pipes or straws.

Role C – Pipes You think pipes are the biggest plastic things that should be replaced. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the last of these to be replaced of these (and why): water bottles, toothbrushes or straws.

Role D – Straws You think straws are the biggest plastic things that should be replaced. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the last of these to be replaced of these (and why): water bottles, pipes or toothbrushes.

Speaking – Plastic goods

Rank these with your partner. Put the plastic goods that should be replaced most at the top. Change partners often and share your rankings.

- chairs
- bowls
- pipes
- straws
- toothbrushes
- water bottles
- car interiors
- CDs / DVDs

Modul 9

Unit 17 Italy's largest river experiencing drought

20th June, 2022

Large swathes of Europe are experiencing droughts and water shortages. One region is experiencing its worst drought for 70 years. The area, in northern Italy, has had hardly any rainfall in the past four months. This year's snowfall was 70 per cent lower. This has caused the River Po, Italy's largest, to be three metres lower than average. A lot of the riverbed has dried up and people can walk across the mud. In one part, the declining water level has fully exposed a World War II shipwreck. Authorities are concerned that if it doesn't rain soon, there'll be a serious water shortage. This means water will be rationed for drinking. Farmers will also have problems finding water to irrigate their crops.

A spokesperson from Italy's Po Basin Authority said the water shortages are unprecedented. The river gets much of its water from Lake Maggiore in the Italian Alps. The lake is seeing its lowest water level since 1946. Problems are being exacerbated by higher-than-average temperatures and a mini heat wave. A farmer from the tiny rural town of Guastalla, 150 km southeast of Milan, said she is expecting a "disastrous year". She said: "With such high temperatures and with no rain...the situation is catastrophic." She added: "We believe that there will be a drop in wheat productivity by at least 20 per cent due to the lack of rain." The Po Valley will see a 30 to 40% reduction in fruit and vegetable production.

Sources: cbsnews.com / theguardian.com / euronews.com

Writing Everyone in the world should reduce the amount of water they use. Discuss.

Chat Talk about these words from the article.

swathes / drought / water shortage / the past four months / mud / riverbeds / crops / river / lake / water level / temperatures / heat wave / catastrophic / wheat / fruit

True / False

- 1) All of Europe is experiencing water shortages. T / F
- 2) All of Italy is experiencing its worst drought in seven decades. T / F
- 3) Lower water levels revealed a sunken World War II shipwreck. T / F
- 4) Farmers have no problems irrigating their crops. T / F
- 5) A huge lake in Switzerland feeds the River Po. T / F
- 6) A mini heat wave is making the water shortage worse. T/F
- 7) A farmer said she is expecting a disastrous year. T/F
- 8) Fruit production in the Po Valley is expected to rise. T / F

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

1. experiencing	a. shortage
2. hardly	b. water
3. exposed	c. made worse
4. rationed	d. barely
5. irrigate	e. countryside
6. unprecedented	f. revealed
7. exacerbated	g. undergoing
8. rural	h. disastrous
9. catastrophic	i. limited
10. lack	j. unparallelled

Discussion – Student A

- a) What do you think about what you read?
- b) How would you feel if rivers near you dried up?
- c) What's the best way to deal with a heat wave?
- d) Have weather events changed the prices of things?
- e) What will the weather be like in 50 years from now?
- f) What will you do if food prices rise a lot?
- g) What three words best describe this story?
- h) What questions would you like to ask the farmers?

Phrase Match

- 1. Large swathes of Europe are
- 2. hardly any rainfall
- 3. fully exposed a
- 4. water will be
- 5. have problems finding water to
- 6. the water shortages are
- 7. Problems are being
- 8. a mini heat
- 9. a drop in wheat
- 10. due to the lack

Discussion - Student B

- a) What do you think of hot weather?
- b) Have you ever experienced water shortages?
- c) What's the best way to deal with a drought?
- d) What strange weather have you experienced?
- e) What is causing these extreme weather events?
- f) What would you do if water was rationed?
- g) How difficult is it to be a farmer?
- h) How can we help farmers to irrigate their crops?

Spelling

- 1. Large twaeshs of Europe
- 2. experiencing its worst tughodr for 70 years
- 3. exposed a World War II krpsheiwc
- 4. there'll be a serious water grhaoest
- 5. water will be eindrtoa for drinking
- 6. finding water to etrarigi their crops
- 7. Problems are being tebdxacerae
- 8. A farmer from the tiny arurl town
- 9. she is expecting a odtisssaur year
- 10. the situation is acpothrtisac
- 11. a drop in wheat iytvudtpoirc
- 12. a 30 to 40% idecrtoun

Role Play

- Role A Droughts You think droughts are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): blizzards, earthquakes or volcanoes.
- **Role B Blizzards** You think blizzards are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): droughts, earthquakes or volcanoes.

- a. wave
- b. unprecedented
- c. irrigate their crops
- d. of rain
- e. World War II shipwreck
- f. rationed for drinking
- g. productivity
- h. experiencing droughts
- i. exacerbated
- j. in the past four months

Role C – Earthquakes You think earthquakes are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): blizzards, droughts or volcanoes.

Role D – Volcanoes You think volcanoes are the worst natural disasters. Tell the others three reasons why. Tell them why their disasters aren't as bad. Also, tell the others which is the least damaging of these (and why): blizzards, earthquakes or droughts.

Speaking – Natural disasters

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

- Droughts
- Typhoons
- Blizzards
- Floods
- Earthquakes
- Heat waves
- Tornadoes
- Volcanoes

Unit 18

Worries about microplastics in our seafood

26th January, 2017

People who eat seafood may be also eating tiny pieces of plastic. The small pieces of plastic are called microplastics. They are tiny pieces of plastic from the waste and garbage that are in the seas and oceans. They are usually less than a millimeter wide. They are becoming more and more common in seafood such as oysters and mussels as well as other kinds of shellfish. Scientists say there are more than five trillion pieces of microplastic in our oceans. More and more are being added every day. Professor Richard Thompson, a marine biologist at Exeter University, said: "Hundreds of marine organisms encounter plastic at the sea surface or in the water...and many of those encounters are harmful if not fatal."

Researchers from the University of Ghent in Belgium conducted a study into microplastics and marine life. They believe people eat up to 11,000 pieces of plastic in their food each year. The researchers said that only around 60 of these pieces stay in our body and the rest will disappear down the toilet. Sixty pieces of microplastic may not seem a lot but it will build up over time. They could eventually be bad for our health. Things are likely to get worse. The researchers added that by the end of the century, seafood eaters could consume as many as 780,000 pieces of plastic a year. That is likely to cause many health problems. Scientists say we need to recycle more and find alternatives to plastic.

Sources: sky.com / independent.co.uk / cambridgenetwork.co.uk

Writing We should stop using plastic immediately. Do you agree? What could we use instead?

Chat Talk about these words from the article.

seafood / plastic / waste / garbage / oceans / oysters / scientists / marine / biologist / study / researchers / health / disappear / century / problems / recycle / alternatives

True / False

- a) The article says shellfish love eating tiny pieces of plastic. T / F
- b) Microplastics are all less than 0.1mm wide. T / F
- c) Microplastics are becoming more common in oysters and mussels. T/F
- d) A marine biologist said microplastics do not harm of kill sea life. T / F
- e) The research was conducted by a university in Malaysia. T/F
- f) Researchers say people eat up to 11,000 pieces of microplastic a year. T / F
- g) By 2099, seafood eaters could be eating 780,000 bits of plastic a year. T/F
- h) Scientists say we need to find alternatives to plastic. T/F

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

1. tiny a. remainder 2. pieces b. trash 3. garbage c. eat 4. such as d. come across 5. encounter e. minute 6. conducted f. substitutes g. did 7. rest h. bits 8. eventually 9. consume i. in the end 10. alternatives j. like

Discussion - Student A

- a) What does a marine biologist do every day?
- b) What are microplastics?
- c) Is eating seafood riskier than eating meat?
- d) What do you think of oysters?
- e) Whose responsibility is it to protect our oceans?
- f) How can we keep our food safe?
- g) What health problems do you think microplastics could cause?
- h) What questions would you like to ask the scientists?

Phrase Match

1. waste and a. of the century 2. more and more common in seafood b. if not fatal

3. More and more are being c. to get worse

4. at the sea surface or d. to plastic 5. many of those encounters are harmful e. garbage

6. the rest will disappear down f. added every day

7. Things are likely g. many health problems

8. by the end h. in the water

9. likely to cause i. the toilet j. such as oysters

10. recycle more and find alternatives

Discussion – Student B

- a) What do you think about what you read?
- b) What seafood is the best, and why?
- c) How can we clean all plastic from the oceans?
- d) What can we use instead of plastic?
- e) What do you think of seafood?
- f) Do you worry about what you eat?
- g) Should shops stop selling seafood if it has microplastics?

h) What do you do to recycle plastic?

Spelling

- 1. tiny eiespc of plastic
- 2. from the waste and aebagrg
- 3. becoming more and more mconom
- 4. in our eaonsc
- 5. a mnraei biologist
- 6. harmful if not lataf
- 7. cdtnuocde a study
- 8. adpiserap down the toilet
- 9. They could <u>nyetlvlaeu</u> be bad
- 10. by the end of the <u>cetyrun</u>
- 11. we need to <u>ereccyl</u> more
- 12. find <u>naraetvetlis</u> to plastic

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

Module 10

Unit 19

Amazon "flips" to be source of CO2 emissions

17th July, 2021

Environmental scientists have revealed shocking news that parts of the Amazon rainforest are emitting more carbon dioxide than they are absorbing. The scientists said the forest is now producing over a billion tons of CO2 a year. They say the Amazon used to be a carbon "sink". This is where CO2 was sucked up and converted into oxygen. However, it has now become a source of carbon dioxide. The forest is at risk of losing its moniker of being the lungs of the world. Researchers are predicting the rainforest will create more CO2 at an accelerating rate in the future. The biggest culprits for the Amazon's flipping from sink to source are logging, deforestation and a growing number of forest fires.

The research on the Amazon's CO2 emissions has been published in the journal "Nature". Researchers analysed 600 profiles of CO2 and carbon monoxide emissions produced by fires at various sites in Brazil's Amazon between 2010 and 2018. They found that the fires produced about 1.5 billion tons of CO2 a year, while forest growth removed just 0.5 billion tons. The researchers said the difference of one billion tons left in the atmosphere is equivalent to the annual emissions of Japan, which is the world's fifth-largest polluter. Professor Simon Lewis, from University College London, said: "The southeast Amazon sink-to-source story is yet another stark warning that climate impacts are accelerating."

Sources: theguardian.com / usatoday.com / commondreams.org

Writing All logging should stop for 10 years. Discuss.

Chat Talk about these words from the article.

environmental / scientists / carbon dioxide / sink / lungs / rainforest / forest fires / research / profiles / emissions / atmosphere / annual / polluter / climate / impact

True / False

- 1) The article says scientists revealed earthshattering news. T / F
- 2) Parts of the Amazon produce over a billion tons of CO2. T/F
- 3) The Amazon has lost its nickname of being the "lungs of the world". T/F
- 4) The article says agriculture is the biggest culprit in flipping the Amazon. T / F
- 5) The research is published in a journal called "Nature". T/F
- 6) Forest fires produced around 1.5 billion tons of CO2 a year. T / F
- 7) Japan is the fifth-largest polluter in the world. T / F
- 8) A professor said the sink-to-source story was a stark warning. T / F

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

1. shocking	a. assorted
2. emitting	b. forecasting
3. converted	c. offenders
4. predicting	d. bleak
5. culprits	e. appalling
6. profiles	f. identical
7. various	g. accounts
8. equivalent	h. releasing
9. stark	i. gaining momentum
10. accelerating	j. changed

Discussion – Student A

a) How important is the Amazon rainforest?

- b) Why does the world just sit and watch the destruction of the Amazon?
- c) How dangerous is CO2?
- d) What are the dangers of the Amazon flipping?
- e) What stresses do you think environmental scientists have?
- f) How worried are you about the loss of rainforest?
- g) What three adjectives best describe this story?
- h) What advice do you have for loggers in the Amazon?

Phrase Match

- 1. scientists have revealed
- 2. emitting more
- 3. producing over
- 4. the lungs
- 5. a growing number
- 6. published in the
- 7. forest
- 8. equivalent to the annual
- 9. the world's fifth
- 10. yet another stark

Discussion - Student B

- a) What do you think about what you read?
- b) Should we all read the journal 'Nature'?
- c) Is it possible to return forests to their original states?
- d) What is your country doing to reduce CO2 emissions?
- e) What are you doing to reduce CO2 emissions?
- f) What will the environment be like in 100 years from now?
- g) Do you think governments will heed this latest warning?
- h) What questions would you like to ask the researchers?

Spelling

- 1. reedalve shocking news
- 2. mntigeti more carbon
- 3. they are bbngoisra
- 4. veeocdrnt into oxygen
- 5. at an atlcecrnaieg rate
- 6. oetestriafodn and a growing number of forest fires
- 7. carbon oxdomeni
- 8. fires at ouisvra sites
- 9. one billion tons left in the etosamhepr
- 10. ivegenulta to the annual...
- 11. the world's fifth-largest euloprtl
- 12. climate satcimp

Role Play

Role A – Becoming Vegetarian You think becoming vegetarian is the best way to reduce your carbon footprint. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least useful of these (and why): not buying fast fashion, cycling more or switching lights off.

Role B – Not Buying Fast Fashion You think not buying fast fashion is the best way to reduce your carbon footprint. Tell the others three reasons why. Tell them what is wrong with their

- a. a billion tons
- b. emissions of Japan
- c. of forest fires
- d. journal "Nature"
- e. carbon dioxide
- f. warning
- g. shocking news
- h. largest polluter
- i. of the world
- j. growth

ways. Also, tell the others which is the least useful of these (and why): becoming vegetarian, cycling more or switching lights off.

Role C – **Cycling More** You think cycling more is the best way to reduce your carbon footprint. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least useful of these (and why): not buying fast fashion, becoming vegetarian or switching lights off.

Role D – Switching Lights Off You think getting switching lights off is the best way to reduce your carbon footprint. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least useful of these (and why): not buying fast fashion, cycling more or becoming vegetarian.

Speaking – Carbon Footprint

Rank these ways of reducing your carbon footprint with your partner. Put the best at the top. Change partners often and share your rankings.

- Cycle more
- Get politically active
- Switch lights off
- Compost food waste
- Becoming vegetarian
- Don't buy fast fashion
- Reusable shopping bags
- Use less water

Unit 20

Scientists discover Earth has two cores

27th February 2023

Little is known about the geology of the very centre of Earth. It was believed our planet had just one core – a scorching hot mass of molten rock and gas surrounded by a solid, rock mantle. The mantle is a ring between the earth's crust and core. The core is found 2,900 kilometres below Earth's surface. It has a radius of around 3,485 kilometres. Scientists from the University of Chicago have discovered that there may be a second core deep below our feet. Research has led geophysicist Dr Sunyoung Park to believe there is another core. She analyzed data from a 560-km-deep earthquake. Her calculations showed the possibility of a second core, consisting of a layer of fluid rock, at the bottom of the mantle.

After Dr Park studied the deep earthquake, she spoke about why she found the Earth's core so intriguing. She said: "Even though the mantle makes up the largest part of Earth, there's still a lot we don't know about it." She added: "There's a lot more we can learn by using deep earthquakes as a way to probe these questions." Ms Park explained the importance of understanding more about the centre of our planet. She said: "We want to know exactly how fast the mantle flows because that influences the evolution of the entire Earth. It affects how much heat the planet retains for how long, and how the Earth's materials are cycled over time. Our current understanding is very limited and includes a lot of assumptions."

Sources: scitechdaily.com / indy100.com / sciencealert.com

Writing

It is essential we know more about Earth's core. Discuss.

Chat Talk about these words from the article.

geology / Earth / planet / core / molten rock / gas / scientists / data / earthquake / intriguing / learn / probe / questions / influences / evolution / materials / assumptions

True / False

- 1) Scientists know a lot about Earth's core. T / F
- 2) The mantle is a flat layer of crust that consists of molten rock. T/F
- 3) The radius of Earth's core is around 2,900 km. T/F
- 4) Data from a deep earthquake fuelled belief in a second core. T / F
- 5) A geophysicist thinks Earth's core is intriguing. T / F
- 6) The mantle constitutes the bulk of Earth. T / F
- 7) Scientists want to know how fast water flows deep under the ground. T/F
- 8) What we currently know about the core is based on many assumptions. T/F

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

1. scorching a. narrow 2. surrounded b. sums 3. crust c. flowing 4. calculations d. development 5. fluid e. red-hot 6. intriguing f. suppositions 7. probe g. encircled 8. evolution h. examine 9. limited i. fascinating j. outer layer 10. assumptions

Discussion – Student A

- a) What do you think of Earth?
- b) What do you know about the geology of Earth?
- c) What do you know about Earth's core?
- d) Why is it important to know about what's beneath our feet?
- e) How interested are you in geology?
- f) Would you like to travel deep underground?
- g) Where's the best place on Earth?
- h) What will Earth be like in the future?

Phrase Match

- 1. a scorching hot
- 2. a ring between the earth's
- 3. a radius of
- 4. there may be a second core deep
- 5. consisting of a layer
- 6. she found the Earth's core
- 7. the mantle makes up the largest
- 8. exactly how fast the mantle
- 9. that influences the evolution
- 10. It affects how much heat

a. crust and core

- b. the planet retains
- c. of fluid rock
- d. so intriguing
- e. flows
- f. around 3,485 kilometres
- g. mass of molten rock
- h. of the entire Earth
- i. below our feet
- j. part of Earth

Discussion – Student B

- a) What do you think about what you read?
- b) What do you know about earthquakes?

- c) What questions about Earth do you want answered?
- d) What other planets do you like?
- e) How was Earth created?
- f) What would Earth be like without humans?
- g) What dangers might Earth face in the future?
- h) What questions would you like to ask a geophysicist?

Spelling

- 1. Little is known about the <u>lgyeogo</u>
- 2. a occgrhsin hot mass
- 3. etnolm rock and gas
- 4. a durisa of around 3,485 kilometres
- 5. <u>ieiygohscps</u>t Dr Sunyoung Park
- 6. a layer of ifdul rock
- 7. she found the Earth's core so gtninuirig
- 8. deep etgeakraush
- 9. a way to eropb these questions
- 10. We want to know etalyxc how fast
- 11. the <u>lieuvtono</u> of the entire Earth
- 12. a lot of ssamsunoitp

Role Play

Role A – **Geology** You think geology is the most useful science. Tell the others three reasons why. Tell them what is wrong with their sciences. Also, tell the others which is the least useful of these (and why): sociology, zoology or psychology.

Role B – Sociology You think sociology is the most useful science. Tell the others three reasons why. Tell them what is wrong with their sciences. Also, tell the others which is the least useful of these (and why): geology, zoology or psychology.

Role C – **Zoology** You think zoology is the most useful science. Tell the others three reasons why. Tell them what is wrong with their sciences. Also, tell the others which is the least useful of these (and why): sociology, geology or psychology.

Role D – Psychology You think psychology is the most useful science. Tell the others three reasons why. Tell them what is wrong with their sciences. Also, tell the others which is the least useful of these (and why): sociology, zoology or geology.

Speaking – ~ologies

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

- Geology
- Biology
- Sociology
- Psychology
- Physiology
- Zoology
- Anthropology
- Astrology

Module 11

Unit 21 Coca-Cola tests a paper bottle

17th March, 2021

Plastic is a big problem for the world. It is causing a lot of damage to our environment. It is polluting rivers and oceans and harming and killing wildlife. Plastic is a growing problem because it takes hundreds of years to break down. Many companies around the world are trying to replace plastic with other things. Coca-Cola has teamed up with a Danish start-up called the Paper Bottle Company ("Paboco" for short) to make a paper bottle. Coca-Cola hopes to completely stop using plastic for its drinks bottles. It was ranked as the world's number one plastic polluter in 2019. In one year, it uses around three million tons of plastic packaging. A lot of this is not recycled.

Paboco asked us to: "Imagine that all plastic packaging in your store has disappeared." CocaCola executives are imagining this. One Coca-Cola exec. said: "Our vision is to create a paper bottle that can be recycled like any other type of paper. A paper bottle opens up a whole new world of packaging possibilities. We are convinced that paper packaging has a role to play in the future." He added that he hopes Coca-Cola will one day use only packaging from renewable sources that are recyclable. He said: "This is all part of our journey to find the most sustainable packaging solutions for people to enjoy our drinks in a way that is right for them, and that is right for our planet."

Sources: bbc.com / coca-colacomoany.com / fastcompany.com

Writing Humans cannot live without plastic. Discuss.

Chat Talk about these words from the article.

problem / damage / wildlife / hundreds of years / plastic / paper / bottle / recycled / store / vision/ type / possibilities / role / renewable / sources / packaging / planet

True / False

- a) The article says plastic isn't a problem everywhere in the world. T / F
- b) The article says plastic takes thousands of years to break down. T/F
- c) The name "Paboco" is short for Paper Bottle Company. T / F
- d) Coca-Cola is the world's number one plastic polluter. T / F
- e) Coca-Cola has a vision to make bottles that are recycled like paper. T/F
- f) A Coca-Cola executive said paper packaging has no role in the future. T / F
- g) A Coca-Cola executive wants to journey to a packaging factory. T / F
- h) A Coca-Cola executive wants people to enjoy drinks in the right way. T / F

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

1. problem	a. decompose
2. harming	b. dream
3. break down	c. totally
4. completely	d. vanished
5. recycled	e. damaging
6. disappeared	f. answers
7. vision	g. good
8. role	h. difficulty
9. solutions	i. part
10. right	j. reused

Discussion – Student A

- a) What do you know about Coca-Cola?
- b) How serious is the plastic pollution problem?
- c) How can we live without plastic?
- d) What do you think of paper bottles?
- e) How much extra would you pay for a paper bottle?
- f) Should Coca-Cola have to pay a plastic tax?
- g) What happens to plastic in the environment?
- h) What do you think when you see plastic on beaches?

Phrase Match

- 1. It is causing a lot
- 2. it takes hundreds of years
- 3. trying to replace plastic
- 4. Coca-Cola hopes to completely
- 5. ranked as the world's number
- 6. all plastic packaging in your
- 7. recycled like any other
- 8. opens up a whole new world of
- 9. We are convinced that paper packaging
- 10. find the most sustainable packaging

- a. packaging possibilities
- b. with other things
- c. type of paper
- d. store has disappeared
- e. of damage
- f. has a role to play
- g. one plastic polluter
- h. to break down
- i. solutions
- j. stop using plastic

Discussion - Student B

- a) What do you think about what you read?
- b) What do you think of Coca-Cola?
- c) What can we use instead of plastic?
- d) What future does paper packaging have?
- e) Which is better, Coke or Pepsi?
- f) Will you stop buying plastic bottles from now?
- g) What things do you have that are made of plastic?
- h) What questions would you like to ask Coca-Cola?

Spelling

- 1. causing a lot of <u>aamdge</u>
- 2. It is polluting rivers and ceaons
- 3. eplrcae plastic with other things
- 4. narked as the world's number one
- 5. tons of plastic acapigkng
- 6. A lot of this is not <u>crcyeled</u>
- 7. Coca-Cola ectueixevs
- 8. Our <u>isvoin</u> is to create a paper bottle
- 9. nrawebele sources
- 10. This is all part of our ourjeny
- 11. find the most <u>unasitasble</u>
- 12. that is right for our neaplt

Role Play

Role A – **Pens** You think pens are the best plastic products. Tell the others three reasons why. Tell them what is wrong with their plastic products. Also, tell the others which is the worst of these (and why): bottles, bags or masks.

Role B – **Botttles** You think bottles are the best plastic products. Tell the others three reasons why. Tell them what is wrong with their plastic products. Also, tell the others which is the worst of these (and why): pens, bags or masks.

Role C – **Bags** You think bags are the best plastic products. Tell the others three reasons why. Tell them what is wrong with their plastic products. Also, tell the others which is the worst of these (and why): bottles, pens or masks.

Role D – Masks You think masks are the best plastic products. Tell the others three reasons why. Tell them what is wrong with their plastic products. Also, tell the others which is the worst of these (and why): bottles, bags or pens.

Speaking – Plastic products

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

- Bags
- Cutlery
- Furniture
- Masks
- Bottles
- Pens
- Plates
- Toys

Unit 22 Jeff Bezos promises \$2 billion to help nature

4th November, 2021

Many countries at the COP26 climate change conference are making promises to help Earth. They have signed agreements to end deforestation and cut methane emission levels by 30 per cent by 2030. Bosses of global companies are also at COP26. Jeff Bezos, the founder of Amazon, made a speech on Tuesday. He promised to give \$2 billion to help nature. He said the money would restore landscapes to their more natural state. He also wants to transform food systems to make food production more sustainable. Mr Bezos also set up The Bezos Earth Fund in 2020. This is a \$10-billion project to help fight climate change. In September, this fund gave \$1 billion to help threatened indigenous peoples.

Jeff Bezos said he decided to give more money to protect the planet after going into space in July. He said that looking at Earth from space made him understand the importance of helping our planet. He said: "Looking back at Earth from up there, the atmosphere seems so thin, the world so...fragile." In his COP26 speech, he said his trip into space changed his feelings about our planet. He said: "I was told that seeing Earth from space changes the lens through which you see the world, but I was not prepared for how much that would be true." He said it was time for all countries and corporations to act. He said: "In this critical year...we must all stand together to protect our world."

Sources: bbc.com / forbes.com / euronews.com

Writing The world does not care enough about nature to act to help it. Discuss.

Chat Talk about these words from the article.

climate change / conference / promises / Earth / methane / Amazon / indigenous / money / planet / space / fragile / feelings / true / countries / corporations / critical

True / False

1) Every country at COP26 has promised to end deforestation. T/F

- 2) Many countries will cut methane emissions levels by 30% by 2030. T/F
- 3) Jeff Bezos wants to transform food systems. T/F
- 4) The Bezos Earth Fund gave \$10 billion to help indigenous peoples. T/F
- 5) Mr Bezos' trip into space made him want to help Earth. T / F
- 6) Mr Bezos said he saw a fragile Earth and a thin atmosphere from space. T/F
- 7) Mr Bezos was fully prepared for looking at Earth from space. T / F
- 8) Bezos said everybody had to stand together in a line. T/F

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

1. promises	a. ready
2. agreements	b. started
3. transform	c. real
4. set up	d. deals
5. threatened	e. safeguard
6. protect	f. serious
7. fragile	g. pledges
8. prepared	h. change
9. true	i. endangered
10. critical	j. delicate

Discussion - Student A

- a) What do you think about what you read?
- b) What do you know about Jeff Bezos?
- c) Would you like to go into space?
- d) Do you think going into space would change you?
- e) What is so fragile about Earth?
- f) Do you think countries and corporations will act?
- g) How critical is this year?
- h) What questions would you like to ask Jeff Bezos?

Phrase Match

1. making promises	a. of helping our planet
2. They have signed agreements to	b. peoples
3. cut methane emission	c. space
4. make food production more	d. all stand together
5. help threatened indigenous	e. end deforestation
6. after going into	f. would be true
7. understand the importance	g. levels
8. the atmosphere seems	h. to help Earth
9. I was not prepared for how much that	i. so thin
10. In this critical yearwe must	j. sustainable

Discussion – Student B

- a) What do you know about COP26?
- b) Do you think COP26 will help to save the planet?
- c) What do we need to do to save the planet?
- d) How dangerous are methane emissions?
- e) How useful with Jeff Bezos' \$2 billion be?
- f) How would you help the planet with \$2 billion?
- g) Do we need to change our diet to make food more sustainable?
- h) How can we help indigenous people?

Spelling

- 1. the COP26 climate change cfcreneone
- 2. making essmrpoi to help Earth
- 3. cut methane sosimeni levels by 30 per cent
- 4. Jeff Bezos, the enfrudo of Amazon
- 5. make food production more <u>slesuibatan</u>
- 6. help <u>hdernteeta</u> indigenous peoples
- 7. give more money to <u>crtotpe</u> the planet
- 8. the psmertoahe seems so thin
- 9. the world so... firlega
- 10. I was not <u>aerrpdpe</u> for how much
- 11. time for all countries and cptoraosrnio to act
- 12. In this crictila year

Role Play

Role A – Billionaire CEOs You think billionaire CEOs are best at fighting climate change. Tell the others three reasons why. Tell them what is wrong with their fighters. Also, tell the others which is the least effective of these (and why): oil companies, you and I or the UN.

Role B – **Oil Companies** You think oil companies are best at fighting climate change. Tell the others three reasons why. Tell them what is wrong with their fighters. Also, tell the others which is the least effective of these (and why): billionaire CEOs, you and I or the UN.

Role C - You and I You think you and I are best at fighting climate change. Tell the others three reasons why. Tell them what is wrong with their fighters. Also, tell the others which is the least effective of these (and why): oil companies, billionaire CEOs or the UN.

Role D – The United Nations You think the UN is best at fighting climate change. Tell the others three reasons why. Tell them what is wrong with their fighters. Also, tell the others which is the least effective of these (and why): oil companies, you and I or billionaire CEOs.

Speaking – Changers

Rank these with your partner. Put the best people / things to help fight climate change at the top. Change partners often and share your rankings.

- Jeff Bezos
- Technology
- Oil companies
- China
- You and I
- Greta Thunberg
- Billionaire CEOs
- The UN

Module 12

Unit 23 Earth Day

Earth Day is an annual event that aims to inspire awareness of and appreciation for our environment. It was founded in 1969 by peace activist John McConnell. He introduced the idea of a global holiday called "Earth Day" at a UN conference on the environment in 1969. The first Earth Day celebration was in 1970. It was quickly adopted by the United Nations. In 1971, then Secretary-General U Thant proclaimed that Earth Day should be held every year. He said: "May there only be peaceful and cheerful Earth Days to come for our beautiful Spaceship Earth as it continues to spin and circle in frigid space with its warm and fragile cargo of animate life." It marked the birth of the modern environmental movement.

Earth Day is now observed in 175 countries around the world. It is one of the largest events in the United Nation's annual calendar. Earth Day is coordinated by the non-profit Earth Day Network. They say more than a half billion people every year celebrate it. Earth Day has got countries to act together to help save our planet. The 1992 UN Earth Summit in Rio de Janeiro was the result of an earlier Earth Day campaign. Earth Day 2000 highlighted the urgent need for clean and green energy. Earth Day 2007 was huge, with an estimated billion people participating in thousands of activities. The 2009 Disney movie 'Earth' raises awareness of the many ways people can help our planet on Earth Day.

Sources: bbc.com / forbes.com / euronews.com

Match the following phrases from the article. Paragraph 1

1	
1.	appreciation

- 2 He introduced the idea of
- 3. It was quickly adopted
- 4. Earth Day should
- 5. fragile
- 6. the modern environmental

c. movementd. for our env

cargo

a.

b.

- d. for our environment
- e. a global holiday
- f. by the United Nations

be held every year

Paragraph 2

- 1. observed in
- the United Nation's annual
- 3. Earth Day has got countries
- 4. the urgent need
- 5. an estimated
- 6. the many ways people can

- a. for clean and green energy
- b. billion people
- c. help our planet
- d. to act together
- e. 175 countries
- f. calendar

CHOOSE THE CORRECT WORD

Delete the wrong word in each of the pairs of italics.

Earth Day is an annual event that *aims / aiming* to inspire awareness of and appreciation for our environment. It was *finding / founded* in 1969 by peace activist John McConnell. He introduced the idea of a global holiday *called / calling* "Earth Day" at a UN conference *in / on* the environment in 1969. The first Earth Day celebration was in 1970. It was quickly adopted *to / by* the United Nations. In 1971, then Secretary-General U Thant proclaimed that Earth Day should be held *every / all* year. He said: "May there only be peaceful and cheerful Earth Days to come for our beautiful Spaceship Earth as it continues to spin and circle in frigid space with *their / its* warm and fragile cargo of animate life." It marked the *born / birth* of the modern environmental movement.

Earth Day is now observed in 175 countries around the world. It is one of the largest events *in / at* the United Nation's annual calendar. Earth Day is *coordinated / coordination* by the non-profit Earth Day Network. They say more than a half billion people every year celebrate *them / it*. Earth Day has got *country / countries* to act together to help save our planet. The 1992 UN Earth Summit in Rio de Janeiro was the result *for / of* an earlier Earth Day campaign. Earth Day 2000 highlighted the urgent need for clean and green *energetic / energy*. Earth Day 2007 was huge, with an estimated billion people participating in thousands *of / by* activities. The 2009 Disney movie 'Earth' raises awareness of the many *way / ways* people can help our planet on Earth Day.

MULTIPLE CHOICE

Earth Day is an (1) event that aims to inspire awareness of and appreciation for our
environment. It was founded in 1969 by peace (2) John McConnell. He introduced the idea
of a global holiday called "Earth Day" at a UN conference on the environment in 1969. The (3)
Earth Day celebration was in 1970. It was quickly adopted by the United Nations. In 1971,
(4) Secretary-General U Thant proclaimed that Earth Day should be held every year. He
said: "(5) there only be peaceful and cheerful Earth Days to come for our beautiful
Spaceship Earth as it continues to spin and circle in frigid space with its warm and fragile cargo
of animate life." It marked the (6) of the modern environmental movement.
Earth Day is now observed in 175 countries around the world. It is one of the largest events (7)
the United Nation's annual calendar. Earth Day is coordinated by the non-profit Earth Day
Network. (8) say more than a half billion people every year celebrate it. Earth Day has got
countries to act together to help (9) our planet. The 1992 UN Earth Summit in Rio de
Janeiro was the result of an earlier Earth Day campaign. Earth Day 2000 highlighted the urgent
need (10) clean and green energy. Earth Day 2007 was huge, with an estimated billion
people participating (11) thousands of activities. The 2009 Disney movie 'Earth' raises
awareness of the (12) ways people can help our planet on Earth Day.

Put the correct words from this table into the article.

1.	(a)	annual	(b)	annually	(c)	annuals	(d)	annul
2.	(a)	activity	(b)	activism	(c)	activist	(d)	actively
3.	(a)	firsts	(b)	first	(c)	firstly	(d)	first-time
4.	(a)	that	(b)	when	(c)	there	(d)	then
5.	(a)	March	(b)	May	(c)	Say	(d)	Could
6.	(a)	birth	(b)	born	(c)	birthing	(d)	give birth
7.	(a)	at	(b)	to	(c)	in	(d)	as
8.	(a)	We	(b)	Не	(c)	Them	(d)	They
9.	(a)	save	(b)	savings	(c)	saver	(d)	saviour
10.	(a)	from	(b)	for	(c)	to	(d)	with
11.	(a)	on	(b)	to	(c)	as	(d)	in
12.	(a)	much	(b)	any	(c)	many	(d)	some

Spell the <u>jumbled</u> words (from the text) correctly.

Paragraph 1

- 1. an nanalu event
- 2. peace <u>siaittvc</u>

- 3. ddteopa by the United Nations
- 4. spin and <u>ilcerc</u>
- 5. fragile <u>orcga</u>
- 6. the <u>btrhi</u> of the modern environmental movement

Paragraph 2

- 7. now sevebdro in 175 countries
- 8. the non-<u>ioprft</u> Earth Day Network
- 9. help save our <u>ntaepl</u>
- 10. the <u>ngertu</u> need for clean and green energy
- 11. an <u>sadtmiete</u> billion people
- 12. thousands of vieatstici

DISCUSSION	(Write	your own	questions)
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ESTIONS (Do not show these to student A)
ESTIONS (Do not show these to student A)
(Do not show these to student A)
(Do not show these to student A)

WRITING

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

MAGAZINE ARTICLE: Write a magazine article about Earth Day. Write about what happens around the world. Include two imaginary interviews with people who did something on this day. Read what you wrote to your classmates in the next lesson. Give each other feedback on your articles.

POSTER: Make your own poster about Earth Day. Write about will happen on this day around the world.

Unit 24

Koala put on endangered species list

14th February, 2022

The koala is regarded as the epitome of cuddliness. However, animal lovers will be saddened to hear that this lovable marsupial has been moved to the endangered species list. The Australian Koala Foundation estimates there are somewhere between 43,000-100,000 koalas left in the wild. Their numbers have been dwindling rapidly due to disease, loss of habitat, bushfires, being hit by cars, and other threats. Stuart Blanch from the World Wildlife Fund in Australia said: "Koalas have gone from no listing to vulnerable to endangered within a decade. That is a shockingly fast decline." He added that koalas risk "sliding toward extinction" unless there are "stronger laws...to protect their forest homes".

The koala has huge cultural significance for Australia. Wikipedia writes: "The koala is well known worldwide and is a major draw for Australian zoos and wildlife parks. It has been featured in advertisements, games, cartoons, and as soft toys. It benefited the national tourism industry by over an estimated billion Australian dollars in 1998, a figure that has since grown." Despite this, efforts to protect the koala have been failing. Australia's Environment Minister Sussan Ley said there have been "many pressures on the koala," and that it is "vulnerable to climate change and to disease". She said the 2019-2020 bushfires, which killed at least 6,400 of the animals, were "a tipping point".

Sources: canberrattimes.com/nypost.com/wikipedia.org

Writing

The whole world should act to save the koala. Discuss.

Chat

Talk about these words from the article.

koala / epitome / cuddliness / marsupial / endangered / in the wild / disease / forest / Australia / worldwide / zoos / wildlife / cartoons / soft toys / vulnerable / bushfires

True / False

- 1) The article says koala epitomise cuddliness. T / F
- 2) There could be as few as 143,000 koalas left in the wild. T/F
- 3) Traffic accidents are one reason for the decline in koala numbers. T/F
- 4) The WWF says Australia needs stronger laws to protect koalas. T/F
- 5) Wikipedia says koalas can draw things. T / F
- 6) Koalas were worth a billion dollars to Australia's economy last year. T/F
- 7) An environment minister said protection efforts have been working. T / F
- 8) Deaths due to bushfires were a tipping point for the koala. T / F

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

1. regarded	a. attraction
2. lovable	b. falling
3. estimates	c. wiped out
4. dwindling	d. reckons
5. extinction	e. boosted
6. draw	f. adorable
7. benefited	g. in danger

8. pressures

9. vulnerable

10. killed

h. dying out

i. considered

j. strains

Discussion – Student A

a) What do you think about what you read?

b) What do you think of koalas?

c) What are the world's cuddliest creatures?

d) What animals are culturally significant in your country?

e) What do you think of zoos?

f) What can you do to help protect koalas?

g) What will the state of wildlife be in 50 years from now?

h) What questions would you like to ask koala experts?

Phrase Match

1. The koala is regarded as the epitome

2. animal lovers will be saddened

3. Their numbers have been dwindling

4. gone from no listing to vulnerable

5. koalas risk sliding

6. cultural

7. a major draw for

8. It benefited the national tourism

9. it is vulnerable

10. a tipping

a. to endangered

b. to climate change

c. toward extinction

d. industry

e. of cuddliness

f. Australian zoos

g. rapidly

h. point

i. to hear that

j. significance

Discussion – Student B

a) What do you know about koalas?

b) What do you know about other Australian marsupials?

c) How cuddly do you think koalas are?

d) How can we save the koala?

e) Why are so many animals on endangered species lists?

f) What three adjectives best describe this story?

g) How would you feel if the koala became extinct?

h) What laws are needed to protect koalas?

Spelling

1. regarded as the oipeemt of cuddliness

2. this lovable uasilmpar

3. Their numbers have been igdnlndwi

4. due to disease, loss of thaiath, bushfires...

5. valerulneb to endangered

6. koalas risk sliding toward totniexicn

7. huge cultural sceigiafnnci

8. It has been rfeudeta in advertisements

9. It beeefntid the national tourism industry

10. an estmdatie billion Australian dollars

11. many useepssrr on the koala

12. a <u>iigppnt</u> point

Role Play

Role A – **Koala** You think a koala is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): rabbit, a dolphin or a horse.

Role B – Rabbit You think a rabbit is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): koala, a dolphin or a horse.

Role C – **Dolphin** You think a dolphin is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): rabbit, koala or a horse.

Role D – **Horse** You think a horse is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): rabbit, a dolphin or koala.

Speaking – Cuddly creatures

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

- Koala
- Polar bear
- Rabbit
- Baby
- Dog
- Cat
- Dolphin
- Horse

Module 13

Unit 25

Two zoos have raised about £25,000 for three zoos in Ukraine following a fundraising weekend

It comes as some animals in Ukraine were having to be released into forests in a bid to keep them safe. Dennis Flynn, CEO of Wild Planet Trust which runs Paignton and Newquay zoos said it was "a great effort". Donations, all of the profits from the shops and restaurants, and half the money from ticket sales were all going towards the cause.

Kharkiv Zoo is among the zoos they are trying to help in Ukraine since Russia invaded the country in February.

"Tragically in Kharkiv two of the staff there were killed while trying to carry out their duties," Mr Flynn told the BBC.

He said some of the zoo's big cats were evacuated a couple of weeks ago.

"Some tragically, deer and antelope for example have been released into local forests as that's the best way to keep them safe.

"The keepers are doing a brilliant job to try and get food and supplies to the animals in their care."

Bosses said double the number of people usually expected at this time of year visited Paignton and Newquay zoos over the fundraising weekend.

"It was astonishing, people were spending, putting money in the collection tins, donating online, it was just a phenomenal effort and we are just so grateful to everyone who came and supported the effort," Mr Flynn said.

Sources: BBC News South West

Writing

The whole world should act to save the zoo. Discuss.

Chat

Talk about these words from the article.

animals / to be released / bid / to keep safe./ great effort / donations / go towards the cause / zoos / Ukraine / Kharkiv / staff / carry out duties /evacuate / local forests / keepers / phenomenal effort

True / False

- 1. Some animals in Ukraine were having to be released into forests. T / F
- 2. Donations, all of the profits from the sold cars were all going towards the cause. T/F
- 3. Kharkiv Zoo is among the zoos they are trying to help in Ukraine since Russia invaded the country in February. T/F
- 4. Tragically in Kharkiv three of the staff there were killed. T / F
- 5. Some of the zoo's big dogs were evacuated a couple of weeks ago. T/F
- 6. The keepers did a brilliant job to try and get food and supplies to the animals. T / F
- 7. Double the number of people visited Paignton and Newquay zoos over the fundraising weekend. T / F
- 8. People were spending, putting money in the collection tins, donating online. T/F

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

1. animals	a. profits
2. effort	b. reason
3. donations	c. several
4. cause	d. excellent
5. staff	e. beast

6. evacuate
7. couple
8. brilliant
9. grateful
10. support
f. attempt
g. employees
h. remove
i. assist
j. thankful

Discussion – Student A

- a) What do you think about what you read?
- b) What do you think of animals?
- c) What are the most popular animals in Ukraine?
- d) What animals are culturally significant in your country?
- e) What do you think of zoos?
- f) What can you do to help protect animals?
- g) What will the state of Ukrainian zoos be in 50 years from now?
- h) What questions would you like to ask zoos experts?

GAP FILL: Put the words into the gaps in the text.

Profits, bid, fundraising weekend, released, a great effort, towards, to keep them safe, invaded, to carry out, evacuated, tins, deer, food and supplies

It comes as some animals in Ukraine were having to be into forests in a to
keep them safe. Dennis Flynn, CEO of Wild Planet Trust which runs Paignton and Newquay
zoos said it was "". Donations, all of the from the shops and restaurants
and half the money from ticket sales were all going the cause.Kharkiv Zoo is
among the zoos they are trying to help in Ukraine since Russia the country in
February."Tragically in Kharkiv two of the staff there were killed while trying thei
duties," Mr Flynn told the BBC.He said some of the zoo's big cats were a couple
of weeks ago. "Some tragically, and antelope for example have been released into loca
forests as that's the best way "The keepers are doing a brilliant job to try
and get to the animals in their care." Bosses said double the number of people
usually expected at this time of year visited Paignton and Newquay zoos over the
"It was astonishing, people were spending, putting money in the
collection, donating online, it was just a phenomenal effort and we are just so
grateful to everyone who came and supported the effort," Mr Flynn said.

Phrase Match

- 1. all of the profits
- 2. were all going
- 3. to be released
- 4. is among the zoos
- 5. two of the staff there
- 6. while trying
- 7. some of the zoo's big cats
- 8. deer and antelope
- 9. as the best way
- 10. people were spending, putting money

- a. from the shops and restaurants
- b. they are trying to help in Ukraine
- c. were killed
- d. to carry out their duties
- e. have been released into local forests
- f. to keep them safe
- g. into forests
- h. in the collection tins
- i. were evacuated
- j. towards the cause

Discussion - Student B

- a) What do you know about the zoos in Ukraine?
- b) What do you know about other animals' shelters in Ukraine?
- c) How cuddly do you think animals are?
- d) How can we save the animals?
- e) Why are so many animals on endangered species lists?
- f) What three adjectives best describe this story?
- g) How would you feel if animals became extinct?
- h) What laws are needed to protect animals?

Spelling

- 1. to be <u>earelsed</u> into forests
- 2. <u>sttru</u> which runs Paignton
- 3. all of the profits from the shops and <u>antsrestaur</u>
- 4. were all going watords the cause
- 5. <u>adediny</u> the country
- 6. lytragical in Kharkiv two of the staff
- 7. while trying to carry out their <u>iesdut</u>
- 8. big cats were <u>uatedevac</u>
- 9. The keepers are doing a <u>brantilli</u> job
- 10. people usually peexcted at this time of year
- 11. over the <u>ingfundrais</u> weekend
- 12. It was nishingasto
- 13. it was just a nomenalphe effort

Role Play

Role A – **Deer** You think a deer is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): deer, an antelope or a big cat.

Role B – Antelope You think an antelope is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): antelope, a deer or a big cat.

Role C – Big cat You think a big cat is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): big cat, a deer or an antelope.

Role D – **Horse** You think a horse is the cuddliest creature. Tell the others three reasons why. Tell them why their creatures aren't as cuddly. Also, tell the others which is the least cuddly of these (and why): deer, an antelope or a big cat.

Speaking – Cuddly creatures

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

- Deer
- Antelope
- Big cat
- Horse
- Dog
- Bear
- Rabbit
- Lion

Unit 26

The British government has unveiled plans

The British government has unveiled plans to make the country the world's leader in the use of wind farms. It announced an ambitious project to power the entire country's homes using wind. Politicians hope that wind farms will provide 20 percent of Britain's total power needs by 2020. To do this, power companies will need to build 7,000 wind turbines all around the British coastline. This will greatly change coastal views, which many nature lovers are unhappy about. There are also fears that the wind farms may disrupt shipping, wildlife and the fishing industry. Meanwhile, consumer groups are concerned over the fact that the public will have to pay higher electricity bills for the wind power. The government hopes the environmental benefits of its idea will win over those worried about the project.

Britain's Business Secretary John Hutton outlined his vision of greatly increasing the amount of renewable energy. He said: "The UK has some of the best offshore wind resources in the world. [It also has] a long history of design, installation and operational expertise in the offshore environment." He added: "The challenge for government and for industry is to turn this potential – for our energy and economy – into a cost-effective reality." Britain may soon produce twice as much electricity from wind than any other country in the world. It could also be a model for how other countries can reduce the amount of fossil fuels and carbon they use. A spokesperson from the British Wind Energy Association said the UK would soon dominate the global market for offshore wind technologies.

Sources: bbc.com / forbes.com / euronews.com

CHAT: In pairs / groups, decide which of these topics or words from the article are most interesting and which are most boring.

plans / world leaders / farms / power needs / coastal views / electricity bills / vision / renewable energy / design / expertise / challenges / fossil fuels

Have a chat about the topics you liked. Change topics and partners frequently.

TWO-MINUTE WIND DEBATES: Have the following fun 2-minute debates. Students A strongly believe in the first argument, students B the second. Change pairs often.

- a. We should stop using all fossil fuels within 5 years. Vs. Don't be ridiculous.
- b. Wind will one day power the whole world. Vs. Only in windy places.
- c. Wind power is better than solar power. Vs. Solar power is best.
- d. Wind farms are too ugly. Vs. Wind farms help save the planet.
- e. Nuclear energy is better than wind energy. Vs. Too dangerous.
- f. The world will run out of wind one day. Vs. No way!!! How could it?

RENEWABLE ENERGY: With your partner(s), rank which of these power sources are best. Discuss when they are likely to play a large part in providing power for your country's needs:

wind farms solar energy wave power hydroelectricity geothermal power nuclear power biofuels **AMBITIOUS:** Spend one minute writing down all of the different words you associate with the word 'ambitious'. Share your words with your partner(s) and talk about them. Together, put the words into different categories.

QUICK ROLE PLAY: Student A believes scientists will find renewable energies to satisfy the world's demand for power; Student B believes that when fossil fuels run out, the world will have not have enough power. Change partners often. Change partners again and talk about your roles and conversations.

TRUE / FALSE

a.	The UK plans to power all its homes using wind power by 2020.	T/F
b.	It will build 70,000 special wind turbines to power all homes.	T/F
c.	The wind farms will be built on mountain tops and beaches.	T/F
d.	Wind power will mean people having to pay higher power charges.	T/F
e.	The UK is a great place for renewable energy from wind.	T/F
f.	The UK has only recently started wind farms in the sea.	T/F
g.	The UK will soon produce most of the world's wind energy.	T/F
h.	The UK may become the leading global player in wind technology.	T / F

SYNONYM MATCH: Match the following synonyms from the article:

1.	unveiled	a.	anxious
2	entire	b.	example
3.	disrupt	c.	whole
4.	concerned	d.	know-how
5.	win over	e.	actuality
6.	expertise	f.	promise
7.	potential	g.	interrupt
8.	reality	h.	convince
9.	model	i.	control
10.	dominate	j.	revealed

PHRASE MATCH: Match the following phrases from the article (sometimes more than one combination is possible):

1.	The British government has unveiled	<i>a</i> .	wind technologies
2	an ambitious project to power the	<i>b</i> .	views
3.	greatly change coastal	<i>c</i> .	environment
4.	the wind farms may disrupt	d.	entire country's homes
5.	its idea will win over those	e.	his vision
6.	Secretary John Hutton outlined	f.	shipping
7.	operational expertise in the offshore	g.	fuels and carbon
8.	produce twice as much	h.	plans
9.	reduce the amount of fossil	i.	worried about the project
10.	dominate the global market for offshore	j.	electricity from wind

GAP FILL: Put the words into the gaps in the text.

The British government has unveiled	_ to make the country the		
world's leader in the use of wind farms. It annot	unced an ambitious project	industry	
to power the country's homes using	wind. Politicians hope that	needs	
wind farms will provide 20 percent of Britain's	s total power by		
2020. To do this, power companies will need to	build 7,000 wind turbines	public	
all around the British This will great	atly change coastal views,	coastline	
which many nature are unhappy abou	it. There are also fears that	plans	
the wind farms may disrupt shipping, wildlife	and the fishing	·	
Meanwhile, consumer groups are concerned	over the fact that the	win	
will have to pay higher electricity bill	ls for the wind power. The	lovers	
government hopes the environmental benefits	of its idea will	entire	
over those worried about the project.		CILLIC	
Britain's Business Secretary John Hutton	his vision of greatly		
increasing the amount of renewable energy. He s		history	
the best offshore wind in the wo	orld. [It also has] a long	•	
resources of design, installation and operational expertise in the offshore			
environment." He added: "The challenge for government and for industry			
is to this potential – for our energy and economy – into a cost-			
effective reality." Britain may soon produce	effective reality " Britain may soon produce as much electricity		
from wind than any other country in the world. I	it could also be a	outlined	
for how other countries can reduce the amount of		model	
they use. A spokesperson from the British Win	d Energy Association said	turn	
the UK would soon dominate the market for offshore wind			
twice technologies.			
WORD SEARCH: Look in your dictionaries / computer to find collocates, other meanings, information, synonyms for the words 'wind' and 'farm'.			
	· • • • • • • • • • • • • • • • • • • •	-	
wind	farm		

- Share your findings with your partners.
- Make questions using the words you found.
- Ask your partner / group your questions.

ARTICLE QUESTIONS: Look back at the article and write down some questions you would like to ask the class about the text.

- Share your questions with other classmates / groups.
- Ask your partner / group your questions.

GAP FILL: In pairs / groups, compare your answers to this exercise. Check your answers. Talk about the words from the activity. Were they new, interesting, worth learning...?

VOCABULARY: Circle any words you do not understand. In groups, pool unknown words and use dictionaries to find their meanings.

TEST EACH OTHER: Look at the words below. With your partner, try to recall exactly how these were used in the text:

unveiled	• outlined
• entire	• best
• views	expertise
• disrupt	• twice
• higher	• model
• win over	dominate

Write five GOOD questions about renewable energy 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.			

DISCUSSION

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

- a) What did you think when you read the headline?
- b) Do you think wind farms will become a big thing in the future?
- c) Could wind power provide electricity to all of the homes in your country?
- d) What renewable energy sources could and should your country be using?
- e) Do you think it's OK to ruin the beauty of the countryside to stop global warming?
- f) What would you think if your town became full of wind turbines?
- g) Would you pay for much more expensive electricity to help the environment?
- h) Are people in your country enthusiastic about renewable energy?
- i) Does your government have any ambitious renewable energy projects?

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

- a) Did you like reading this article?
- b) What is your vision for the energy needs of the world?
- c) Which renewable resource does your country have most of?
- d) Do you think governments are moving too slowly or too fast to develop renewable energy?
- e) Why is Britain and not your country the leader in wind technologies?
- f) How long do you think countries should continue using fossil fuels?
- g) Do you think there'll be zero carbon emissions one day?
- h) Will every house have its own wind turbine one day?
- i) Did you like this discussion?

CORRECT WORD: Put the correct words from a–d below in the article.

The British government has unveiled plans to make the country the world's leader in the (1)
of wind farms. It announced an ambitious project to power the entire (2) homes using
wind. Politicians hope that wind farms will provide 20 percent of Britain's total power (3)
by 2020. To do this, power companies will need to build 7,000 wind turbines all around the
British coastline. This will greatly change coastal (4), which many nature lovers are
unhappy about. There are also fears that the wind farms may disrupt shipping, wildlife and the
fishing industry. Meanwhile, consumer groups are concerned (5) the fact that the public
will have to pay higher electricity bills for the wind power. The government hopes the
environmental benefits of its idea will win (6) those worried about the project.
Pritain's Duciness Secretary John Hutton outlined his (7) of greatly increasing the amount
Britain's Business Secretary John Hutton outlined his (7) of greatly increasing the amount
of renewable energy. He said: "The UK has some of the best offshore wind resources in the

world. [It also has] a long history of design, installation and operational (8) ____ in the offshore environment." He added: "The challenge for government and for industry is to turn this potential

– for our energy and economy – (9) a cost-effective reality." Britain may soon produce twice as (10) electricity from wind than any other country in the world. It could also be a model for how other countries can reduce the amount of (11) fuels and carbon they use. A spokesperson from the British Wind Energy Association said the UK would (12) dominate the global market for offshore wind technologies.								
1.	(a)	user	(b)	usage	(c)	use	(d)	using
2.	(a)	countries	(b)	country	(c)	countries'	(d)	country's
3.	(a)	necessary	(b)	needs	(c)	needy	(d)	needing
4.	(a)	views	(b)	viewers	(c)	view	(d)	viewing
5.	(a)	in	(b)	around	(c)	over	(d)	under
6.	(a)	over	(b)	under	(c)	up	(d)	down
7.	(a)	visible	(b)	visionary	(c)	visibility	(d)	vision
8.	(a)	expert	(b)	expertise	(c)	expertly	(d)	experts
9.	(a)	into	(b)	onto	(c)	unto	(d)	up to
10.	(a)	most	(b)	more	(c)	many	(d)	much
11.	(a)	fossilized	(b)	fossilize	(c)	fossil	(d)	fossils
12.	(a)	sooner	(b)	soon	(c)	soonest	(d)	soonish

Write about wind farms for 10 minutes. Correct your partner's paper.

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 wind farms. Which are the best value? Talk about what you discover with your partner(s) in the next lesson.

RENEWABLE ENERGIES: Make a poster about different kinds of renewable energies. Show your poster to your classmates in the next lesson. Did you all include similar things?

MAGAZINE ARTICLE: Write a magazine article about how much longer we should use fossil fuels. Include imaginary interviews with an oil company executive and an environmentalist.

Read what you wrote to your classmates in the next lesson. Write down new words and expressions.

LETTER: Write a letter to your government leaders. Give them three suggestions on what renewable energy sources they should be trying. Give them three reasons they should take your advice. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

Module 14

Unit 27 Scientists say cold air rises

9th May, 2020

Most of us learn at school that warm air rises and cool air sinks. This has always appeared to be a fundamental principle of science. However, a study from the University of California, Davis found that there are circumstances in which cool air rises. Researchers discovered that in tropical atmospheres, cold air rises because of the lightness of water vapour. Apparently, in warmer and more humid climates, water particles become more buoyant and can help cooler air rise. Lead researcher Dr Da Yang said: "Water vapour has a buoyancy effect which helps release the heat of the atmosphere to space and reduce the degree of warming. Without this lightness of water vapour, the climate warming would be even worse."

The scientists said humid air is lighter than dry air at the same temperatures and pressure. This is called the vapour buoyancy effect. It allows cooler air containing water droplets to rise, which then forms clouds and thunderstorms. The resulting rain has a cooling effect in tropical areas. Another researcher, Seth Seidel, said more research is needed to find out the effects rising cool air has on climate change, and on its impact on curbing the effects of global warming. Seth Seidel said: "Now that we understand how the lightness of water regulates tropical climate, we plan to study whether global climate models accurately represent this effect." The study is published in the journal "Science Advances".

Sources: sciencedaily.com/phys.org/sciencemag.com

Writing Cold air is better than warm air. Discuss.

Chat Talk about these words from the article.

learn / warm air / fundamental / cool air / tropical / water vapour / buoyancy / climate scientists / temperature / pressure / clouds / thunderstorm / global warming / journal

True / False

- a) Few of us learn at school that warm air rises. T / F
- b) There is a study from the University of Davis, California. T/F
- c) Cold air rises because of the lightness of water vapour. T/F
- d) Climate change could be worse if cool air didn't rise. T / F
- e) Dry air is lighter than humid air. T/F
- f) Rising cool air helps to form thunderstorms and clouds. T / F
- g) A researcher said more research is needed on warm and hot air. T / F
- h) The research is published in the journal "Advances Science". T / F

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

1. sinks	a. including
2. circumstances	b. evidently
3. apparently	c. outcome
4. vapour	d. precisely
5. release	e. moisture
6. effect	f. descends
7. containing	g. controls
8. curbing	h. set free
9. regulates	i. situations
10. accurately	j. restraining

Discussion - Student A

- a) What do you think of cold air?
- b) What did you learn about air at school?
- c) What did you think of science at school?
- d) What do you know about tropical areas?
- e) What are the good and bad things about the tropics?
- f) What do you think of humidity?
- g) What kind of weather do you love?
- h) What do you know about global warming?

Phrase Match

- 1. Most of us learn at school that warm air
- 2. a fundamental principle
- 3. there are circumstances in
- 4. Water vapour has a buoyancy
- 5. climate warming would be even
- 6. dry air at the same temperatures
- 7. forms clouds
- 8. The resulting rain has a cooling effect
- 9. its impact on curbing
- 10. The study is published in
- **Discussion Student B**
- a) What do you think about what you read?
- b) What is your favourite outside temperature and why?
- c) What do you think the vapour buoyancy effect is?
- d) What do you think of thunderstorms?
- e) How could we curb the effects of global warming?
- f) How much do you like science?
- g) What would it be like to be a scientist?
- h) What questions would you like to ask the researchers?
- **Spelling**
- 1. a fundamental <u>ripnipcel</u> of science
- 2. there are acusscemrtcni
- 3. in tropical eoephssrmat
- 4. water particles become more <u>notaybu</u>
- 5. reduce the geeedr of warming
- 6. Without this lightness of water opuavr
- 7. <u>hdimu</u> air is lighter
- 8. at the same temperatures and esrrspue
- 9. water strledop
- 10. ngbicur the effects of global warming
- 11. water teugersal tropical climate
- 12. published in the <u>anjrlou</u> "Science Advances"

Role Play

Role A – **Science** You think science is the best subject to study at school. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least interesting of these (and why): literature, art or maths.

- a. and pressure
- b. which cool air rises
- c. the effects
- d. worse
- e. and thunderstorms
- f. of science
- g. in tropical areas
- h. effect
- i. the journal
- j. rises and cool air sinks

Role B – **Literature** You think literature is the best subject to study at school. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least interesting of these (and why): science, art or maths.

Role C – Art You think art is the best subject to study at school. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least interesting of these (and why): literature, science or maths.

Role D – Maths You think maths is the best subject to study at school. Tell the others three reasons why. Tell them what is wrong with their subjects. Also, tell the others which is the least interesting of these (and why): literature, art or science.

Speaking - School

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

- English
- Sports
- Maths
- Art
- Science
- Religion
- Literature
- History

Unit 28 Scientists discover the world's cleanest air

6th June, 2020

Scientists have discovered what they believe to be the cleanest air on Earth. Researchers from Colorado State University and the Australian Bureau of Meteorology conducted research on the purity of the air above Antarctica. They found a region over the Southern Ocean, between the south of Australia and Antarctica, that was "unaffected" by human activity. The scientists said the area they researched formed the atmosphere in the lower clouds. The analysis of the air showed that it was totally free from "anthropogenic aerosols". These are pollutants or particles derived from human activity, or dust from other continents. The scientists called this pollutionfree area, "truly pristine".

The scientists analysed the structure of airborne microbes in the lower clouds over the Southern Ocean. They looked at the DNA of the microbes and tracked where they came from. Their analysis included monitoring wind trajectories to detect how far the microbes may have travelled. They found that the atmospheric eco-system was very much "isolated," self-contained, and free from contaminants from elsewhere in the world. The source of the microbes was the Southern Ocean, rather than airborne pollutants from other continents. The researchers concluded that the Southern Ocean is one of very few places on Earth that has been "minimally affected by anthropogenic activities".

Sources: newsweek.com / ecowatch.com / scitechdaily.com

Writing It is impossible for the world to be pollution free. Discuss.

Chat Talk about these words from the article.

discover / clean air / purity / region / atmosphere / clouds / pollutants / pristine / structure / microbes / analysis / eco-system / microbes / continent / Antarctica

True / False

- a) Researchers found the world's cleanest air in Colorado's mountains. T/F
- b) Researchers found an area that was not affected by human activity. T/F
- c) The area the researchers looked at was in the lower clouds. T / F
- d) Researchers said the area they monitored was pristine. T / F
- e) The scientists analysed the DNA of microbes in the air. T/F
- f) The scientists said the area under study was not an isolated eco-system. T/F
- g) The air the scientists studied had microbes from nearby continents. T / F
- h) The Southern Ocean is the only place on Earth unaffected by aerosols. T / F

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

1. discovered	a. unspoiled
2. conducted	b. revealed
3. region	c. remote
4. showed	d. carried out
5. pristine	e. paths
6. airborne	f. scant
7. trajectories	g. found
8. isolated	h. origin
9. source	i. area
10. few	j. in flight

Discussion – Student A

- a) What do you think about what you read?
- b) What do you know about clouds?
- c) What would you advise your government regarding clean air?
- d) What do you think is contained in the DNA of air?
- e) What collocations do you know for the word 'air'?
- f) What damage have humans done to the air?
- g) What will our air be like in 50 years from now?
- h) What questions would you like to ask the scientists?

Phrase Match

- 1. discovered what they believe to be
- 2. conducted research on the purity
- 3. the atmosphere in
- 4. pollutants or particles derived
- 5. scientists called this pollution-free area
- 6. scientists analysed the structure of
- 7. They looked at the
- 8. wind
- 9. contaminants
- 10. one of very few

- a. airborne microbes
- b. from human activity
- c. from elsewhere
- d. of the air
- e. the cleanest air
- f. trajectories
- g. the lower clouds
- h. places on Earth
- i. "truly pristine"
- j. DNA of the microbes

Discussion – Student B

- a) How clean is the air where you live?
- b) How important is it for you to have perfectly clean air?
- c) How do you feel when the air is polluted?
- d) To what degree is 100% pure air a human right?

- e) What do you think of factories that create pollution?
- f) What activities do you do that creates pollution?
- g) Would you pay for clean air?
- h) How clean is the air where you live?

Spelling

- 1. research on the <u>ytrupi</u> of the air
- 2. a rngoie over the Southern Ocean
- 3. ctfdafnuee by human activity
- 4. the atorpmhese in the lower clouds
- 5. parisclte derived from human activity
- 6. scientists called this pollution-free area, "truly irntsepi"
- 7. The scientists analysed the ttceurrus
- 8. airborne eibmcsro
- 9. free from oaimcatnsntn
- 10. from other cenntotsin
- 11. The researchers docdelucn that
- 12. <u>liymilamn</u> affected by anthropogenic activities

Role Play

Role A – Water Pollution You think water pollution is the worst form of pollution. Tell the others three reasons why. Tell them why their forms of pollution aren't as bad. Also, tell the others which is the least damaging of these (and why): plastic pollution, noise pollution or light pollution.

Role B – Plastic Pollution You think plastic pollution is the worst form of pollution. Tell the others three reasons why. Tell them why their forms of pollution aren't as bad. Also, tell the others which is the least damaging of these (and why): water pollution, noise pollution or light pollution.

Role C – **Noise Pollution** You think noise pollution is the worst form of pollution. Tell the others three reasons why. Tell them why their forms of pollution aren't as bad. Also, tell the others which is the least damaging of these (and why): plastic pollution, water pollution or light pollution.

Role D – Light Pollution You think light pollution is the worst form of pollution. Tell the others three reasons why. Tell them why their forms of pollution aren't as bad. Also, tell the others which is the least damaging of these (and why): plastic pollution, noise pollution or water pollution.

Speaking – Pollution

Rank these with your partner. Put the most dangerous forms of pollution at the top. Change partners often and share your rankings.

- Water pollution
- Plastic pollution
- Air pollution
- Radioactive waste
- Noise pollution
- Light pollution
- Visual pollution
- Littering

Module 15

Unit 29

Who is Greenpeace?

What makes Greenpeace unique? We are global. Greenpeace was founded in 1971 by a small group of people who sailed to Amchitka Island, an island off the coast of Alaska. They sailed there to try and stop a US nuclear weapons test from happening because it could damage the environment. Their old fishing boat was called 'The Greenpeace'. Greenpeace is a movement of people who are passionate about defending the natural world from destruction. Our mission is to make a greener, healthier and more peaceful planet. One that can sustain life for many years to come. We work hard to make this happen. Read on to find out what makes us unique and how we reach our goal. Today, Greenpeace is working in over 40 countries around the world.

We are independent. Greenpeace doesn't accept funding from any governments, political groups or companies. All our support is from ordinary people like you. This means we can confront governments and companies who are responsible for the destruction of our natural world. We can do what is best for our planet.

We are people powered. Millions of ordinary people around the world are part of Greenpeace. They are all working together to help achieve our mission and protect our planet. The more people supporting our work, the greater our chance to make positive change.

We are action-led. We believe that actions speak louder than words. That's how we make change happen. We investigate the causes of environmental destruction and then challenge those who are causing it. We always take action peacefully.

Sources: https://www.greenpeace.org.uk/wp-content

Writing Do you know any similar organizations? Discuss.

Chat

Talk about these words from the article.

Greenpeace / unique / nuclear weapons / damage the environment / to be passionate about / defending the natural world / destruction / mission / sustain life / over 40 countries around the world / confront governments / to be part of Greenpeace / to make positive change / action-led / take action

True / False

- 1. Greenpeace was founded in 1971 by a small group of people who sailed to Amchitka Island. T/F
- 2. Their old fishing boat was called 'The Greenpeace'. T / F
- 3. Greenpeace is a movement of people who are passionate about defending the artificial world from destruction. T/F
- 4. Their mission is to make a greener, healthier and more peaceful planet. T/F
- 5. Greenpeace is working in over 50 countries around the world. T / F
- 6. They are independent. T / F
- 7. Greenpeace accepts funding from any governments, political groups or companies. T/F
- 8. The support of organisation is from ordinary people. T / F
- 9. Thousands of ordinary people around the world are part of Greenpeace. T / F
- 10. They are all working together to help achieve our mission and protect our planet. T/F

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

unique
 weapons
 damage
 passionate
 a. arms
 intense
 c. demolition
 quiet

5. destruction e. special
6. peaceful f. support
7. sustain g. study
8. achieve h. confront
9. investigate i. reach
10. challenge j. harm

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?

Phrase Match

- 1. Greenpeace was founded natural world from destruction
- 2. They sailed there to try and stop
- 3. Greenpeace is a movement of people
- 4. Our mission is
- 5. work hard to
- 6. Greenpeace doesn't accept funding
- 7. confront governments and companies
- 8. We believe that actions speak
- 9. We investigate the causes of
- 10. take action

- a. who are passionate about defending the
- b. to make a greener planet
- c. make this happen
- d. by a small group of people
- e. from any governments
- f. a US nuclear weapons test from happening
- g. louder than words
- h. of environmental destruction
- i. peacefully
- j. who are responsible for the destruction

ENVIRONMENTAL PROBLEMS DISCUSSION

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?

Spelling

- 1. ssionatepa about defending the natural world
- 2. to make a <u>ergreen</u> planet
- 3. confront ergovnments and companies
- 4. actions speak udloer than words
- 5. Greenpeace is a vemoment of people
- 6. We investigate the scause

- 7. responsible for the tiondestruc of our natural world
- 8. ryordina people
- 9. <u>Ilchaenge</u> those who are causing it
- 10. fedending the natural world from destruction
- 11. We are people wepored
- 12. in over 40 escountri around the world

Role Play

Role A – Buying From Charity Shops You think buying from charity shops is the best way to conserve energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least useful of these (and why): taking shorter showers, becoming a vegetarian or cycling more often.

Role B – Taking Shorter Showers You think taking shorter showers is the best way to conserve energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least useful of these (and why): buying from charity shops, becoming a vegetarian or cycling more often.

Role C – Becoming A Vegetarian You think becoming a vegetarian is the best way to conserve energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least useful of these (and why): taking shorter showers, buying from charity shops or cycling more often.

Role D – Cycling More Often You think cycling more often is the best way to conserve energy. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least useful of these (and why): taking shorter showers, becoming a vegetarian or buying from charity shops.

Speaking – Conservation

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

- be a vegetarian
- cycle more
- buy solar panels
- recycle paper
- use stairs, not elevators
- buy from charity shops
- take shorter showers
- wash clothes less often

Unit 30 What do Greenpeace campaign on?

Currently, Greenpeace is campaigning on four issues: protecting our oceans, protecting our forests, stopping climate change, ending plastic pollution. We campaign on the topics which are most important in our world today. That's why the focus of our campaigns will change over time. Greenpeace creates positive change in many different ways. It's important we have the correct facts so we know what is happening. That's why...

We investigate. Through careful research, we discover the damage occurring to our natural world and who is responsible. We carry out field work, look at satellite imagery and analyse company information. Since 2015 we have published investigative journalism stories through a team called Unearthed. They reveal environmental destruction that no one else has discovered yet.

We use science. All of our work is informed by science and research. We use research from scientists all over the world to make sure our campaigns are accurate. We even have our own

research laboratory based at the University of Exeter in the UK. Our scientists test lots of different things including water, chemicals and metals. Once we've got our facts...

We campaign. We decide on an environmental issue that most needs our support. It could be to protect our oceans, to stop deforestation or to halt climate change. Once we've identified the biggest issue, we come up with a plan to create the change we want to see. Usually campaigning involves persuading governments, companies and ordinary people to make changes that protect our planet. We ensure our demands are heard by decision-makers, like politicians and business leaders. We then help them turn our demands into real actions that protect the environment.

We stop destruction. We don't like seeing our planet destroyed. If trees are being cut down, we will stand in front of them. We will climb oil rigs to stop them drilling. We will stand outside the headquarters of destructive companies so they hear what we are saying. If we can see no other way, we will stand in the way of those who are destroying our planet to save it for future generations.

Sources: https://www.greenpeace.org.uk/wp-content

Writing The main aspects of Greenpeace's activity. Discuss.

Chat

Talk about these words from the article.

campaign / protect / oceans / forests / plastic / pollution / climate / change / focus / areas / creates / satellite / imagery / analyse / destruction / research / accurate / environmental / issue / persuade / governments / to make changes / oil / drilling

True / False

- 1. Greenpeace is campaigning on four issues: protecting our oceans, protecting our forests, stopping climate change, ending plastic pollution. T/F
- 2. They campaign on the topics which were most important in our world yesterday. T/F
- 3. The focus of our campaigns will change over time. T/F
- 4. Greenpeace creates negative change in many different ways. T/F
- 5. Through careful research, we discover the damage occurring to our natural world and who is responsible. T/F
- 6. Greenpeace carries out field work, looks at satellite imagery and analyses company information. T/F
- 7. Since 2000 they have published investigative journalism stories through a team called Unearthed. T/F
- 8. They ensure our demands are heard by decision-makers, like politicians and business leaders. T/F
- 9. They stop destruction. T/F
- 10. They will stand in the way of those who are destroying our planet to save it for future generations. T/F

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

1. campaign	a. save
2. protect	b. sector
3. focus	c. representation
4. areas	d. study
5. imagery	e. exact
6. destruction	f. effort
7. research	g. convince
8. accurate	h. ruin
9. persuade	i. levelling
10. destroy	j. centre

Discussion - Student A

- a) What do you think about what you read?
- b) What do you think of Greenpeace?
- c) What do you get most angry about when you think about pollution?
- d) What do you do every day that helps to reduce pollution?
- e)Is there a lot of pollution in your country?
- f) What do you think of people who buy big, gas-guzzling 4WDs when they don't really need them?
- g) Do you think pollution will be a bigger issue in fifty years than it is now?
- h) What questions would you like to ask the participant of Greenpeace?

Spelling

- 1. Greenpeace is ingcampaign on four issues
- 2. ending plastic <u>llpoution</u>
- 3. the topics which are most antimport in our world today
- 4. ghthrou careful research
- 5. the egdama occurring to our natural world
- 6. ylanase company information
- 7. our campaigns are cacurate
- 8. an noenvirmental issue
- 9. seeing our planet eyddestro
- 10. climb oil rigs to stop them ingdrill
- 11. stand outside the ersheadquart of destructive companies
- 12. to save it for future snogenerati

Role Play

Role A – Deforestation You think deforestation is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): overfishing, water pollution or biodiversity loss.

Role B – **Overfishing** You think overfishing is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): deforestation, water pollution or biodiversity loss.

Role C – Water Pollution You think water pollution is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): overfishing, deforestation or biodiversity loss.

Role D – Biodiversity Loss You think biodiversity loss is the biggest threat to the environment. Tell the others three reasons why. Tell them why their threats aren't as serious. Also, tell the others which is the least serious of these (and why): overfishing, water pollution or deforestation.

Speaking – Environment

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

- Deforestation
- Overfishing
- Oil spills
- Acid rain
- Loss of biodiversity
- Water pollution
- Desertification
- Climate change

Module 16

Unit 31

UN says extreme heat is the new normal

20th July 2023

The United Nations weather agency has warned that extreme temperatures are "the new normal". Scientists say climate change is making heatwaves longer, hotter and more frequent. Many countries have been experiencing record hot weather in the past week. In parts of the USA and China, the mercury went over 50°C (122°F). In Death Valley, California, it was 53.9°C; and in Xinjiang, China, it got up to 52.2°C. In Spain and Italy, the temperature rose to 46°C. Many European countries and Japan have issued heat alerts. They advised people to stay in the shade and drink plenty of water. The U.N. weather agency has warned Europe's heatwave could continue for another month.

A spokesperson for the United Nations warned of the need to cut greenhouse gas emissions. He said: "Extreme weather is increasing in frequency in our warming climate. It is having a major impact on human health...and water supplies." He added: "We have to step up efforts to help society adapt to what is unfortunately becoming the new normal." The European Travel Commission said the extreme heat is making holidaymakers change their travel plans. People who used to holiday in Spain, Italy and Greece are choosing to go to cooler countries instead. A woman who wanted to "escape the heat" by going to Rome complained that the Italian capital was hotter than her hometown in Texas.

Sources: bbc.com / dailymail.co.uk / cbsnews.com

Writing

It is too late to change the warming climate. Discuss.

Chat

Talk about these words from the article.

United Nations / extreme temperatures / heatwaves / mercury / heat / the shade / greenhouse gas / climate / health / society / normal / holidaymakers / travel plans

True / False

- 1) The UN said extreme temperatures are because of climate change. T/F
- 2) Temperatures in parts of the USA and China were above 52°C. T/F
- 3) Japan has issued a heart alert to old people. T / F
- 4) The UN said the heatwave in Europe could last for another month. T/F
- 5) The UN said people should stop growing vegetables in greenhouses. T/F
- 6) The UN said climate change is having a minor impact on health. T/F
- 7) Fewer tourists are going to Spain because of the heatwaves. T / F
- 8) A woman in Rome said the city was hotter than her hometown in Texas. T/F

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

· · · · · · · · · · · · · · · · · · ·	
1. warned	a. sadly
2. parts	b. get away from
3. rose	c. increased
4. plenty	d. last
5. continue	e. serious
6. spokesperson	f. regions
7. major	g. representative
8. unfortunately	h. cautioned
9. extreme	i. important
10. escape	j. a lot of

Discussion – Student A

- a) What do you think about what you read?
- b) What do you think of greenhouse gases?
- c) How does extreme weather affect people's health?
- d) Have you changed your plans because of hot weather?
- e) Do you prefer going to hot or cold countries?
- f) Where do you go to 'escape the heat'?
- g) Do you like the weather in your country?
- h) What questions would you like to ask the UN weather agency?

Phrase Match

- 1. Scientists say climate change is making
- 2. the mercury went
- 3. European countries and Japan have
- 4. They advised people to stay in
- 5. Europe's heatwave could continue
- 6. the need to cut greenhouse
- 7. It is having a major impact
- 8. step up efforts to
- 9. People who used to
- 10. wanted to escape

- a. on human health
- b. issued heat alerts
- c. for another month
- d. the heat
- e. over 50°C
- f. help society adapt
- g. the shade
- h. holiday in Spain
- i. gas emissions
- j. heatwaves longer

Discussion - Student B

- a) What do you think of hot weather?
- b) What's the hottest temperature you can be in?
- c) What do you think of the heatwaves?
- d) What should people do in very hot weather?
- e) Why are countries experiencing hotter weather?
- f) What's the hottest weather you've experienced?
- g) Is boiling hot or freezing cold weather best?
- h) What would you do if it was over 50°C outside?

Spelling

- 1. The United Nations weather cgenya
- 2. hotter and more freuteng
- 3. iixcepnengre record hot weather
- 4. the <u>ptertmareeu</u> rose to 46°C
- 5. stay in the saedh
- 6. <u>nncitoeu</u> for another month
- 7. greenhouse gas smoeisisn
- 8. having a major tiamed on human health
- 9. water upselpsi
- 10. step up efforts to help syoicte adapt
- 11. choosing to go to cooler countries eatdisn
- 12. the Italian apcita

Role Play

Role A – Turn Off Lights You think turning off lights is the best way to ease climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): cycling everywhere, eating more vegetables or planting trees.

Role B – Cycling Everywhere You think cycling everywhere is the best way to ease climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): turning off lights, eating more vegetables or planting trees.

Role C – Eat More Vegetables You think eating more vegetables is the best way to ease climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): cycling everywhere, turning off lights or planting trees.

Role D – Plant Trees You think planting trees is the best way to ease climate change. Tell the others three reasons why. Tell them what is wrong with their ways. Also, tell the others which is the least effective of these (and why): cycling everywhere, eating more vegetables or turning off lights.

Speaking – Climate Change

Rank these with your partner. Put the best ways to reduce climate change at the top. Change partners often and share your rankings.

- Turn off lights
- Buy used clothes
- Cycle everywhere
- Drink tap water
- Use buses and trains
- Do not fly
- Eat more vegetables
- Plant trees

Unit 32

Scientists warn of more extreme hot weather

9th July, 2021

Climate scientists have warned that many parts of the world will experience more extreme heat. The experts are from Copernicus, the European Union's Earth Observation Programme. Its meteorologists analysed world temperatures from satellites, aircraft, weather stations and other databases from around the world. The scientists reported that their figures indicated a high likelihood of an escalation in extreme temperatures. They said: "It was the second warmest June on record for Europe....Heatwave conditions persisted over western North America, where many temperature records were broken. Arctic Siberia also experienced high temperatures."

Professor Peter Stott of the UK's Meteorological Office said: "We are getting used to record high temperatures being recorded somewhere around the world every year now." He added that his primary concern was not the fact that regions are experiencing more heatwaves, but that record high temperatures are increasingly being broken by such large margins. Talking about Canada's recent "heat dome" weather event, professor Stott said: "It is telling us that changes in average climate are leading to rapid escalation not just of extreme temperatures, but of extraordinarily extreme temperatures." The scientists warned that a warming world would mean more droughts and heat-related deaths.

Sources: yahoo.com / washingtonpost.com / cnn.com

Writing All world governments should declare a climate emergency. Discuss.

Chat Talk about these words from the article.

climate / scientists / world / meteorologists / satellites / temperatures / records / record / somewhere / primary / concern / regions / weather / heatwaves / droughts

True / False

- 1) Scientists said the whole world will experience extreme heat. T/F
- 2) The data in the article comes from the European Union. T / F
- 3) Scientists say last June was the warmest on record. T/F
- 4) Arctic Siberia also experienced record high temperatures. T/F
- 5) A meteorologist said we would never get used to high temperatures. T / F
- 6) Temperature records are being broken by tiny margins. T / F
- 7) A professor warned of extraordinarily extreme temperatures. T / F
- 8) Scientists are warning of more droughts. T / F

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

1. experience a. data 2. extreme b. gaps 3. meteorologist c. continued 4. figures d. severe 5. persisted e. main 6. recorded f. quick 7. primary g. undergo 8. margins h. lack of rain 9. rapid i. documented 10. drought j. weather forecast

Discussion – Student A

- a) Would you like to be a climate scientist?
- b) What extreme weather have you experienced?
- c) Has the weather in your country changed in any way?
- d) What is your favourite weather?
- e) What is causing the extremes in weather?
- f) Would you rather experience extreme heat or cold?
- g) What are the dangers of extreme heat?
- h) What will happen if the Arctic warms up?

Phrase Match

- 1. their figures indicated a
- 2. an escalation
- 3. It was the second warmest June
- 4. Heatwave conditions persisted over
- 5. Arctic Siberia also experienced
- 6. being recorded somewhere
- 7. his primary
- 8. being broken by such large
- 9. leading to rapid
- 10. more droughts and heat

- a. in extreme temperatures
- b. concern
- c. high temperatures
- d. high likelihood
- e. escalation
- f. related deaths
- g. margins
- h. western North America
- i. around the world
- j. on record

Discussion – Student B

- a) What do you think about what you read?
- b) Which countries will be hit most by extreme temperatures?
- c) What do you know about Canada's heat dome?
- d) How high can temperatures go?

- e) What is the best way to survive extreme heat?
- f) What three adjectives best describe this story?
- g) How can we curb the extreme temperatures?
- h) What questions would you like to ask the meteorologists?

Spelling

- 1. Its <u>iomrteotesgslo</u> analysed...
- 2. temperatures from tatlelesis
- 3. figures dudiaitec a high likelihood
- 4. an aliseoctna in extreme temperatures
- 5. Heatwave conditions epssredti
- 6. xneeedpierc high temperatures
- 7. his <u>marpiry</u> concern
- 8. more ahwteaves
- 9. broken by such large inrsgam
- 10. changes in gyraaee climate
- 11. aeratdlorxrynii extreme
- 12. more trogshud and heat-related deaths

Role Play

Role A – **Heatwaves** You think heatwaves are the most dangerous weather events. Tell the others three reasons why. Tell them why their weather events aren't as bad. Also, tell the others which is the least harmful of these (and why): hurricanes, blizzards or flash floods.

Role B – Hurricanes You think hurricanes is are the most dangerous weather events. Tell the others three reasons why. Tell them why their weather events aren't as bad. Also, tell the others which is the least harmful of these (and why): heatwaves, blizzards or flash floods.

Role C – Blizzards You think blizzards is are the most dangerous weather events. Tell the others three reasons why. Tell them why their weather events aren't as bad. Also, tell the others which is the least harmful of these (and why): hurricanes, heatwaves or flash floods.

Role D – Flash Floods You think flash floods is are the most dangerous weather events. Tell the others three reasons why. Tell them why their weather events aren't as bad. Also, tell the others which is the least harmful of these (and why): hurricanes, blizzards or heatwayes.

Speaking – Weather Events Rank these with your partner. Put the worst at the top. Change partners often and share your rankings.

- Hail
- Sand storms
- Tornadoes
- Flash floods
- Heatwaves
- Blizzards
- Hurricanes
- Torrential rain

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