8 Environmental Affairs

8.1	affair (n) /ə'feə/ a situation or subject that is bei • You shouldn't ask so many ques people's affairs!		8.13 8.14	hoist (v) /hoist/ pull sth heavy up, eg sails • They hoisted the sails when it got breezy and the yacht moved smoothly over the water. pattern (n) /'pætən/
Red	ading	page 96		the regular way in which sth happens or is done • Meteorologists study weather patterns in order to forecast future weather.
8.2	power (v) / pauə/ supply power to a vehicle or ma car is powered by a special engin powerful (adj)		8.15	Equator (n) /I'kweItə/ an imaginary line around the middle of the Earth • Greece lies north of the Equator in the northern hemisphere. ➤ equatorial (adj)
8.3	tornado (n) /tɔːˈneɪdəʊ/ a violent windstorm which rota • The spinning tornado destroyed	•	8.16	harness (v) /'haːnɪs/ control and use the power of sth • We can harness the wind to generate electricity. ➤ harness (n)
8.4	along the street. spin (v) /spin/ turn round quickly ● The dancer was spin	was spinning in	8.17	crop (n) /krvp/a kind of plant grown on a farm for eatingThis farm's main crop is potatoes.
Word	Focus page 96		8.18	steel (n) /stiːl/a strong metal often used in buildings and bridgesThese knives are made of steel.
8.5	rotation (n) /rəʊˈteɪʃn/ going round in a circle ● Night a a result of Earth's rotation. >> rot	and day are	8.19	storey (n) /stori/ a floor or level of a building ● I live on the third floor of a block of flats.
8.6	gust (n) /g\st/ a sudden strong movement of • Strong gusts of wind made it ha	wind or rain	8.20	top (with) (v) /tpp (wið)/ put on the top ● This building is topped with a roof garden.
Red	the seafront.	pages 96–97	8.21	 blade (n) /bleId/ a flat piece of metal or wood on a windmill The blades of the windmill turned slowly in the breeze.
8.7	carve (v) / $kaxv$ / cut into • Rivers carve rock over and create valleys. $>$ carving (n)	•	8.22	generator (n) /'dʒenəreɪtə/ a machine that produces electricity ● Hospitals have generators which can produce electricity if
8.8	whip up (phr v) /WIP Ap/ create; cause • The teacher whip for the excursion by telling the sta see some interesting things.		8.23	there is a blackout. ➤ generate (v) account for (phr v) /ə'kaʊnt fɔː/ be the reason for sth • The high temperatures and heavy rain account for the thick vegetation in
8.9	tear (v) /teə/ go very fast ● The dog tore acros the ball.	ss the park after	8.24	this area. tube (n) /tjuːb/ a hollow cylinder • Please buy me a tube of
8.10	airborne (adj) /'eəbɔːn/ in the air • When the plane was a see the land below.	airborne, we could	8.25	toothpaste from the supermarket. upright (adj) /'ApraIt/ standing up • After being ill in bed for so long, it was
8.11	unevenly (adv) /∧n'iːvənli/ not regularly • The food was hed the microwave oven, so some of cold. > uneven (adj)	-	8.26	difficult for him to stand upright. hurricane (n) /'h∧rıkən/ a strong storm • Hurricanes can destroy large coastal areas if they reach the shore.
8.12	breezy (adj) /briːzi/ a little windy • It was a breezy do a kite. ➤ breeze (n)	ay–perfect for flying	8.27	mass (n) /mæs/ a large amount of sth ● A mass of dark clouds started to gather in the sky before the storm.

8.28	moist (adj) /moist/ slightly wet • We could tell it was going to rain soon because of the moist air. ➤ moisture (n)	8.42	 emission (n) /I'mI∫n/ the act of sending out light, heat, gas etc The emission of fumes from cars causes a lot of pollution. >= emit (v)
8.29	pull a tree, plant, etc out of the ground • The storm uprooted several large trees.		omission (n) /ə¹mɪ∫n/ when you do not include or do not do sth • The omission of the conclusion in your essay makes it incomplete. ➤ omit (v)
8.31			trap (v) /træp/ prevent sth from getting away • Smoke was trapped in the room and we couldn't open the window to let it out. ➤ trap (n)
Weather words tornado breezy			carbon dioxide (n) /'karbən dar'pksard/ a kind of gas • We breathe in oxygen and breathe out carbon dioxide.
twis hurr	ter thunderstorm icane gust	8.46	methane (n) /'miːθeɪn/ a gas often used as fuel ● Natural gas consists mainly of methane.
VO(CADUIALY page 98 torrential (adj) /təˈrenʃl/	8.47	greenhouse gas (n) /'griinhaus gæs/ a gas that traps heat and causes the greenhouse effect ● Carbon dioxide is the main greenhouse gas and its emissions are increasing.
8.33	very heavy (rain) • The torrential rain caused the rivers to flood. ➤ torrent (n) rainfall (n) /'reinfoil/	8.48	fumes (pl n) /fjuːmz/ unpleasant smoke ● The fumes from the old car smelt horrible.
6.33	the amount of rain that falls on an area in a particular period of time • The crops are dying in the fields because of the very low rainfall.	8.49	blanket (n) /'blænkɪt/ a thick covering of sth • When we woke up, there was a blanket of snow on the ground.
8.34	moisture (n) /'mpistfə/ small amounts of water in the air, a substance, etc • There is always a lot of moisture in the air in the	8.50	remains (pl n) /rI'meInz/ the body of a person or animal after it has died • The remains of animals were excavated at the site.
8.35	mornings. ➤ moist (adj) coastal (adj) /'kəʊstl/ next to the sea • We live in a coastal area near a fishing village. ➤ coast (n)	8.51	oil (n) /⊃1l/ the thick liquid found underground from which petrol is produced • People drill for oil in the desert and under the sea.
8.36	ecosystem (n) /'iːkəʊˌsɪstəm/ all the plants and animals that live in the same place and their relationship • The ecosystem of this	8.52	natural gas (n) /'næt∫rʊl gæs/ gas found underground • Natural gas is used to heat many houses.
8.37	lake has been destroyed by pollution. evaporation (n) /I,væpə¹reI∫n/ when a liquid changes into a gas • The simplest method of getting salt is through the evaporation of	8.53	coal (n) /kอบl/ black solid rock found underground and burnt as fuel • They put more coal on the fire because they were freezing.
8.38	salt water. > evaporate (v) natural resource (n) /'nætrl rɪ'zɔːs/ things like coal, oil, water, trees, etc that can	8.54	renewable (adj) /rɪˈnjuːəbl/ that will never run out ● Wind power is renewable energy. ➤ renew (v)
8.39	be used by people • Our way of life depends on natural resources like oil and natural gas. draught (n) /draːft/	8.55	usable (adj) /'juːsəbl/ that can be used • Those batteries aren't usable. They're dead. ➤ use (v)
	a cold current of air • Please close the door as there is a draught in the room. ➤ draughty (adj)	8.56	conserve (v) /kpn's3IV/ use as little water, energy etc as possible so as not to waste it • We need to conserve water because there is not enough of it. ➤ conservation, conservationist (n)
8.40	drought (n) /draʊt/ a long period of time without rain ● The crops all died because of the drought.		
8.41	gradual (adj) /'grædʒʊəl/ happening slowly over a period of time ● The gradual increase in temperatures on Earth will change our climate.	8.57	consume (v) /kən'sjuːm/ use up ● If we consume all the fossil fuels, we will have to find alternative sources of energy. >> consumption (n)

- 8.58 crude oil (n) /kruːd ⊃ɪl/
 oil in its natural state Crude oil cannot be used for fuel. It has to be refined first.
- **8.59** raw (adj) /rɔː/
 uncooked Do you like raw fish or do you prefer it cooked?
- **8.60 deforestation** (n) /,disforts'tei∫n/ destruction of the forests The deforestation of the Amazon will be a disaster for the whole world.
- 8.61 erosion (n) /I'rəʊʒn/
 the process by which rock or soil is gradually
 destroyed by wind or water The erosion of the
 hillsides means that trees can't grow there any more.
 >> erode (n)
- **8.62 current** (n) /'k∧rənt/ a continuous movement of water in the sea or a river • A strong current swept the swimmer far from the shore.
- 8.63 delta (n) /'deltə/
 an area of land near the sea where a river splits
 into many smaller rivers A lot of water birds live
 in the river delta.
- **8.64** downpour (n) /'daunpor/ heavy rainfall • We got completely soaked in the downpour.
- 8.65 habitat (n) /'hæbɪtæt/
 the natural place where an animal or plant
 lives This spider's natural habitat is the
 desert.
- 8.66 soaking wet (expr) /'səʊkɪŋ wet/ completely wet ● I didn't have an umbrella, so I arrived home soaking wet.
- **8.67** grassy (adj) /'grassi/
 covered with grass They cycled down a grassy hillside. ➤ grass (n)
- 8.68 sweep v) /swiːp/
 force sb or sth to move in a particular
 direction The little boat was swept out to
 sea in the storm.
- **8.69 flow** (v) /fləʊ/
 move continuously *The river flowed out to sea*.

 >> flow (n)
- 8.70 irrigation (n) /IrI'geI∫n/
 supply land or crops with water Proper
 irrigation is essential as crops need water to grow.
 >> irrigate (v)

Phrasal verbs

account for turn into block out wear away blow over whip up breathe out freeze over

Environmental problems

global warming deforestation drought erosion radiation

greenhouse gas

Grammar

page 99

- **8.71** reactor (n) /rɪ'æktə(r)/
 a large machine used for producing nuclear
 energy *The Chernobyl reactor exploded in 1986*.
- **8.73** recycled (adj) /riː'saɪkld/
 used again This book is made from recycled paper.

 ➤ recycling (n), recycle (v)
- 8.74 turn into (phr v) /tɜːn 'ɪntə/
 become sth different or make sb or sth do this

 In six months, the little puppy turned into a big, scary dog.
- **8.75** reduce (v) /rɪ'djuːs/
 make sth smaller or less They reduced the price of the T-shirt from £20 to £15. ➤ reduction (n)
- **8.76** fancy (adj) /'fænsi/ expensive and fashionable • Mia took us to a fancy restaurant on her birthday.
- explosion (n) /Iks'pləʊʒn/
 a blast of energy (often from a bomb)
 There was a loud explosion when the gas heater blew up. ➤ explode (v), explosive (n, adj)
- **8.78** humid (adj) /'hjuːmɪd/ wet; damp • The day was hot and humid and in the evening it rained heavily. ➤ humidity (n)
- 8.79 restricted (adj) /rɪ'strɪktɪd '/

 If sth is restricted, it can only be used by people
 with special permission because it is secret or
 dangerous. This is a restricted area you
 can't enter. ➤ restrict (v), restriction (n)
- 8.80 billionaire (n) /'bɪljəˌneə/
 sb who has a billion dollars, pounds or euros
 in money The richest people in the world are
 billionaires. ➤ billion (n)
- **8.81** shellfish (n) /'∫el,fɪ∫/ an edible sea creature with a shell • I love eating shellfish, especially prawns and mussels.
- **8.82** nasty (adj) /'naːsti/ painful, dangerous or serious He had a nasty cut on his foot.
- **8.83** rash (n) /ræ∫/ red inflammation on the skin His skin was red and the doctor said it was an allergic rash.

Rubbish

scrap recycling bin recycled household waste

Listening

page 100

8.96

- admit (v) /əd^fmɪt/
 agree that you did sth bad or that sth bad is true
 The meteorologist admitted that they had not forecast the weather correctly.
- 8.85 complain (v) /kəm'pleɪn/ say you are not happy about sth • We complained that there was no heating in the hotel. ➤ complaint (n)
- 8.86 enquire (v) /In'kwaIə/ ask • We enquired at the station about train times. ➤ enquiry (n)
- 8.87 inform (v) /In¹fɔːm/
 tell sb sth Our teacher informed us that she would
 be giving us a test. ➤ information (n)
- 8.88 predict (v) /prī'dīkt/
 say what will happen in the future Meteorologists
 predict that the weather will be fine this weekend.
 >> prediction (n), predictable (adj)
- 8.89 seek permission (expr) /siik pə'mi∫n/ ask to do sth • You will have to seek permission from the city council if you want to hold a concert in the square.
- **8.90** recycling bin (n) / rix'saɪklɪŋ bɪn/
 a container for materials that can be recycled,
 such as glass, paper and aluminium I take my
 empty glass bottles to the recycling bin outside the
 supermarket.
- 8.91 genetically modified food (expr)
 /dʒə'netɪkli 'mɒdɪfaɪd fuːd/
 food that has had its DNA changed by genetic
 engineering Do you think genetically
 modified food might affect our health?
- **8.92** organic (adj) /ɔːˈgænɪk/ grown without chemicals • Organic food is supposed to be good for your health. ➤ organically (adv)
- 8.93 stuff (n) /st∧f/ used to talk about a substance, material, group of objects, etc when you do not know what they are called or when the name is not important • What's that black stuff on your shirt?
- 8.94 photovoltaic panel (n)
 /fəʊtəʊvɒl'teɪɪk 'pænəl/
 a panel which makes electricity from the sun
 Photovoltaic panels on your roof can power your home.
- 8.95 discourage (v) /dis'k∧ridʒ/
 make sb lose confidence or enthusiasm
 about sth The terrible weather discouraged us
 from going to the beach for the day.
 ➤ discouragement (n)

 Opp: encourage

say that an action is illegal or not allowed
• Swimming is prohibited here. There are sharks in the water.

express doubt (expr) /1ks'pres daut/

prohibit (v) /prə'hɪbɪt/

- 8.97 express doubt (expr) /Iks'pres daut/ say you are not sure about sth ● He expressed doubt about the weather forecast for rain as the sun was shining in the sky.
- 8.98 criticise (v) /'krɪtɪsaɪz/
 point out the negative things about sb or sth
 The boss criticised his employees for not writing thorough reports. >> criticism (n), critical (adj)
- 8.99 environmentally-friendly (adj)
 /In,vaiərə'mentəli-'frendli/
 things that are environmentally friendly do not
 harm the environment Environmentally-friendly
 packaging which can be recycled is used in many
 supermarkets nowadays.

Speaking

page 101

8.100 plot (n) /plpt/

a small piece of land used for building or growing things on • I made this salad with tomatoes from my own vegetable plot.

Grammar

page 102

- 8.101 litter (v) /'lɪtə(r)/
 drop rubbish on the ground in a public place
 There was a sign on the beach that said 'Please do not litter'.
- **8.102** endangered (adj) /In'deIndʒəd/ that may soon no longer exist ● *The giant panda is* an endangered species.
- **8.103** extinct (adj) /Ik'stɪŋkt/
 no longer alive *Dinosaurs became extinct about*65 million years ago. ➤ extinction (n)
- **8.104** household waste (n) /'haบshอบld weɪst/ rubbish from sb's house Household waste can be divided into regular rubbish and material for recycling.
- **8.105** acid rain (n) /'æsid rein/
 polluted rain The pollution from the factory rose
 into the clouds and then created acid rain which
 destroyed the forests.
- **8.106** torrential (adj) /tə'ren∫l/
 very heavy (rain) The torrential rain caused the rivers to flood. ➤ torrent (n)

Use your English page 103

- 8.107 block out (phr v) /blok aut/ stop light from coming in • She shaded her eyes to try to block out the bright sun.
- **8.108 blow over** (phr v) /bləບ 'ອບvə/ go away without serious effect • *The storm soon* blew over and the sun came out again.

- 8.109 burst into flames (expr) /b3:st 'Intə fleImz/ suddenly start to burn with large flames
 The plane crashed and burst into flames.
- **8.110 freeze over** (phr v) /friːz 'əʊvə/ when the surface of water turns to ice Last winter the pond in our garden froze over
- **8.111** wear away (phr v) /weə ə'weɪ/ become gradually smaller and smoother • The cliffs have been worn away by the sea.
- **8.112** wipe out (phr v) /waɪp aut/ destroy completely Many species have been wiped out by hunters.
- 8.113 smooth (adj) /smuːð/ without sudden movements or changesThe plane made a smooth landing.
- 8.114 catch fire (expr) /kætʃ faɪə/ start to burn • The wooden house caught fire when it was struck by lightning.
- **8.115** patch (n) /pæt∫/ a small area • There were patches of dry grass on the football pitch.
- 8.116 pessimistic (adj) /pesɪ'mɪstɪk/ believing bad things will happen ● He is pessimistic about the future of the planet and says people will destroy it. ➤ pessimism (n)
 ⑤ Opp: optimistic
- **8.117 keen** (adj) /kiːn/ liking or interested in sth She is keen on geography and hopes to study it at university.
- 8.118 weaken (v) /'wiːkən/
 lose strength Luckily the hurricane weakened
 before it reached the coast. ➤ weakness (n),
 weak (adj) ⑤ Opp: strengthen
- **8.119** large-scale (adj) /'laːdʒ skeɪl/ using or involving a lot of people, things, effort, etc After a large-scale investigation, 197 people were arrested.
- 8.120 meteorological (adj) /mixtiərə'lodʒikl/
 to do with the weather Meteorological
 studies help us to understand weather patterns.
 >> meteorology, meteorologist (n)

Useful verbs

admit enquire complain inform criticise predict discourage prohibit

Writing: an essay(2) pages 104-105

8.121 destination (n) /,desti'nei∫n/ the place where sb or sth is going • After a twelvehour drive, we reached our destination.

- 8.122 dump (v) /d∧mp/ get rid of sth that you do not wantThey dumped their old car near the beach.
- **8.123** unpleasant (adj) /∧n¹pleznt/ not nice or enjoyable • Seeing her was an unpleasant surprise.
- **8.124 exhaust fumes** (pl n) /Ig'zɔːst fjuːmz/ gases produced when an engine is working Exhaust fumes from cars are responsible for the pollution.

Video: Global Warming

page 106

- 8.125 global warming (n) /'gləʊbl 'wɔːmɪŋ/
 the rise in the Earth's temperature Global
 warming will cause the ice caps to melt and sea
 levels to rise.
- 8.126 greenhouse effect (n) /'griːnhaʊs ɪ'fekt/
 the gradual rise in the Earth's temperature caused
 by high levels of gases in the atmosphere
 The greenhouse effect is making the ice caps melt
 and sea levels rise.
- 8.127 power plant (n) /'paʊə plaːnt/ a building or group of buildings where electricity is produced ● The blackout was due to a fire at the power plant. Syn: power station
- 8.128 breathe out (phr v) /bri∑ð aut/ let air out of your lungs • When the danger passed, she breathed out in relief. So Opp: breathe in
- 8.129 chemical reaction (n) /'kemikl ri'æk∫n/ a chemical change produced when two or more substances are mixed • A chemical reaction causes the liquid to change colour.
- **8.130** melt (v) /melt/

 If heat melts sth, it becomes liquid. *The child's ice*cream melted in the hot sun.
- 8.131 shrink (v) /∫rɪŋk/
 become smaller If you wash that woollen pullover
 in hot water, it will shrink.
- 8.132 Industrial Revolution (n)/In'd∧strIəl revə'lu:∫n/
 the period in the eighteenth and nineteenth
 centuries when many machines were invented
 and the first factories were built Trains became a
 common form of transport thanks to the Industrial
 Revolution.
- 8.133 decrease (v) /d¹'kriːs/
 become or make sth smaller or less The price of oil decreased by 2% last year. >> decrease (n)
 ⑤ Opp: increase
- **8.134 slight** (adj) /slaɪt/ small; not important or serious • *I'm afraid we've* got a slight problem.
- **8.135 floe** (n) /fləʊ/ an area of ice floating in the sea From their ship, they saw a group of penguins on a floe.