

## PRECOURSE

**A**UK

- 1 chill
- 2 minus
- 3 Frost
- 4 crisp
- 5 sleet
- 6 settle
- 7 slush
- 8 spells
- 9 breeze
- 10 below freezing
- 11 blizzards
- 12 driving
- 13 drifting
- 14 Patchy
- 15 Foggy
- 16 hail

Australia

- 1 stormy
- 2 trough
- 3 thunderstorms
- 4 lightning strikes
- 5 gale force
- 6 showers
- 7 overcast
- 8 south-westerly
- 9 rainfall
- 10 heatwave

**B**

- |     |      |
|-----|------|
| 1 H | 6 E  |
| 2 I | 7 D  |
| 3 J | 8 C  |
| 4 G | 9 A  |
| 5 F | 10 B |

**D**

- 1 b) jääpäinen
- 2 c) syntipukki
- 3 b) musta hevonen
- 4 c) kylmäkiskoinen
- 5 a) arkajalka, pelkuri
- 6 a) roisto
- 7 a) yksinäinen susi
- 8 a) petturi

**E**

- 1 cricket
- 2 owl
- 3 lion
- 4 mosquito
- 5 monkeys
- 6 elephant

**F**

- 1 They change colour. The feathers become paler, greyer.
- 2 Now that there is less snow, they blend in better with the forests.
- 3 Pandas eat mostly bamboo, and therefore any threat to the bamboo forests will have a direct effect on the pandas' food supply.
- 4 Bamboo plants have an unusual reproductive cycle, e.g. one species only flowers and reproduces every 30–35 years. This means it will be slow to adapt to climate change.

**1A**

- 1 They are not protected by law, wolf hunting is a popular tradition, and people are paid money for killing them.
- 2 Cut down trees close to livestock enclosures. Put up brightly coloured balloons along fences. Keep dogs inside at night.
- 3 To limit wolf hunting in Russia. He hopes to achieve this by ending the bounty system where people are paid for killing wolves, and by winning legal protection for wolves.
- 4 Susien palauttamista luontoon ei tehdä ilman laajaa julkista hyväksyntää. Maanviljelijöiden menetykset voidaan minimoida hoitamalla karjaa eri tavalla, ja menetyksiä varten kehitellään korvaussuunnitelma.
- 5 Susia on demonisoitu vuosisatojen ajan myyteissä ja kansantarinoissa, eikä susia tunneta hyvin. Satujen pahat sudet ja elokuvien ihmis-sudet pelottavat.

**1.1C**

- 1 luonnonsuojelija, ympäristön-suojelija
- 2 harhaila, kuljeskella, vaellella
- 3 elinympäristö
- 4 karja
- 5 leikki-ikäinen, taapero
- 6 suostumus, myöntymys; suostua, hyväksyä
- 7 vakuuttaa, rauhoitella
- 8 hämärä, välttelevä, vaikeasti tavoiteltava

**1.1D**

## Suggested key

- 1 Alkuperäisen lajiston palauttamista, uudelleen villiinnyttämistä.
- 2 Sudet pitävät hirvet liikkeellä, jotta nämä eivät ylilaidunna herkkiä puiden taimia. Susien avulla ruohomaa muuttuu metsäksi ja luo elintilaa sadoille lajeille. Sudet ovat arkoja ja hyvin pieni riski ihmisille.
- 3 Maanviljelijät, sillä he pelkäävät karjansa puolesta. Koiran-ulkoiluttajat, sillä he pelkäävät lemmikkiensä puolesta. Nuoret vanhemmat, sillä he ovat huolissaan pienten lastensa puolesta.

**1.1E**

## Suggested key

We have hunted many animal species to extinction. But now there is a plan to reintroduce some of those animals into the countryside. In the UK there are environmentalists who want to bring back wolves to Scotland. Of course, there have been protests. Farmers are worried about their livestock. And many people are frightened of wolves because of stories and horror movies. It is important to fight this fear before reintroducing wolves. People are not in danger because wolves are wary of humans.

**1.1F**

- 1 We've hunted ... to extinction
- 2 restore ... to its former glory
- 3 Those in favour of the scheme
- 4 being shy by nature
- 5 to reassure the public at large
- 6 demonisation of wolves
- 7 they loom large
- 8 stir deep-seated fears
- 9 wary of humans
- 10 People are unlikely ever to see one (one = a wolf)

**1.1G**

- 1 to extinction
- 2 wary of
- 3 loom large
- 4 deep-seated fears
- 5 toddlers
- 6 the public at large
- 7 in favour of
- 8 elusive
- 9 by nature
- 10 unlikely to happen

**1.2C**

- 1 raato, ruumis
- 2 norsunluu, norsunluinen
- 3 salakauppiaat
- 4 päätekijä, tärkeä henkilö
- 5 valita
- 6 aloite, aloitekyky, oma-aloitteisuus
- 7 palkkio, kannustin, virike
- 8 torjua, käsitellä, taklata; taklaus

**1.2D**

## Suggested key

- 1 Koska metsästäjät vievät niistä sarvet ja torahampaat, eli arvokkaimmat osat.
- 2 Elinkautisen.
- 3 Kiinni jääneet metsästäjät ovat köyhimpiä, helposti korvattavia tekijöitä, kun taas päätekijät ovat visusti piiloutuneita ja suojattuja järjestäytyneitä rikollisia. Metsästäjät on helppo korvata uusilla metsästäjillä.
- 4 Paikallisia ihmisiä on otettu mukaan suojelemaan eläimiä, heille maksetaan tästä. Metsästäjistä on koulutettu riistanvartijoita.
- 5 Kysynnän leikkaaminen: Kiinan ja Kaakkois-Aasian hallitusten on pistettävä kauppa kuriin. (Tietoisuutta pitää myös lisätä kampanjoinnilla, jotta ymmärretään, että eläimet ovat arvokkaampia elävinä.)

**1.2E**

## Suggested key

Wild animals are being illegally slaughtered. This is because the trade in elephant tusks and rhino horns is big business. Poor poachers do the hunting, but the real money goes to kingpins who are involved in organized crime. We can fight against poaching by training former poachers to be gamekeepers. Awareness rising campaigns are also needed to persuade people that wild animals are worth more alive than dead.

**1.2F**

- 1 the underlying causes
- 2 serves as a status symbol
- 3 keen to purchase
- 4 on the black market
- 5 at stake
- 6 at the bottom of the food chain
- 7 The focus needs to shift
- 8 one less poacher to catch
- 9 inside knowledge
- 10 are worth more alive than dead

**1.2G**

- 1 at the bottom of the food chain
- 2 purchase
- 3 incentive
- 4 worth more in pieces than
- 5 on the black market
- 6 inside knowledge
- 7 tackle
- 8 at stake
- 9 focus needed to shift
- 10 underlying causes

**1H**

	Definition	Problem	Solution
Rewilding	reintroduction of animal species e.g. wolves in Scotland	People are afraid of wolves e.g. farmers, dog walkers, pet owners, parents with young children.	Reassure the public at large; manage livestock differently: compensation for possible livestock losses; fight public fear by giving facts about wolves.
Poaching	illegal hunting e.g. killing elephants and rhino for horn	People can make a lot of money. Poachers are easily replaced. The kingpins are difficult to prosecute.	Prosecute the kingpins; co-opt local people; train former poachers as rangers; persuade buyers the animals are worth more alive than dead.

**1L**

- 1 F vapaan kanan munat
- 2 C syvälle juurtunut pelko
- 3 J kiistanalainen aihe
- 4 A vääristynyt kuva
- 5 G luonnollinen elinympäristö
- 6 H musta pörssi
- 7 I varakkaat perheet
- 8 D elinkautinen vankeus
- 9 B yhteinen suostumus
- 10 E norsunluutorni

**1N**

- 1 PRAIRIE
- 2 CANINE
- 3 LIVESTOCK
- 4 SEEDLING
- 5 FOOD CHAIN
- 6 CONSERVATIONIST
- 7 EXTINCTION
- 8 GAME
- 9 NATIONAL PARK
- 10 SAVANNAH
- 11 IVORY
- 12 RANGER

**1O**

- |   |   |
|---|---|
| 3 | 4 |
| 1 | 2 |

**2A**

- 1 True
- 2 False  
About 5,500 silkworm cocoons are required to produce 1 kilo of raw silk.
- 3 True
- 4 False  
Honeybees typically flap their wings 240 times a second.
- 5 True
- 6 True
- 7 False  
85% of all plant life is found in the ocean.
- 8 True

**2B**

- 1 suunnitella, keksiä, laatia
- 2 joustava, sitkeä
- 3 seuraava
- 4 kangas, kudos, rakenne
- 5 näyttö, näyttely, osoitus; näyttää, osoittaa, tuoda esiin
- 6 yö-, yöllinen
- 7 pusertaa, puristaa, tiivistää; harsotaite
- 8 jätteet, jäänteet, romu

## 2C

Tuote	Eläin tai kasvi, jota kopioitu	Tuotteen tarkoitus	Ominaisuus, jota kopioitu luonnosta
gel-filled bag	vihreät lehdet	halpa ja luotettava aurinkopaneeli	kasvien kyky sitoa auringonvaloa energiaksi eli yhteyttää tehokkaasti (fotosynteesi)
Velcro	takiaiset	tarranauha	takiaisten mikroskooppisen pienet koukut, joilla ne takertuivat kiinni vaatteisiin tai karvoihin
Mirasol	perhonen	valoa heijastamaton värinäyttö e-kirjojen lukulaitetta varten	perhosen siipien tapa heijastaa valoa auringonpaisteessa
Autotype	yöperhonen	muovikalvo, joka vähentää heijastusta mobiililaitteissa, voi myös pidentää akkujen elinikää	yöperhosen silmien valoa heijastamaton rakenne
CRAM	torakka	kämmenen kokoinen robotti, jolla voidaan etsiä eloonjääneitä luhistuneista rakennuksista	torakan kyky painua kokoon ja mahduttaa itsensä pienienkin rakojen läpi

## 2E

- 1 Over billions of years of trial and error
- 2 have stood the test of time
- 3 more efficient solar cells are being developed
- 4 as closely as possible
- 5 Researchers ... took inspiration from
- 6 requires much less energy compared to
- 7 the film reduces reflections and improves readability
- 8 for at least half a century

## 2F

- 1 more efficient solar cells
- 2 compared to
- 3 trial and error
- 4 as closely as possible
- 5 have stood the test of time
- 6 that / which reduces reflections
- 7 for at least half a century

**2H**

- 1 devised
- 2 perfected
- 3 improve
- 4 developed
- 5 inspired
- 6 based on
- 7 mimicking

**2I**

1	humble	vaatimaton	modest	arrogant
2	resilient	joustava	flexible	stiff
3	plentiful	runsas	abundant	scarce
4	inexpensive	halpa	cheap	costly
5	practical	käytännöllinen	handy	cumbersome
6	subsequent	seuraava	next	previous
7	ordinary	tavallinen	common	exceptional
8	awkward	hankala	inconvenient	comfortable
9	confined	ahdas, rajoitettu	restricted	open
10	narrow	ahdas, kapea	tight	broad

**2K**

- 1 in
- 2 on
- 3 for
- 4 of
- 5 by
- 6 into
- 7 in
- 8 to

**2L**

- 1 Puupistiäinen pystyy poraamaan puuta mistä tahansa kulmasta, eikä se tarvitse voimaa poraamiseen toisin kuin perinteiset porat.
- 2 Sitä voidaan käyttää tarkkuutta vaativassa porauksessa kuten aivokirurgiassa ja paikoissa, missä on heikko painovoima kuten avaruudessa tai meren alla.
- 3 Tutkijat ovat selvittäneet miten hummerin näkökykyä voidaan käyttää hyödyksi pienemmän ja tehokkaamman röntgenlaitteen luomisessa.
- 4 Laite on kuin pieni taskulamppu. Tulli voi käyttää sitä apuna löytääkseen salakuljetettuja tavaroita.

**2M**

Search words for Youtube:  
The Namib desert beetle

**3A**

- 1 C chimpanzee
- 2 D guinea pig
- 3 A slug
- 4 B narwhal, chimpanzee, kangaroo, guinea pig
- 5 G viper
- 6 E kangaroo
- 7 F toad

**3C**

- 1 tukeva, vankka, kiinteä, vakaa
- 2 kaamea, kolkko, pelokas, aavemainen
- 3 levoton, kiihtynyt
- 4 välähdys, leimaus, salama(valo); väläyttää, välähtää, salamoida
- 5 pompottaa, ponnahtaa, poukota
- 6 kaiku; kaikua
- 7 betoni; konkreettinen
- 8 uhata, uhkailla, vaarantaa

**3D**

- 1 False  
The room was dim, but Fern was the youngest and the smallest and easy to recognize.
- 2 False  
Fern felt Lowell coming before he even spoke to her.
- 3 False  
Fern got agitated and made oo oo sounds, and she was screaming.
- 4 False  
No, he felt dizzy.
- 5 True
- 6 False  
Fern was gripping Lowell. In the end he grabs Lowell's other arm.
- 7 True
- 8 False  
Fern was signing with her hand to Lowell. She begged him to take her home.



**3E**

## Suggested key

- 1 She recognizes Lowell as if she instinctively feels him coming. Lowell thinks that is eerie.
- 2 At first, she does not turn in Lowell's direction but she goes rigid. Her hair rises, and she makes oo-oo noises.
- 3 Tense and unsettling. Fern becomes very restless / Fern gets agitated and starts to make a lot of noise. She also starts shaking the bars of the cage and swinging back and forth. Lowell wants to touch her, but feels frightened of her. There is a feeling of anger and desperation rather than joy in this reunion.
- 4 She cannot hear Lowell because she is screaming. He doesn't succeed in calming her.
- 5 She uses sign language. And also body language as she grips his hand tightly.

**3F**

- 1 how different one chimp looks from another
- 2 where she used to be so graceful
- 3 as if she felt
- 4 a study on
- 5 swinging back and forth
- 6 screaming at me
- 7 she wouldn't let go
- 8 came crashing from behind

**3G**

- |          |         |
|----------|---------|
| 1 sound  | 6 wide  |
| 2 bustle | 7 tired |
| 3 error  | 8 downs |
| 4 gloom  | 9 quiet |
| 5 run    | 10 miss |

**3H**

- 1 The child (that/who) I was babysitting / looking after was swinging back and forth on a swing.
- 2 He/She shouted/screamed at me when I told him/her it was time to go home.
- 3 He/she used to be so shy, but now he's/she's four he/she has become more confident.
- 4 His/her brother hates swings. It is amazing how different one child is from another.
- 5 One day I would like to do a study on child behaviour.

**3J**

- 1 in
- 2 on
- 3 with/at
- 4 on/of
- 5 of/about
- 6 for
- 7 to
- 8 at/in
- 9 at
- 10 from

**3K**

- 1 chimpanzees/chimps
- 2 by now
- 3 screaming
- 4 frightened
- 5 cages
- 6 research
- 7 cannot defend themselves
- 8 pay attention to

## 3L

- 1 Kävelin / Olin kävelemässä kellarin poikki häkkejä kohti, kun näin hänen/sen kangistuvan/jähmettyvän.
- 2 Se/Hän kirkui yhä, joten tiedän ettei se/hän kuullut minua.
- 3 Kumpikin kiskoi minua käsivarsista / veti käsivarsistani, ja he/ne pompottivat minua välissään iskien minua yhä uudestaan/toistuvasti kaltereita vasten.
- 4 Hän/Se/Uros yritti uhata häntä/sitä/naarasta, mutta hän/se ei kiinnittänyt yhtään/mitään/ollenkaan huomiota.
- 5 Hän/Se viittoili vapaalla kädellään minulle. Minun nimeni, hänen sormensa / sen sormet näyttivät L-kirjainta läpsäytyksellä rintaansa vasten.

## 3N

Mark Cole

- Research done on animals aims to benefit humans rather than animals.
- Drugs fail in human trials because animals are so different from us.
- Testing cosmetics on rabbits is cruel. Laws don't seem to protect them from mistreatment.
- It would be more useful to run tests on voluntary humans. Or on human tissue.

Lily Cole

- Many animals benefit since a number of animal diseases have been eradicated / prevented.
- Animal testing is carefully regulated to limit animal suffering.
- Life-changing drugs are on the market because of animal testing.
- Drugs can be tested on people after they have been tested on animal.

## 4A

- |     |      |
|-----|------|
| 1 J | 6 B  |
| 2 G | 7 A  |
| 3 F | 8 I  |
| 4 D | 9 C  |
| 5 H | 10 E |

## 4C

Florida

erämaa, korpi	wilderness
kasvisto ja eläimistö	flora and fauna
laskuvesi	low tide
niemimaa	peninsula
petoeläin, saalistaja	predator
rannikko	coast
riutta, särkkä	reef
salmi	straits

Iceland

jäätiköt	glaciers
kuumat lähteet	hot springs
laakso	valley
niityt	meadows
purot	streams
rotko	gorge
tasanko	plateau
tulivuori	volcano
vesiputous	waterfall

The Fairest Cape

elinympäristö	habitat
huippu	peak
jyrkänteet	cliffs
kukkulat	hills
luolat	caves
maasto	terrain
villieläimet	wildlife
vuoristo, vuorijono	mountain range

**5A**

- 1 It was hot in January. Now there is ice and snow in July. They think it is because of climate change.
- 2 They are in New Zealand where the winter months are June, July and August.

**5B**

- 1 B hiilijalanjälki
- 2 D ilmastonmuutos
- 3 A otsonikerroksen oheneminen
- 4 C ilmaston lämpeneminen
- 5 G jäätikön sulaminen
- 6 E kasvihuonekaasupäästöt
- 7 F fossiilinen polttoaine
- 8 H uusiutuva energia

**5D**

- 1 He is trying to prove by giving examples that climate change is really happening.
- 2 The writer is speaking to people – especially young people – who want to learn about climate change and might have doubts about it. He wants to reach an audience who don't necessarily read science books or articles.
- 3 Red and orange are used to show heat. For example, the globe is a red fireball. White is used for snow and blue for water or melting ice. Blue is a calm colour and used when giving facts.
- 4 Examples of humour: sinking (and still talking) in the pictures where the writer is explaining the sea level rise; the stereotypical hat and the shoe describing the era he mentions (they were in fashion during the periods mentioned).  
Irony: At the start both groups who use the weather as evidence about climate change happening or not happening are wrong.

- 5 Numbers: the winter of 2009–2010, since 1981–1982, the summer of 2010, tiny, over a long period of time, thousands of years, in the last 650,000 years, seven cycles of, the present, in modern times, in the last century, doubled, in the last decade, since the 1880s / 1970s, the 2000s

The cartoonist uses numbers to support his argument. The use of numbers also makes him look well-informed and knowledgeable.

- 6 Agree: environmentalists, those who are concerned about the future of the planet.  
Disagree: big corporations, oil and fossil fuel industries and those who don't trust the science.
- 7 The cartoonist wants to explain that climate change is taking place and give the science that supports this. He would like to persuade the reader to share his view. And he is trying to give information in an entertaining way.

**5E**

- 1 Millions of years
- 2 over a long period of time
- 3 on our tiny human scale
- 4 in the last century
- 5 in the last decade
- 6 since the 1990s
- 7 the 2000s
- 8 The former
- 9 the latter
- 10 neither

**5F**

## Suggested key

- 1 We should eat less meat. For example, we could have at least one meat-free day a week – since 18% of greenhouse gas emissions come from meat production.
- 2 We should reduce waste by composting and recycling waste. Garbage buried in landfills produces methane, a potent greenhouse gas.
- 3 We should rethink travel. We should walk, cycle and use public transport rather than using cars and planes. If we have to use a car, then we should share car journeys with others. This will shrink our carbon footprint.
- 4 We should make our homes greener by switching to an electricity supplier offering renewable power. We could also use LED light bulbs, wash clothes in cold or warm (rather than hot) water, not use the tumble dryer, and make sure appliances are energy efficient.
- 5 We should voice our concerns. We should let decision makers know what we think via social media, online petitions, and email. Protesting is another way of getting our message across, especially if it receives press coverage.

**5G**

- 1 b
- 2 b
- 3 a
- 4 c
- 5 c

**5H**

- 1 in the right direction
- 2 Eat low on the food chain
- 3 Buy locally
- 4 avoid produce that has travelled by air
- 5 recycle paper, plastic, metal and glass
- 6 take public transport whenever you can
- 7 This will shrink your carbon footprint
- 8 try carpooling
- 9 reduce energy consumption
- 10 voice your concerns

**5I**

- 1 take public transport whenever you can
- 2 try carpooling
- 3 reduce energy consumption
- 4 eat low on the food chain
- 5 shrinks your carbon footprint
- 6 buy locally
- 7 avoid produce that has travelled by air
- 8 recycle
- 9 make a difference
- 10 voice your concerns

**5L**

- 1 biodiversity  
The other words are about recycling.
- 2 landfill  
The other words are materials that can be recycled.
- 3 fossil fuel  
The other words are sources of clean energy.
- 4 carbon footprint  
The other words often describe places where things live.
- 5 fumes  
The other words describe solid things.
- 6 wasteful  
The other words describe having a positive effect on the environment.
- 7 organic  
The other words describe harmful substances.
- 8 disposable  
The other words describe processes that benefit the environment.
- 9 oxygen  
The other gases are greenhouse gases.
- 10 packaging  
The other words refer to farming.

**6A**

- 1 a
- 2 c

**6C**

- 1 vähentäminen, ahtauma, lyhennys, taantuma
- 2 laajentuminen, laajentaminen; laajennus, ekspansio
- 3 päästö; kaasumainen
- 4 pato; padota
- 5 este, aita, raja; aidata
- 6 vastaus, reaktio
- 7 ulkoreuna, piiri, kehä
- 8 liittouma, liitto, koalitio

**6D**

- |     |     |
|-----|-----|
| 1 b | 5 b |
| 2 a | 6 b |
| 3 b | 7 a |
| 4 a | 8 b |

**6E**

- 1 Talous tarvitsee jatkuvaa, vapaasti tapahtuvaa kasvua varten ehtyviä luonnonvaroja: öljyä ja hiiltä. Samaan aikaan ilmaston romahduksen välttämiseksi luonnonvarojen, kuten öljyn ja hiilen, käyttöä tulee vähentää.
- 2 Kun Kiinasta tuli maailman ”työpaja” siitä tuli myös maailman hiiltä sylkevä savupiippu. Suuri osa päästöistä johtuu ulkomaille suuntautuvasta tuotannosta ja tuotteiden kuljetuksesta.
- 3 Halpa työvoima (pienet palkka-kustannukset), ammattiliittojen alistettu asema, valtio oli halukas käyttämään miljoonia infrastruktuurin kehittämiseen (satamat, valtatie, hiilivoimalla toimivat tehtaot, padot).
- 4 Kurjuus: länsimaissa töiden loppuminen ja kehittyvissä maissa huonot työolosuhteet.

**6F**

- 1 at war
- 2 became the rule
- 3 is directly related to
- 4 all roads led to China
- 5 demand better wages
- 6 the removal of ... all barriers
- 7 when the subject ... comes up
- 8 the fast developing economies
- 9 with single-minded determination
- 10 are killed in the hundreds

**6G**

- 1 were killed in the hundreds
- 2 demanded better wages
- 3 at war
- 4 became the rule
- 5 with single-minded determination
- 6 the removal of all barriers
- 7 all roads led to China
- 8 are directly related to

**6H**

- 1 C
  - 2 F
  - 3 H
  - 4 A
  - 5 D
  - 6 B
  - 7 G
  - 8 E
- 1 He tutkivat saaren löytääkseen vettä ja puuta.
  - 2 Selviytyäkseen, talousmekanismimme on riippuvainen jatkuvan kasvun periaatteesta.
  - 3 Ikävä kyllä firmojen kasvu on usein riippuvainen ehtyvistä luonnonvaroista.
  - 4 Saasteita eivät tuota pelkästään tehtaat, vaan myös pitkät kuljetusmatkat, jotka ovat osallisena päästöjen räjähdysmäiseen lisääntymiseen.
  - 5 Vapaan kaupan vuoksi tuotannon siirtäminen ulkomaille on tullut säännöksi.
  - 6 Kehittyvissä maissa turvamääräykset ovat niin löyhät, että työntekijöiden henki on vaarassa.
  - 7 Kun ilmaston muutos tuli puheenaiheeksi konferenssissa Shanghaissa, länsimaiden edustajat kielsivät kaiken vastuunsa.
  - 8 Länsimaissa ihmiset olivat tietoisia ilmastokriisistä, kun säännöt nykyiselle kaupan käynnille kirjoitettiin.

**6I**

- 1 Overpopulation and an alternative economic system.
- 2 c

**6J**

- 1 limitless
- 2 markedly
- 3 sprawling
- 4 brutally
- 5 reckless
- 6 mountain
- 7 greatest
- 8 slightly

**6K**

- 2 Sprawling makes it sound as if the highway systems are spread out everywhere. It also suggests a lack of control or planning.
- 3 Endless implies that there are so many, there is no limit to their number.
- 4 A nightmare is a very upsetting experience. Calling a free trader's dream a climate nightmare suggests the dream will have terrifying consequences for our climate.
- 5 It implies that they work so hard, they work their skin and flesh away. It makes China seem brutal.
- 6 Mountains are high, massive structures, so the use of this word stresses how much dirty coal is used.

**6L**

- 1 on
- 2 up
- 3 to
- 4 for
- 5 of
- 6 of
- 7 out
- 8 between

**6N**

- 1 a
- 2 b
- 3 a
- 4 c

**7A**

- 1 c
- 2 b
- 3 b

**8A**

- 1 warming
- 2 emissions
- 3 concentrations
- 4 atmosphere
- 5 impacts

- 6 cap
- 7 nations
- 8 submerged
- 9 coastal
- 10 flooding

- 11 glaciers
- 12 runoff
- 13 freshwater
- 14 shortages
- 15 famine

- 16 habitats
- 17 species
- 18 extinction
- 19 polar
- 20 biodiversity
- 21 chains
- 22 ecosystems
- 23 yields
- 24 basin

- 25 reefs
  - 26 nurseries
  - 27 bleaching
  - 28 acidification
  - 29 dioxide
  - 30 evolved
  - 31 adapt
- 32 evaporation
  - 33 vegetation
  - 34 soils
  - 35 reservoirs
  - 36 aquifers
  - 37 grasslands
  - 38 fires
  - 39 drought
  - 40 desertification

**8B**

- 1 thaw
- 2 permafrost
- 3 organic matter
- 4 microbes
- 5 methane
- 6 greenhouse gas
- 7 feedback loop
- 8 deforestation
- 9 fossil fuel combustion

- 10 ice sheets
- 11 poles
- 12 continental interiors
- 13 mass extinctions
- 14 uninhabitable
- 15 climate refuges



**9A**

ENTERING  
ALERT  
AVOID

back away  
charges  
surprise encounter  
persistently stalks  
guarantee of your safety

**9C**

- 1 eläin, nauta, peto, inhottava tyyppi
- 2 lannoite, apulanta
- 3 tuholaismyrkkyy, torjunta-aine
- 4 muutto, muuttoliike, vaellus
- 5 hedelmällisyys
- 6 imeytyminen
- 7 sukupuuttoon kuollut, hävinnyt, sammunut
- 8 tyrkyttää, määrätä, käyttää hyväkseen
- 9 yksinäinen, eristäytynyt
- 10 sävy, vivahdus, sivumaku; sävyttää, värjätä

**9D**

Who am I?	I
Organic pest control	E
Passionate about pachyderms	B
fumbling florist	F
Eutrophication	C
Get your Jurassic pot plants here!	A
Monkey Kingdom	D
I love the mountains	G
House of Orphans	H

**9E**

- 1 A kenguru; B hyttynen, sääski; C ihminen
- 2 Tuhoeläimet iskevät ensisijaisesti heikkoihin ja huonosti voiviin kasveihin. Myös terveet kasvit voivat kärsiä tuhoeläimistä, erityisesti jos niiden kasvattamisessa on käytetty typpirikasta lannoitetta.
- 3 Kirvat ja jauhaiset karkotetaan suihkuttamalla seosta, jossa on teelusikallinen tiskiainetta puolessa litrassa vettä. Muurahaisia ja termiittejä vastaan suihkutetaan ruokasoodan ja astianpesuaineen seosta. Etanat kannattaa poimia pois lehdiltä ja tuhota. Ne voidaan myös pyydystää oluella täytetyn matalan lautasen avulla. Etanat pitävät happamesta maaperästä, joten puutarhaan kannattaa sirotella kalkkia jotta sen happamuus vähenee.
- 4 Botha käyttää teoksissaan monipuolisia materiaaleja: esimerkiksi ajopuuta, vanhoja autonrenkaita, pieniä kiviä, savea. Veistokset käsittelevät taiteen ja luonnon roolia julkisissa tiloissa, muuttoliikettä, liikakansoitusta, kierrätystä, villieläinten ja ihmisten yhteiseloja, kaupungistumista, ympäristönsuojelua ja syvällisellä tasolla elämää ja selviytymistä vastoin kaikkia odotuksia.
- 5 Rehevöityminen johtuu kasvien tarvitsemien ravinteiden kuten fosforin ja typen määrän lisääntymisestä vesistöissä. Leväkukintoja muodostuu veden pinnalle ja ne estävät pinnan alla olevia kasveja ja eläimiä saamasta valoa ja happea.

- 6 The Wollemi Pine pot plants can manage both in low and high temperatures, the saplings are cultivated from an ancient species that was thought to have died out two million years ago. Surviving Wollemi Pines grow only in an isolated spot in the Blue Mountains close to Sydney.
- 7 The film critic has a positive view of the film, praising its beautiful footage of wild animals. The film can make urban children interested in learning about and protecting nature.
- 8 The narrator is describing the coming of spring and how everything comes back to life after the winter.

**9F**

- 1 holds true
- 2 may fall victim to pests
- 3 against all odds
- 4 the gradual increase in
- 5 a closely guarded secret
- 6 grab and keep the attention of a younger audience
- 7 On the whole
- 8 Sharing our fondest dreams
- 9 drop by drop
- 10 everything that's flawed

**9G**

- 1 against all odds
- 2 closely guarded
- 3 fall victim to
- 4 grabbed the attention
- 5 increase in
- 6 on the whole
- 7 everything that / all that
- 8 holds true

**9H**

- |    |   |                       |                         |
|----|---|-----------------------|-------------------------|
| 1  | J | vesi                  | keinotekoinen           |
| 2  | I | emäksinen             | piilotettu              |
| 3  | H | valikoiva,<br>tasokas | viallinen               |
| 4  | G | elossa oleva          | heikko                  |
| 5  | A | luomu-                | järkevä                 |
| 6  | C | täydellinen           | niukka                  |
| 7  | D | vankka                | sukupuuttoon<br>kuollut |
| 8  | F | runsas                | julkinen                |
| 9  | E | tunne,<br>syvälinen   | hapan                   |
| 10 | B | näkyvä                | maa,<br>maanpäällinen   |

**9J**

- 1 ~~for your life~~
- 2 ~~remedies~~
- 3 ~~temperatures~~
- 4 ~~survival~~
- 5 ~~elements~~
- 6 ~~a ploy~~
- 7 ~~for the occasion~~
- 8 ~~right~~
- 9 ~~overpopulation~~
- 10 ~~top to toe~~

**9K**

- |        |           |
|--------|-----------|
| 1 in   | 6 -       |
| 2 in   | 7 at      |
| 3 of   | 8 in      |
| 4 at   | 9 on      |
| 5 with | 10 around |

**9N**

- 1 Tashtagol  
A town / place in Siberia, where a yeti conference was held.
- 2 Neanderthal men  
Dr. Igor Burtsev claims that there are yetis living in the Kemerovo region and that they are the last of the surviving Neanderthal men.
- 3 Azasskaya cave  
Conference participants claimed that they had found evidence of the Yetis existence in the cave (e.g. footprints, a presumed bed and various other markers)
- 4 several hairs  
Russian scientist Anatoly Fokin claimed he had found several hairs in the snow that might belong to the yeti.
- 5 sasquatch  
In North America the yeti is known as sasquatch, or bigfoot.
- 6 Michigan  
An American conference participant (Robin Lynn) claimed that there were 10 yeti-like creatures living on her land in Michigan.
- 7 media campaign  
Conference participants wanted to start a media campaign to promote a more serious approach to the yeti in the media.
- 8 "the beast from the east"  
Former heavyweight boxing champion Nikolai Valuev who is known as "the beast from the east", recently visited the area to look for the yeti himself but he failed to find it.

Why would the authorities of the Kemerovo region promote this unlikely story?

It is likely to be a marketing gimmick to attract attention to the region and hopefully boost tourism in the area.

**10A**

- 1 Any three of the following: type of eucalyptus / Aboriginal name / very hard wood / tall, straight trunk / once they grew all over Western Australia / very durable / grow slowly
- 2 The leaves hang down, or sideways. In this way only a small part of the leaf is exposed to the sun, thus limiting evaporation.

**10B**

- 1 rings
- 2 redwoods
- 3 Kazakhstan
- 4 The Lord of the Rings
- 5 bonsai
- 6 an arboretum
- 7 cherry trees
- 8 birch
- 9 eucalyptus
- 10 carbon dioxide

**10C**

- |     |     |
|-----|-----|
| 1 D | 5 E |
| 2 H | 6 C |
| 3 A | 7 B |
| 4 G | 8 F |

deciduous: aspen, birch, oak, rowan, willow

coniferous: juniper, pine, spruce

**10D**

- 1 puun kuori, tuohi; haukkua, haukahtaa
- 2 tapaus, sattumus, välikohtaus
- 3 rehu
- 4 saatto, saattue; saattaa
- 5 itää, idättää
- 6 antenni (BrE), ilma-, lento-
- 7 latvusto, katos, kuomu, lippa
- 8 merkittävä, huomattava; merkkihenkilö, vaikuttaja

**10E**

- 1 b
- 2 b
- 3 c
- 4 a
- 5 c
- 6 b

**10F**

- 1 She has always liked trees, and she was also literally climbing into trees.
- 2 The Gija believed that the tree was alive, almost like a person. So they sang to it so that it would feel happy and comfortable in its new home.
- 3 Because if too many people came to see the tree, it might be damaged.
- 4 Because the tree doesn't seem to have any flowers.
- 5 Suggested answer:  
Without wood, we would not have built ships. Without ships, we would not have sailed around the world, and America, Africa, Australia, for example, would not have been colonised.

**10G**

- 1 It struck me that
- 2 Neither does it include
- 3 the influence on humanity
- 4 But rather than try and convince you
- 5 are highly valued
- 6 was no easy matter
- 7 Contrary to what you might expect
- 8 is kept a close secret
- 9 feeds a greater variety of animals
- 10 several times a year

**10H**

- 1 highly valued
- 2 it struck me
- 3 a greater variety of trees
- 4 several times a week
- 5 contrary to what you might expect
- 6 kept a close secret
- 7 rather than try and convince you

**10I**

- 1 C
- 2 F
- 3 E
- 4 B
- 5 G
- 6 I
- 7 D
- 8 J
- 9 H
- 10 A

**10J**

- 1 knock on wood  
Hope that everything turns out alright.  
Koputtaa puuta.
- 2 connect with your roots  
Establish a connection with your family and ancestors.  
Olla yhteydessä sukuun ja esi-isiin.
- 3 bark up the wrong tree  
To be wrong about the reason for something or the way to achieve something.  
Haukkua väärää puuta.
- 4 hold out the olive branch  
Offer a token of peace or goodwill.  
Tarjota sovintoa. ”Tarjota sovinnon kättä.”
- 5 turn over a new leaf  
To begin a new and improved course of behaviour.  
Kääntää uusi lehti.
- 6 put down roots  
Make new friends, settle down in a new place so that you feel it's your home.  
Asettautua aloilleen.
- 7 can't see the wood for the trees  
When you are unable to see a situation clearly because you're looking too closely at small details to see what is really important.  
Ei nähdä metsää puilta.
- 8 bend before you break  
It's usually better to compromise, adjust to circumstances.  
On parempi sopeutua tilanteeseen, tehdä kompromisseja kuin ”ratketa”.

**10K**

- 1 about
- 2 on
- 3 into
- 4 to
- 5 as
- 6 in
- 7 By
- 8 of

**10M**

- 1 He suunnittelevat aktiviteetit, joita koulussa tehdään. (Huom! Sen jälkeen koulut toteuttavat aktiviteetit mm. videoklippien jakamisen/ lähettämisen jne.)
- 2 Kunnat, ministeriöt ja muut ei-kaupalliset toimijat sekä ympäristöryhmät.
- 3 Valitaan alueen omia (alkuperäisiä) puita, ei eksoottisia. Puita, joita ihmiset tarvitsevat.
- 4 Pitäisi istuttaa useamman lajisia puita alueilla, jotta olisi rikkaampi biodiversiteetti, joka mahdollistaisi rikkaamman kasviston ja eläimistön.
- 5 Suomalaiset eivät ole halukkaita toimimaan. Projektin tarkoituksena on juuri se: rohkaista ihmisiä toimimaan.

**11B**

- 1 luoda, kehittää, tuottaa, aiheuttaa
- 2 kaupunkilainen
- 3 (valtion, kunnan) verotulot
- 4 alue, kaupunginosa
- 5 työmatkailainen
- 6 estää, estellä, pelotella
- 7 osattomaksi jäänyt, köyhä
- 8 viemärointi

**11C**A Viv Reid

- 1 all available for everyone
- 2 a steady stream of customers
- 3 the place has a vibrant feel to it
- 4 it causes regular bottlenecks
- 5 It's the little things I cherish

**11C**B Parvez Patel

- 6 a densely populated
- 7 provide the basics
- 8 knows one another
- 9 total lack of infrastructure
- 10 many companies operate local tours

**11D**

## Suggested key

## Viv Reid

- Quality of life in Auckland: According to surveys, the quality of life in Auckland is usually high. Viv thinks she might even take it for granted.
- Natural beauty: There are a lot of parks, nature trails and volcanic hills in Auckland, as well as great beaches. The great outdoors is close to everybody. Auckland's abundant natural beauty is what Viv appreciates most.
- Business: As Viv owns a sports store, the great outdoors is good for her professionally too. She has a lot of customers who need outdoor gear.
- Ethnic groups: There are over 200 ethnic groups living in Auckland. It is easy to find different cuisines – one of the good things about the ethnic diversity.
- Downsides: The town planning is not good. Public transport does not work. It takes a lot of time to travel to work and back to the city.

## Parvez Patel

- Dharavi slum: Parvez was born in the biggest slum in Mumbai. His parents had work, and he didn't have a deprived childhood. He went to school in the same area. Dharavi is also called Shadow City.
- Stigma: Parvez was not judged on his background in the slum until he went to college. They thought he had had a deprived childhood, which was not true in his opinion.
- People living in Dharavi: Not all people living in Dharavi are poor or desperate. The rents are cheaper there and there is a feeling of community.

- **Problems:** Poor sanitation, a shortage of clean water, an almost total lack of infrastructure and bad healthcare are problems in the area.
- **Visitors:** Some tourists visiting India are curious to see what life in a slum is like. That is why there are companies organizing slum tours. Parvez is working for one to fund his tuition.

**11E**

- 1 False  
The text doesn't say this. However, people living in cities have better access to healthcare.
- 2 True
- 3 False  
While appreciating the ethnic diversity, Viv rates Auckland's natural beauty as the best thing about living there.
- 4 True
- 5 False  
The text doesn't say anything about the dangers of the nightlife. Many people don't bother go to the centre in the evenings once they have braved the traffic to get home.
- 6 True
- 7 False  
Nobody judged him on his background until he went to college.
- 8 True

**11F**

- 1 despite our roots
- 2 By reducing transaction costs
- 3 superior to
- 4 Auckland has its downsides
- 5 predict the weather
- 6 It was only when I went to college
- 7 they run businesses
- 8 a shortage of clean water

**11G**

- 1 Elämänlaatu josta kaupunkien asukkaat nauttivat, / Kaupunkien asukkaiden elämänlaatu on usein parempi kuin heidän maalla asuvien serkkujensa / kuin maaseudun asukkaiden.
- 2 Jos minun pitäisi valita Aucklandista jotain, mitä todella arvostan, valitsisin luonnon kauneuden runsauden / runsaan luonnon kauneuden.
- 3 Vaikka kasvoin slummissa, ei se tarkoita, että minulla olisi ollut köyhä lapsuus / että olisin jäänyt lapsuudessani osattomaksi / paitsi jostakin.
- 4 One of the downsides in/of the area is that it is almost / next to impossible to predict the weather.
- 5 By reducing your consumption of water you can prevent (a) shortage of water.

**11I**

- 1 provide for
- 2 for granted
- 3 lack of
- 4 known as
- 5 paying for
- 6 curious about
- 7 attend
- 8 made of

**12A**

- |                        |   |
|------------------------|---|
| 1 incorrect            | väärä   |
| 2 unfinished           | kesken,<br>keskeneräinen                            |
| 3 unacceptable         | ei hyväksyttävä,<br>mahdoton<br>hyväksyä            |
| 4 disagree             | olla eri mieltä                                     |
| 5 regrowth<br>degrowth | uudelleenkasvu<br>supistuva kasvu,<br>pienentyminen |
| 6 irrational           | järjetön, älytön                                    |
| 7 immature             | epäkypsä,<br>lapsellinen                            |
| 8 malnutrition         | aliravitsemus,<br>virheellinen<br>ravitsemus        |
| 9 non-toxic            | myrkytön  |
| 10 deforestation       | metsän<br>hävittäminen                              |
| reforestation          | metsänvijely  |

**12B**

## Suggested key

- |                    |                                   |
|--------------------|-----------------------------------|
| 1 autocorrect      | korjata auto-<br>maattisesti      |
| hypercorrect       | hyperkorrekti                     |
| incorrect          | väärä                             |
| 2 semiautomatic    | puoliauto-<br>mattinen            |
| 3 hyperactive      | yliaktiivinen,<br>hyperaktiivinen |
| proactive          | ennakoiva,<br>proaktiivinen       |
| (interactive       | interaktiivinen)                  |
| 4 regrowth         | uudelleenkasvu                    |
| undergrowth        | aluskasvillisuus                  |
| 5 outlive          | elää kauemmin                     |
| 6 overenthusiastic | yli-innokas                       |
| 7 ultrasound       | ultraääni, ultra-<br>äänitutkimus |
| 8 intercontinental | mannerten-<br>välinen             |
| 9 co-worker        | työkaveri                         |
| 10 hyperventilate  | hyperventiloida                   |



**12C**

1	clearance	alennusmyynti, raivaus, väli
2	continental	mantereinen, manner-
3	interviewee interviewer	haastateltava haastattelija
4	livelihood	toimeentulo, elinkeino
5	employee employer	työntekijä työnantaja
6	populism populist	populismi populistinen
7	production	tuotanto, valmistaminen
8	calmness	tyyneys, rauha
9	entrepreneurship	yrittäjäyys, yritteliäisyys
10	explosion	räjähdyks

## Suggested key

govern – government; crucify –  
crucifixion; air – airy

11	adventurous	seikkailun- haluinen
12	flourish	kukoistaa, menestyä
13	epidemic	epidemia, kulkutauti
14	fruitful	hedelmällinen, antoisa
15	convertible	avoauto, muunneltava

## Suggested key

fruit – fruity; angry – angrily;  
accident – accidental

16	timewise	ajan suhteen
17	modernise	nykyaikaistaa
18	intensify	voimistaa, voimistua
19	frighten	pelottaa
20	backward	taaksepäin, takaperin

**12D**

- 1 Sam again wants to attend the biannual seminar dealing with the state of Finnish forests.
- 2 I was homeward bound / going home(ward) when I realised that I could shorten my route by taking a shortcut through the woods.
- 3 What has been your most meaningful experience in nature?
- 4 The best idea was clearly the driverless bus.
- 5 Jotkin poliittiset päätökset eivät innosta yksilöä osallistumaan enemmän ympäristöasioihin.
- 6 Meille annettiin virheellistä tietoa taas. Valheiden kirjoittaminen pitäisi tehdä lainvastaiseksi ja rangaistavaksi.
- 7 Amerikan presidentin vaimo oli levoton. Hänen kykynsä salata hermostuneisuutensa oli kuitenkin vakuuttava.

## READING COMPREHENSION

**1.1a**Bottled water in the Antarctic

- a) Huolimatta siitä, että Etelänapamantereella on 70 % maailman makeasta vedestä (sidottuna jäähän) ruokajuomana käytettiin Italiasta tuotua pulloitettua vettä.

**1.1b**The power of birdsong

- b) Tutkijat tutkivat sitä, millainen psykologinen vaikutus ihmiseen on sillä, että hän on säännöllisesti alttiina linnun laululle.  
TAI  
Tutkitaan auttaako linnunlaulu ihmistä rentoutumaan, parantaako se ihmisen kykyä saada tehtäviä päätökseen/tehdyksi ja auttaako se ihmisiä ajattelemaan luovemmin.

**1.1c**Stars burning bright?

- c) Tähdet antavat meille kuvan siitä, miten pieniä olemme suhteessa maailmankaikkeuteen.  
Tähdet ovat tärkeä osa ihmisten kollektiivista/yhteistä identiteettiä.

**1.1d–e**Safe houses

- d) Ongelma: Onko mahdollista pitää rakennukset pystyssä ja ehjinä voimakkaan maanjäristyksen aikana?  
e) Ratkaisu 1: perustuksen liittäminen rakennukseen niin, että koko rakenne liikkuu yhtenä kappaleena. Ratkaisu 2: Teräsvaijerien asentaminen rakennuksen kehikkoon niin, että järistyksen loputtua vaijerit vetävät rakennuksen takaisin sen alkuperäiseen muotoon.

**1.2a**Swamp dining

- 1 C  
2 B

**1.2b**Dogs sniff out black gold

- 3 A  
4 B  
5 B

**1.2c**Perhaps not dead as a dodo

- 6 B  
7 A  
8 C

**1.2d**All sorts of worms

- 9 B  
10 C  
11 C  
12 A

**1.2e**Going bananas

- 13 B  
14 C  
15 A  
16 B  
17 C

**1.3a**Urban landscape ecology

- 18 A  
19 A False  
B True  
C False  
20 B  
21 C

**1.3b**Urban Greenways and linear parks

- 22 Vihreät kävelyreitit läpäisevät sadevettä, mikä vähentää painetta viemäriverkostolle. Puut viilentävät kaupunkeja tarjoten varjoa ja haihduttaen vettä.

## GRAMMAR AND VOCABULARY

**2.1**Waste not, want not

- |      |      |
|------|------|
| 1 B  | 16 C |
| 2 C  | 17 B |
| 3 B  | 18 D |
| 4 D  | 19 C |
| 5 B  | 20 C |
| 6 A  | 21 B |
| 7 C  | 22 C |
| 8 A  | 23 B |
| 9 B  | 24 A |
| 10 D | 25 B |
| 11 D | 26 D |
| 12 B | 27 D |
| 13 C | 28 A |
| 14 A | 29 D |
| 15 D | 30 A |

**2.2**Zoologger

- |      |      |
|------|------|
| 1 B  | 16 C |
| 2 A  | 17 D |
| 3 D  | 18 A |
| 4 A  | 19 A |
| 5 D  | 20 C |
| 6 B  | 21 C |
| 7 A  | 22 C |
| 8 C  | 23 A |
| 9 D  | 24 D |
| 10 D | 25 C |
| 11 B | 26 B |
| 12 A | 27 C |
| 13 C | 28 B |
| 14 A | 29 C |
| 15 B | 30 A |

**2.3**Corpse flower blooms

- 1 rare
- 2 is expected
- 3 for the first time
- 4 on Saturday afternoon /  
in the afternoon on Saturday
- 5 Nearly / Almost / About
- 6 Many / A lot
- 7 until / till / up to
- 8 logged in
- 9 has taken
- 10 than
- 11 species
- 12 helps
- 13 which
- 14 as

**2.4**To save the oceans

- 1 are having
- 2 decades
- 3 as ... as
- 4 impact / influence / affect /  
impact on / have on effect on /  
have an influence on
- 5 Swedish
- 6 can succeed
- 7 There
- 8 I've always felt
- 9 dozens of
- 10 based / that is based / which is  
based
- 11 which
- 12 As for / When it comes to
- 13 letting
- 14 hopefully

**2.5**Summer job

- 1 There is a wide range of options;  
trips from beginners to advanced.
- 2 You will be OK. The beginners  
will get training, everyone wears  
a life jacket and all canoes are  
very stable.
- 3 That's true. The water is clean,  
and there is a network of lakes and  
rivers. A couple said yesterday  
that they had even seen a seal.
- 4 You will camp overnight on  
the islands and take breaks for  
coffee and meals (food). People  
have the right to enjoy the Finnish  
countryside freely. We have this  
tradition known as everyman's  
right.
- 5 Right. Each small group has  
a guide. All food and equipment  
will be provided. If you are not  
happy with the service, you will  
get your money back.
- 6 I assure you it's not a problem.  
Every guide speaks English, and  
a lot of the people in the groups  
will be happy to practise their  
English.
- 7 Why don't you choose a day trip  
to start with? It's only 10 km.  
If that goes well, you can come  
back for a longer one.

## LISTENING COMPREHENSION

**Part I**

- |     |     |
|-----|-----|
| 1 B | 5 B |
| 2 B | 6 A |
| 3 C | 7 C |
| 4 B | 8 A |

**Part II**

- 9 True
- 10 False  
The same feature has been noted, for example, in arid areas of Western Australia.
- 11 True
- 12 False  
Water and nutrient content is checked and the information is analysed by computers.
- 13 False  
Fairy circles are smaller if there are more resources, such as soil nitrogen and rainfall.

**Part III**

- |      |      |
|------|------|
| 14 B | 17 B |
| 15 C | 18 C |
| 16 A | 19 A |

**Part IV**

- |      |      |
|------|------|
| 20 B | 23 C |
| 21 A | 24 A |
| 22 B | 25 C |

**Part V**

- |      |      |
|------|------|
| 26 C | 29 A |
| 27 B | 30 B |
| 28 C |      |

**Part VI**

- a) Hämähäkin seitti välittää värinää kuten kitaran kieli. Se auttaa naarashämähäkkejä valitsemaan partnerinsa.
- b) Puun juuret pitävät joenuoman ehjänä. Jos puita ei olisi, joki leviäisi (sekä madaltuisi) ja kuivuisi (kadoten kokonaan).
- c) Koira herätti nukkuvan kuuron pojan, joka ei kuullut palo-varoittimen ääntä otettuaan kuulolaitteen pois torkkujen ajaksi.
- d) Korpit vakoilivat ja raportoivat hänelle.
- e) Ennen tehtiin karttoja, tutkittiin kasveja tai haettiin mahdollisia kauppareittejä. Nykyisin matkojen syynä on usein itsensä haastaminen esim. vuorikiipeilyssä, luolien tutkimisessa, sukeltamisessa.

**Part VII**

- a) Emo munii toukokuun lopussa tai kesäkuun alussa. Hautomisaika on kuusi viikkoa.
- b) Yleensä kaksi munaa. Erikoista on se, että sekä koiras että naaras hautovat munia.
- c) Poikaset saavat ravinnerikasta ruokaa. / 90% ruuasta tulee mehiläiskenoissa olevista toukista.
- d) Poikaset ovat sosiaalisia, ystävällisiä, ei-aggressiivisiä (kaksi näistä riittää).
- e) Poikaset alkavat harjoitella lentoa myöhään elokuussa. Ne aloittavat lentämisen tuulisena päivänä tekemällä lyhyitä tutustumis-lentoja lähiympäristöön.

**G1**

- 1 I saw Tom and Lisa just briefly at the demonstration yesterday.
- 2 They are usually late.
- 3 Lisa would never harm animals.
- 4 Alex wanted to know how much the organic apples would cost.
- 5 Did you get enough food? Was it healthy enough?
- 6 Could we meet in front of the store in the Mall, at two pm tomorrow?
- 7 I would rather meet you at a restaurant next to the park, in the evening.
- 8 I like vegan food so much!
- 9 Luckily, I found an environmentally friendly laptop.
- 10 How can I recycle my old computer?

**G2**

- 1 Rarely has a nature documentary won an Oscar.
- 2 Not only was I wet, but I was also freezing (cold). / Not only was I wet but I was also freezing.
- 3 Hardly had the hunters taken their positions when the capercaillie appeared.
- 4 Only with his pets did he feel relaxed.
- 5 Little did I know then that (one day) Jack and I would be vegetarians one day.
- 6 Not only was I sad when I saw the animals in the zoo, but I was also angry / I was angry, too.

**G4**

- 1 Wolves living close to humans are often considered potentially dangerous.
- 2 In some countries, the government pays a reward for each wolf killed.
- 3 When studying the behaviour of wild wolves, biologists found that wolves are very social animals.
- 4 Knowing very little about wolves, most people are likely to fear the animal.
- 5 People earning money from protecting wild animals help the fight against poaching in African countries.
- 6 After investigating / Having investigated the trafficking of elephant tusks for months, the police finally arrested a group of poachers.
- 7 Poachers caught selling rhino horns or elephant tusks face life imprisonment.
- 8 If killed for their valuable horns at the current rate, rhino will become extinct soon.

**G5**

- 1 Generally speaking, nature is good for our health and happiness.
- 2 After picking / Having picked a litre of blueberries, we baked a pie.
- 3 Judging by all the red spots on Tom's face, there had been a lot of mosquitoes at the cottage / cabin.
- 4 We will visit Northern Lapland this summer, provided that we have enough time.
- 5 Weather permitting, we will go hiking there.
- 6 Being a Finn / Because I am a Finn, I am used to seeing hail and sleet in June.
- 7 Reindeer walking / Reindeer that walk on the road sometimes cause accidents in the north.
- 8 After listening / Having listened to a nature programme, I decided to go for a walk in the forest / woods.

**G6**

- 1 worked
- 2 was
- 3 got
- 4 was
- 5 was going to take
- 6 had reported
- 7 had been behaving
- 8 suspected
- 9 had become
- 10 needed
- 11 took
- 12 stroked
- 13 reassured
- 14 said
- 15 slipped
- 16 felt
- 17 suggested
- 18 had analysed
- 19 would know

**G7**

- 1 had
- 2 supported
- 3 wakes, realizes
- 4 had lost, would
- 5 was, loved / loves
- 6 was
- 7 has, will
- 8 have, had

**G8**

- 1 where I was going.
- 2 who my best friend was / is.
- 3 if I wanted to reduce my carbon footprint.
- 4 if I had seen the latest news.
- 5 if I was OK.

**G9**

- 1 He asked me where I lived in 2010.
- 2 He asked me what time it was. / He asked me the time.
- 3 He asked what time he would be home if he left right away.
- 4 I asked him to sell his car.
- 5 James says he lives on the coast. He says he will buy a house by the sea.
- 6 Tina said she had moved to London. She said she would buy a house in Kensington.
- 7 Mark will never move abroad. He says he will stay in his hometown.
- 8 He said he had been walking down the street when somebody crashed into a lamppost.

**G10**

- 1 lived, would walk
- 2 would have recycled, had told
- 3 will learn, listen to
- 4 wouldn't have paid, had reduced / had cut down
- 5 Would you buy, didn't have
- 6 were/was, would take
- 7 had guessed, would we have allowed
- 8 Would we have pumped, we had known, would develop

**G11**

- 1 I wish / If only I had studied more biology.
- 2 Even though I am an ordinary citizen, I can still make a difference / I can still change things.
- 3 I wish / If only I had time to grow my own vegetables.
- 4 Some people act as if they didn't care about anything.
- 5 You couldn't have made a better decision even if you had tried.
- 6 Joey wouldn't have travelled abroad even if his parents had paid for the ticket.
- 7 What will happen if sea levels keep rising?
- 8 Even if we slowed down the rising temperatures, we would still see dramatic changes on the coastlines.

**G12**

- 1 C should
- 2 B ought to
- 3 A should be allowed
- 4 C have not been able to
- 5 B were able to
- 6 C could improve
- 7 A have had to
- 8 B were able to find
- 9 B could
- 10 A used to going
- 11 B would
- 12 A had to be
- 13 A have been able to
- 14 C have to

**G13**

- 1 Could we have saved
- 2 must have been inspected, could be made
- 3 can't have been
- 4 might have been, could have been saved
- 5 could have spared
- 6 had to agree
- 7 were able to go
- 8 were allowed to inspect, had to be felled / cut down



**G15**

- 1 The last wolf was shot (by hunters) in the UK a few centuries ago.
- 2 A famous artist has been invited (by campaign leaders) to advertise rewilding.
- 3 Some animals were considered too dangerous.
- 4 Now some of these animals can be seen in the wild again.
- 5 Natural forests have also been restored.
- 6 A new pond is being built for the water birds. / A new pond for the water birds is being built.
- 7 A lot of pictures had been painted by the children before their field trip to the forest.
- 8 A nest was found and selfies were taken.

**G16**

- 1 have been lost
- 2 are created
- 3 are reintroduced
- 4 (are) left
- 5 were born
- 6 have been given / donated
- 7 has been criticised
- 8 are needed
- 9 doesn't have to be carried out / doesn't need to be carried out
- 10 were asked

**G17**

- 1 Every week, water samples are taken from the pond. / Water samples are taken from the pond every week.
- 2 They are being analysed right now / at the moment.
- 3 Last month, high concentrations of bacteria were found/discovered. / High concentrations of bacteria were found/discovered last month.
- 4 (The) bad / negative / poor results had been expected.
- 5 Waste must have been thrown into/in the pond.
- 6 Birds had to be rescued from the contaminated water.
- 7 Now, better results are (being) hoped for / expected.
- 8 Visitors should be told how to behave on / in / at the nature reserve.

**G18**

- 1 a, the
- 2 -, The
- 3 -, -, -, an
- 4 the, the
- 5 -, -, the
- 6 the, the
- 7 a, -
- 8 a, -
- 9 -, -, -, the, a, the, the
- 10 the

**G19**

- |    |     |    |     |
|----|-----|----|-----|
| 1  | the | 16 | a   |
| 2  | -   | 17 | the |
| 3  | the | 18 | -   |
| 4  | the | 19 | -   |
| 5  | -   | 20 | the |
| 6  | a   | 21 | a   |
| 7  | the | 22 | a   |
| 8  | -   | 23 | the |
| 9  | the | 24 | the |
| 10 | the | 25 | -   |
| 11 | -   | 26 | the |
| 12 | -   | 27 | an  |
| 13 | -   | 28 | the |
| 14 | the | 29 | -   |
| 15 | a   | 30 | the |

**G20**

- 1 which  
Relatiivipronomini viittaa edeltävään substantiiviin. Pilkun jälkeen tulee 'which'.
- 2 which  
Relatiivipronomini on yhdistettynä prepositioon.
- 3 which  
Relatiivipronomini viittaa koko edeltävään lauseeseen.
- 4 which  
Relatiivipronomini viittaa edeltävään substantiiviin.
- 5 who  
Relatiivipronomini viittaa ihmisiin.
- 6 What  
Relatiivipronomini sisältää korrelaatin. (= se joka, se mitä)

**G21**

- 1 which
- 2 that/which
- 3 which
- 4 that / - / which
- 5 that/-
- 6 that
- 7 What
- 8 that/which
- 9 which
- 10 whose
- 11 whom
- 12 that

**G22**

- 1 who
- 2 that
- 3 that/which
- 4 that/who
- 5 who
- 6 that/which
- 7 which
- 8 which
- 9 which
- 10 that/which
- 11 which
- 12 that

**G23**

- 1 My friends, neither of whom like travelling, decided to hike in the forest nearby / nearby forest.
- 2 They wanted to use the tent (that / which / -) I bought a year ago.
- 3 I didn't want to let them use the newest hiking gear (that/-) I had.
- 4 "Do you have to stay overnight in a forest that/which is so close to home?" I asked them.
- 5 "Sleeping outdoors is exactly what we are looking forward to," they answered/replied.