5 Emerging technologies

Glossary

Glossal y			
Page 5 5.1 5.2	emerging (adj) /ɪˈmɜːdʒɪŋ/ new, just beginning to exist or become known • She's an emerging artist from Spain. You may not have heard of her yet. ➤ emerge (v) • aufstrebender/e/es sample (n) /sɑːmpl/ a small amount of sth that you can use to taste or get information about the rest of it • The doctor needed a sample of blood. • die Probe bacteria (n pl) /bækˈtɪəriə/	5.10	orbit (v) /ˈɔːbɪt/ move or make sth move in a circle around sth else ● It takes the Earth a year to orbit the sur > orbit (n) ❖ umkreisen
		5.11	impact (n) /'Impækt/ the force with which sth hits sth else ● The scientists calculated the impact of the asteroid hitting our planet. ➤ impact (v) ❖ der Aufprall
5.3		5.12	record (v) /rr'kɔːd/ write down information so that you can keep it for the future • The police recorded every move the suspect made. ➤ record (n)
3.3	very small organisms that live everywhere and can cause disease • They discovered the bacteria that caused the illness in the water. • die Bakterien (plural; singular: die Bakterie)	5.13	 aufzeichnen, festhalten precise (adj) /prɪˈsaɪs/ exact • I can give you a general outline, but
_		5.14	I don't yet know the precise details of what happened. ➤ precision (n) ❖ genauer/e/es planetary (adj) /'plænɪtəri/
Rea	ading Pages 54–55 cause (v) /kɔːz/		related to planets • There are thousands of planetary systems in our galaxy. ➤ planet (n) ❖ planetarischer/e/es
	make sth (usually bad) happen ● The storm caused terrible destruction in the area. > cause (n) ❖ bewirken	5.15 defence (n) /dr'fens/ protection against attack or critic	·
5.5	monitor (v) /'mɒnɪtə(r)/ watch and check carefully to see how a situation develops or to get information ● The police monitored the suspect's phone calls.	5.16	his defence. ➤ defend (v), defensive (adj) this die Verteidigung collision (n) /kə'lɪʒn/ an accident in which two moving objects or people crash into each other • The pilot avoided the collision by changing course at the last minute. ➤ collide (v) to die Kollision, der Zusammenstoß
5.6	> monitor (n) ❖ überwachen drone (n) /drəʊn/ a small aircraft without a pilot that is controlled by sb on the ground ● Many drones have cameras so you can take photos from above. ❖ die Drohne > tiberwachen ### Amaly Controlled ### Amaly		
		decrease (v) /dɪˈkriːs/ make or become smaller ● As a result of the	
5.7	slam (v) /slæm/ crash into sth with a lot of force ● The driver lost control of the car and slammed into a tree.		new measures, crime in inner city areas has decreased by 10%. ➤ decrease (n) ❖ abnehmen Syn: reduce
5.8	★ mit etw. gegen etw. knallen asteroid (n) /ˈæstəˌrɔɪd/ one of the many big rocks that go around the sun • The asteroid flew within 200,000 miles of	5.18	military (adj) /ˈmɪlɪtri/ related to the army ● The soldiers were wearing brown military uniforms. ❖ Militär-, militärischer/e/es
5.9	the Earth. ❖ der Asteroid redirection (n) /ˌriːdəˈrekʃn/ the act of changing the direction in which sth moves ● Don't worry – redirection to our new	5.19	eager (adj) /'iːgə(r)/ wanting to do sth very much ● The staff were all very kind and eager to help us. > eagerness (n) ❖ eifriger/e/es, beflissener/e/

es 🕾 Syn: willing

lock. ❖ ferngesteuerter/e/es

remote-control (adj) /rɪˌməʊt kənˈtrəʊl/ that you can control from a distance ● The car has remote-control central locking. Just press this button and all the doors will automatically

5.20

❖ die Weiterleitung

web address is automatic. ➤ redirect (v)

- aid (n) /eɪd/
 money, food or other supplies that an organisation or country gives to a group of people in need or to a poor country
 Thousands of lives will be saved when the aid arrives in the country. ❖ die Beihilfe
- 5.22 humanitarian (adj) /hjuːˌmænɪ'teəriən/ aiming to improve people's lives and reduce suffering ● The prisoner was very ill so they decided to set him free for humanitarian reasons. ❖ humanitärer/e/es, menschenfreundlicher/e/es
- assignment (n) /əˈsaɪnmənt/
 a task that you ask sb to do as part of their job
 or studies They sent him abroad on a very
 difficult assignment. ➤ assign (v)
 der Arbeitsauftrag
- 5.24 survivor (n) /səˈvaɪvə(r)/
 a person who continues to live after experiencing great danger or difficulty Unfortunately, there were only two survivors of the plane crash. ➤ survive (v), survival (n) ❖ der/die Überlebende
- 5.26 transport (v) /træn'spo:t/ move goods or people from one place to another • Most products are transported by road across the country. ➤ transport (n), transportation (n) ❖ befördern
- 5.27 vital (adj) /'vartl/ necessary or extremely important ● The mayor's support is vital to the success of the project. ❖ wesentlicher/e/es
- 5.28 poacher (n) /'pəʊtʃə(r)/
 sb that hunts animals illegally Unfortunately,
 poachers are still killing elephants and rhinos.
 ❖ der Wilderer/die Wilderin
- 5.29 capture (v) /ˈkæptʃə(r)/
 catch a person or animal and keep them
 in a place from which they can't escape

 They capture wild animals and sell them to zoos. > capture (n), captive (adj) ❖ fangen, einfangen
- 5.30 sense (v) /sens/ feel or experience sth ● I could sense that he wasn't happy although he said he was. > sense (n) ❖ spüren
- astrophysicist (n) /ˌæstrəʊˈfɪzɪsɪst/
 a scientist who studies stars and other objects
 in space Some astrophysicists believe it is
 possible that human beings will move to other
 planets in the near future. ➤ astrophysics (n)
 der/die Astrophysiker/-in

- 5.32 equipped (adj) /rˈkwɪpt/ having the necessary tools and clothes for a particular purpose ● Our kitchen is equipped with all modern appliances. ➤ equip (v), equipment (n) ❖ ausgestatteter/e/es
- acronym (n) /'ækrənɪm/
 an abbreviation that is pronounced as a
 word NASA is an acronym for the National
 Aeronautics and Space Administration.
 das Akronym
- rough (adj) /r∧f/
 not exact I think I have a rough idea of what
 you mean, but can you give me more details?

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- 5.35 highlight (v) /'harlart/
 emphasise sth important The study
 highlights the need to take measures urgently.
 ❖ hervorheben Syn: emphasise
- illegally (adv) /ɪˈliːgəli/
 in a way that breaks the law I got a fine for parking illegally. ➤ illegal (adj) ❖ rechtswidrig
 Opp: legally

Vocabulary Page 56

- attachment (n) /əˈtætʃmənt/
 a file included in an email There were two
 attachments in the email he sent us. Did you
 download the files? >> attach (v)
 der Anhang
- 5.39 backup (n) /ˈbækʌp/
 a copy of the information on a computer that is stored separately for security *I make a backup of all my work files every day.* ❖ das Backup, die Datensicherung
- bookmark (n) /'bʊkmɑːk/
 website address saved on a computer so it can be easily found I've got two online dictionaries in my bookmarks. ➤ bookmark (v)
 das Lesezeichen, das Bookmark
- browse (v) /braʊz/
 look at information on the internet I found
 your site while I was browsing and I thought
 it was amazing. ➤ browser (n) ❖ browsen,
 stöbern
- 5.42 display (v) /dr'spleɪ/ show sth on a screen • The screen will display the name of the current user in the top righthand corner. ➤ display (n) ❖ anzeigen

- 5.44 upgrade (v) /∧p'greɪd/
 replace a machine or system with a newer or better one It's time to upgrade my phone I've had it for ten years.
 ❖ nachrüsten, upgraden ⑤ Opp: downgrade
- virtually (adv) /ˈvɜːtʃuəli/
 done or seen using a computer or the internet,
 without going anywhere or meeting people in
 person ◆ You can join our class virtually from
 the comfort of your home. ➤ virtual (adj)
 praktisch
- 5.46 anti-virus (adj) /ˌænti'vaɪərəs/
 protecting a computer from programs that can
 harm it ◆ You should use a good anti-virus
 program that protects you without slowing
 down your computer. ❖ Virenschutz-
- 5.47 broadband (n) /'bro:dbænd/
 a system that allows a lot of information to be shared between computers via the internet
 Most homes have broadband internet access these days. ❖ der Breitbandanschluss
- 5.48 database (n) /'deɪtəbeɪs/
 a large amount of information stored on a
 computer so that it can be easily accessed and
 used ◆ We have more than 10,000 names and
 addresses in our database.
 ❖ das Rechenzentrum
- 5.49 desktop (n) /'desktop/ a computer that fits on a desk and is not intended to be carried around ● I have a powerful desktop at work, but just use a tablet at home. ❖ der Desktop-PC
- 5.50 headset (n) /'hedset/
 a set of headphones with a microphone
 I use a headset to listen to music, so as not to disturb other people. ❖ der Kopfhörer
- 5.51 hard drive (n) /'hɑːd ˌdraɪv/
 a disk inside a computer or other device where large amounts of information can be stored and used The hard drive on my laptop isn't as big as the one on my desktop.
 ❖ die Festplatte Syn: hard disk
- password (n) /'pɑːswɜːd/
 a series of letters, numbers and/or symbols
 that you must type into a computer to be able
 to use it ◆ You can't access these files unless
 you have the password. ❖ das Passwort
- 5.53 network (n) /'netw3:k/
 a number of computers that are connected together so that they can share information
 All the computers in our office are on the same network so we can easily send large files to each other. ❖ das Netzwerk

- 5.54 wireless (adj) /ˈwaɪələs/ using radio signals rather than cables or wires to connect devices to each other ● You can control your wireless speaker from a distance, using your phone. ❖ drahtloser/e/es, Wireless-
- 5.55 virtual reality (n) /ˌvɜːtjuəl riˈælɪti/
 a set of images and sounds produced by
 a computer which represent a real place
 or situation ◆ The use of virtual reality in
 computer games makes the experience much
 more engaging. ❖ die virtuelle Realität
- 5.56 cloud (n) /klaʊd/
 a network where information is stored that
 you can access over the internet I keep all
 my files on the cloud so I can access them
 wherever I am. ❖ die Cloud
- 5.57 hacker (n) /'hækə(r)/
 a person that knows a lot about computers and accesses private computer systems illegally
 A hacker can break into your computer and steal all of the information you store there.
 ➤ hack (v) ❖ der/die Hacker/-in

Computers

broadband hard drive access anti-virus browse network cloud upgrade app virtual reality attachment database backup desktop wireless bookmark display

Grammar Page 57

- 5.58 capable (adj) /ˈkeɪpəbl/
 able to do sth and achieve results / don't
 need your help I'm perfectly capable of doing
 it myself. ➤ capability (n) ❖ fähiger/e/es
- 5.59 perform (v) /pəˈfɔːm/
 do an action or a task Computers can
 perform millions of calculations in no time.
 >> performance (n), performer (n)

 •> ausführen

Speaking Page 59

- 5.60 lead (v) /li:d/
 direct, manage (a conversation) The teacher led the discussion so that all the students could express their views. ➤ leader (n)
 ❖ führen, leiten
- 5.61 dominate (v) /'domineit/ not allow other people to participate ● If you're really confident in your abilities, you don't try to dominate others. ➤ domination (n), dominant (adj) ❖ unterbuttern, dominieren

Grammar Page 60

- 5.62 useless (adj) /'juːsləs/ not at all good at sth ● I'm afraid I can't help you; I'm useless with computers. ❖ unbrauchbarer/e/ es
- fairly (adv) /'feəli/
 slightly more than average He's not the
 tallest boy in his class, but he's fairly tall.
 żemlich
- charity (n) /'tʃærəti/
 an organisation that helps people in need and does not make a profit A number of charities have sent money to help the victims of the earthquake. ➤ charitable (adj)
 die Wohltätigkeitsorganisation
- shame (n) /ʃeɪm/
 sth disappointing that makes you feel sad ●
 It's such a shame that you didn't come to the
 party we had loads of fun. ❖ die Schande,
 der Jammer ை Syn: pity

Use your English Page 61

- 5.66 fake (adj) /feɪk/ not real, but made to look real ● They discovered his passport was fake and arrested him. > fake (v, n) ❖ qefälschter/e/es
- take (sb) in (phr v) /teik ('sʌmbədi) in/
 make sb believe sth that is not true He's a
 liar so whatever he says, don't be taken in.
 sich täuschen lassen
- 5.68 come up (phr v) /k∧m ∧p/
 appear; become available I looked for more
 information about the company online, but
 nothing came up. ❖ hochkommen, erscheinen
- do without (phr v) /du: wiðaʊt/
 manage without having sth We'll have to do
 without coffee today as we've run out.
 ❖ ohne etw. auskommen
- 5.70 key (sth) in (phr v) /ki: (sʌmθɪŋ) ɪn/
 enter information into a computer or other
 device by hitting buttons on a keyboard It will
 take hours to key in all these names by hand.
 ❖ (etw.) eingeben
- 5.71 speak up (phr v) /spi:k ∧p/ speak more loudly so that others can hear you
 I can't hear you. Can you speak up, please?
 ♦ lauter sprechen
- 5.72 get hold of (phr v) /get həʊld əv/ find sth that you need or want ● I need to get hold of her address – do you happen to have it? ❖ etw. auftreiben
- 5.73 watch out for (phr v) /wpt∫ aut fə(r)/ be careful so that you will notice if sth is interesting or wrong • You should always watch out for cars when you cross the road. ❖ achten auf

- fool (v) /fu:l/
 trick sb into believing sth that is not true
 He said he could help, but he didn't fool me.
 I knew he had other plans. ❖ täuschen
- 5.75 sensor (n) /'sensə(r)/
 a device that can tell whether sth is present
 or has changed The security camera has a
 motion sensor, so it will turn itself on if anyone
 moves. ➤ sense (v, n) ❖ der Sensor
- 5.76 detect (v) /dr'tekt/ discover sth by using special equipment • The fire alarm will go off automatically if it detects smoke. ➤ detection (n) ❖ erkennen
- 5.77 stare (v) /steə(r)/
 look for a long time, with eyes wide open You
 shouldn't stare at people on the train. It's rude.
 ❖ anstarren
- 5.78 drop (n) /drop/ a very small amount of liquid ● *I think I felt a* drop of rain. Is it raining? ❖ der Tropfen
- exhausting (adj) /ɪgˈzɔːstɪŋ/
 making you feel extremely tired It was an
 exhausting drive, but after six hours I was
 relieved we were finally there. ➤ exhaust (v),
 exhaustion (n) ❖ strapaziöser/e/es
- plug (sth) in (phr v) /plag ('samθin) in/ connect sth to a piece of electrical equipment or to the electricity supply You need to plug your desktop in before you start using it.
 ❖ (etw.) in die Steckdose stecken, (etw.) einstecken
- 5.81 compete (v) /kəm'pi:t/ try to be better or more successful than sb else ● It's very difficult for small local shops to compete with online stores. ➤ competition (n) ★ konkurrieren
- when it comes to (phr) /wen it kʌmz tə/ taking into consideration When it comes to cooking, I am completely useless.
 in Hinblick auf

 Syn: with regard to
- 5.83 non-verbal (adj) /₁non 'v3:bl/ without using words Body language is a form of non-verbal communication. ❖ nonverbaler/e/ es ⑤ Opp: verbal
- 5.84 clue (n) /kluː/
 a sign or piece of information that helps
 you find or understand sth The detectives
 searched the whole building for clues.
 ❖ der Hinweis

Phrasal verbs

back up pick up come up plug in do without speak up get hold of key in watch out for log out

Writing Pages 62-63

- speculate (v) /'spekjəleɪt/
 guess without knowing all the facts We can
 all speculate about the reason why he left, but
 only he knows the truth. ➤ speculation (n)
 ❖ Vermutungen äußern, spekulieren
- 5.86 variety (n) /vəˈraɪəti/
 many different types of She has a variety of hobbies, including skydiving, rollerskating and hiking. ❖ die Vielzahl
- 5.87 rephrase (v) /ˌriː'freɪz/
 say or write sth again in a different way
 I couldn't understand what she said, so I asked her to rephrase it. ❖ umformulieren
- 5.88 demonstrate (v) /'demənstreɪt/
 show that you have a particular ability or
 feeling He has demonstrated his creative
 talent in the stories that he's written.

 > demonstration (n) ❖ demonstrieren
- aspect (n) /'æspekt/ a part of a situation or topic • We examined every aspect of the problem. ❖ der Aspekt
- 5.90 stream (v) /stri:m/
 send or receive sound and/or video directly
 over the internet We are going to stream the
 interview live. ❖ streamen
- 5.91 drawback (n) /'drɔːbæk/
 negative point It's a fantastic plan; the only
 drawback is its high cost. ❖ der Minuspunkt
 Syn: disadvantage
- 5.92 consequently (adv) /ˈkɒnsɪkwəntli/ as a result • He is usually rather rude and consequently doesn't have many friends. ➤ consequence (n) ❖ folglich
- 5.93 addiction (n) /əˈdɪk∫n/ a habit that involves doing sth harmful, which you are unable to stop • She is trying to fight her addiction to social media and only uses her phone for an hour a day. ➤ addict (n), addicted (adj) ❖ die Sucht
- however (adv) /_ihaʊ'evə(r)/
 in spite of that I was feeling ill. However, I tried to get on with my work. ❖ jedoch
 Syn: nevertheless
- 5.95 nevertheless (adv) /ˌnevəðə'les/ in spite of what has just been mentioned ● The weather was terrible. Nevertheless, they went out for a walk. ❖ trotzdem Syn: however
- furthermore (adv) /ˌfɜːðəˈmɔː(r)/
 in addition It's the job I always wanted to do. Furthermore, it's very well paid.
 ❖ ferner Syn: additionally, moreover
- 5.97 moreover (adv) /_imɔː'rəʊvə(r)/
 in addition, also He enjoys his job and,
 moreover, he's really good at it. ❖ zudem
 Syn: additionally, furthermore

LOOK!

We usually put the adverbs *consequently*, *furthermore*, *moreover*, *however* and *nevertheless* at the beginning of a sentence followed by a comma.

- → I missed the 8:00 train this morning.

 Consequently, I was late for work.
- → You should read the job description carefully. Furthermore, you should find out more information about the company on the internet.
- → He noticed that there were two people following him. **Moreover**, he realised they were furious.
- → I understand what you're saying. **However**, I cannot agree.
- → Your performance was good. **Nevertheless**, it could have been a lot better.

Live well, study well

Page 64

- infographic (n) /ˌɪnfəʊˈgræfɪk/
 a picture or diagram that presents information
 The infographic shows how smartphones have changed our lives in the last ten years.
 die Infografik
- 5.99 USB stick (n) /ju:es'bix ˌstrk/
 a small device that you connect to a computer
 and transfer information to *l've put the*presentation on this USB stick. ❖ der USBStick
- 5.100 keep on top of (expr) /ki:p on top əv/
 be in control of a situation There's no way
 you can keep on top of all the work you have
 to do if you don't manage your time better.
 ❖ mit etw. nachkommen
- 5.101 commitment (n) /kəˈmɪtmənt/ something that you must do that takes your time ● I can't take on any more commitments. I'm already far too busy. ➤ commit (v), committed (adj) ❖ der Einsatz
- 5.102 digital (adj) /'dɪdʒɪtl/
 using computer technology I bought a digital
 watch that also measures my blood pressure.
 ❖ digitaler/e/es
- 5.103 keep track of (expr) /ki:p træk əv/
 continue to get information about what is
 happening or where sb/sth is You've had so
 many different jobs that I can't keep track of
 what you're doing. ❖ über etw. den Überblick
 behalten, etw. verfolgen
- 5.104 deadline (n) /'dedlaɪn/
 the time by which sth must be completed

 I thought it wouldn't be difficult to meet
 the deadline, but there was so much work
 that in the end I missed it. ❖ die Frist, der
 Abgabetermin

5.105 complicated (adj) /ˈkomplɪkeɪtɪd/
having a lot of different parts that are difficult
to understand ● The lecture was very
complicated and I found it hard to follow.

> complicate (v), complication (n)

* komplexer/e/es ⑤ Opp: simple

5.106 aware (adj) /əˈweə(r)/
having knowledge or experience of sth
I wasn't aware that the game had been cancelled. ➤ awareness (n) ♦ bewusster/e/es
Opp: unaware

5.107 screen time (n) /'skriːn ˌtaɪm/
the amount of time sb spends looking at the
screen of a TV, computer, smartphone or other
electronic device ● The children are allowed an
hour of screen time a day. ❖ die Bildschirmzeit

5.108 balance (n) /'bæləns/
a situation in which things stay equal and have
the right relationship between them ● It's not
always easy to find the right balance between
work and leisure. ❖ das Gleichgewicht