# 5 Emerging technologies

## Glossary

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Page 5.1	emerging (adj) /rˈmɜːdʒɪŋ/ new, just beginning to exist or become known • She's an emerging artist from Spain. You	5.10	orbit (v) /'ɔːbɪt/ move or make sth move in a circle around sth else ● It takes the Earth a year to orbit the sun. > orbit (n) ❖ orbitare
5.2	may not have heard of her yet. ➤ emerge (v)  • emergente  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. • campione  bacteria (n pl) /bæk'tɪəriə/ very small organisms that live everywhere and can cause disease • They discovered the bacteria that caused the illness in the water. • batteri	5.11	<pre>impact (n) /'impækt/ the force with which sth hits sth else ● The scientists calculated the impact of the asteroid hitting our planet. ➤ impact (v) ❖ impatto</pre>
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)
		5.13	<pre>* registrare precise (adj) /prɪ'saɪs/ exact • I can give you a general outline, but I don't yet know the precise details of what happened. ➤ precision (n) * preciso</pre>
Reading Pages 54–55  5.4 cause (v) /kɔːz/		5.14	planetary (adj) /'plænɪtəri/ related to planets • There are thousands of planetary systems in our galaxy. ➤ planet (n) ❖ planetario
5.5	make sth (usually bad) happen • The storm caused terrible destruction in the area.  > cause (n) ❖ causare  monitor (v) /'mpnɪtə(r)/	5.15	defence (n) /dr'fens/ protection against attack or criticism • When the bullies attacked her brother, she leapt to his defence. ➤ defend (v), defensive (adj)
0.0	watch and check carefully to see how a situation develops or to get information ● <i>The police monitored the suspect's phone calls.</i> ➤ monitor (n) ❖ monitorare	5.16	<ul> <li>difesa</li> <li>collision (n) /kəˈlɪʒn/</li> <li>an accident in which two moving objects or people crash into each other ● The pilot</li> </ul>
5.6	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. ❖ drone		avoided the collision by changing course at the last minute. ➤ collide (v) ❖ collisione
		5.17	decrease (v) /dr'kriːs/ make or become smaller ● As a result of the new measures, crime in inner city areas has decreased by 10%. ➤ decrease (n) ❖ scendere, diminuire ⑤ Syn: reduce military (adj) /'mrlɪtri/ related to the army ● The soldiers were wearing brown military uniforms. ❖ militare eager (adj) /'iːgə(r)/ wanting to do sth very much ● The staff were all very kind and eager to help us. ➤ eagerness (n) ❖ desideroso ⑥ Syn: willing remote-control (adj) /rɪˌməʊt kən'trəʊl/ that you can control from a distance ● The car
5.7	slam (v) /slæm/ crash into sth with a lot of force ● <i>The driver</i>		
5.8	lost control of the car and slammed into a tree.  ❖ sbattere  asteroid (n) /'æstəˌrɔɪd/	5.18	
	one of the many big rocks that go around the sun ● The asteroid flew within 200,000 miles of the Earth. ❖ asteroide	5.19	
5.9	redirection (n) /ˌriːdəˈrekʃn/ the act of changing the direction in which sth moves ● Don't worry – redirection to our new	5.20	

has remote-control central locking. Just press

this button and all the doors will automatically

lock. ❖ telecomando

reindirizzamento

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. ❖ aiuto
- 5.22 humanitarian (adj) /hjuːˌmænɪˈteəriən/ aiming to improve people's lives and reduce suffering ● The prisoner was very ill so they decided to set him free for humanitarian reasons. ❖ umanitario
- 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) ❖incarico
- 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) ❖ sopravvissuto
- flood (n) /fl∧d/
   a large amount of water covering an area that
   is normally dry The heavy rain has caused
   floods all over the country. ➤ flood (v)
   inondazione
- 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) ❖ trasportare
- 5.27 vital (adj) /'vartl/ necessary or extremely important ● The mayor's support is vital to the success of the project. ❖ essenziale
- 5.28 poacher (n) /'pəʊtʃə(r)/
  sb that hunts animals illegally Unfortunately,
  poachers are still killing elephants and rhinos.
  ❖ bracconiere
- 5.29 capture (v) /'kæptʃə(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) ❖ catturare
- 5.30 sense (v) /sens/ feel or experience sth ● I could sense that he wasn't happy although he said he was. > sense (n) ❖ percepire
- 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)
  astrofisico
- 5.32 equipped (adj) /r¹kwɪpt/ having the necessary tools and clothes for a particular purpose ● Our kitchen is equipped with all modern appliances. ➤ equip (v), equipment (n) ❖ dotato

- acronym (n) /ˈækrənɪm/
   an abbreviation that is pronounced as a
   word NASA is an acronym for the National
   Aeronautics and Space Administration.
   ⇒ acronimo
- highlight (v) /'harlart/
   emphasise sth important The study highlights the need to take measures urgently.
   ❖ sottolineare Syn: emphasise
- illegally (adv) /r'lirgəli/
   in a way that breaks the law I got a fine for parking illegally. ➤ illegal (adj) ❖ illegalmente
   Opp: legally

## Vocabulary Page 56

- 5.37 access (v) /'ækses/
  be able to open a computer file, website, etc.
  I couldn't access my documents because I had forgotten my password. ➤ access (n)
  \* accedere
- attachment (n) /ə'tæt∫mənt/
  a file included in an email There were two
  attachments in the email he sent us. Did you
  download the files? ➤ attach (v)
  allegato
- 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.* ❖ back-up
- 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)
   \* inserire un segnalibro
- 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) ❖ scorrere
- 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) ❖ mostrare
- 5.43 undo (v) /∧n'duː/
   cancel sth that you did previously on a
   computer On a computer you can easily
   undo something if you change your mind.
   ❖ disfare, annullare

- 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.
  ❖ aggiornare Sopp: 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)
   virtualmente
- 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. ❖ antivirus
- 5.47 broadband (n) /ˈbrɔːdbænd/
  a system that allows a lot of information to be shared between computers via the internet
  Most homes have broadband internet access these days. ❖ banda larga
- 5.48 database (n) /'dertəbers/ 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. ❖ database
- 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. ❖ computer fisso
- 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. ❖ cuffie
- 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.
  ❖ disco rigido Syn: hard disk
- 5.52 password (n) /ˈpɑːswɜːd/ 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. ❖ password
- 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. ❖ network, rete
- 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. ❖ senza fili

- 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. ❖ realtà virtuale
- 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. ❖ 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) ❖ hacker

#### Computers

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

#### Grammar Page 57

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

## Speaking Page 59

- 5.60 lead (v) /liːd/
   direct, manage (a conversation) The teacher
   led the discussion so that all the students
   could express their views. ➤ leader (n)
   • quidare, condurre
- 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) ❖ dominare

#### 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. ❖ inutile, incapace
- fairly (adv) /'feəli/
   slightly more than average He's not the
   tallest boy in his class, but he's fairly tall.
   ◆ abbastanza
- 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)
  the ente di volontariato
- 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. ❖ vergogna 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) ❖ finto
- take (sb) in (phr v) /teɪk ('sʌmbədi) ɪn/
  make sb believe sth that is not true He's a
  liar so whatever he says, don't be taken in.
   imbrogliare
- 5.68 come up (phr v) /kʌm ʌp/
  appear; become available I looked for more
  information about the company online, but
  nothing came up. ❖ emergere
- do without (phr v) /du: wiðaʊt/
  manage without having sth We'll have to do
  without coffee today as we've run out.
   ❖ fare senza
- 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.
   ❖ inserire
- 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?
  ❖ parlare più forte
- 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? ❖ procurarsi
- 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.
   ❖ fare attenzione

- fool (v) /fu:I/
  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. ❖ ingannare
- 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) ❖ sensore
- 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) ❖ rilevare
- 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.
  ❖ fissare
- 5.78 drop (n) /drop/ a very small amount of liquid ● *I think I felt a* drop of rain. Is it raining? ❖ goccia
- **exhausting** (adj) /Ig'zɔːstɪŋ/ 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) ❖ estenuante
- plug (sth) in (phr v) /pl∧g ('sʌmθɪŋ) ɪn/
  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.
   collegare
- compete (v) /kəm'piːt/
   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)
   competere
- 5.83 non-verbal (adj) /,non 'v3:bl/ without using words Body language is a form of non-verbal communication. ❖ non verbale
   ⑤ Opp: verbal
- clue (n) /klu:/
   a sign or piece of information that helps
   you find or understand sth The detectives
   searched the whole building for clues.
   ❖ indizio

#### Phrasal verbs

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

## Writing Pages 62-63

- 5.85 speculate (v) /'spekjəlert/
  guess without knowing all the facts We can
  all speculate about the reason why he left, but
  only he knows the truth. ➤ speculation (n)

  ❖ fare supposizioni
- 5.86 variety (n) /vəˈraɪəti/
  many different types of She has a variety of hobbies, including skydiving, rollerskating and hiking. ❖ varietà
- 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. ❖ parafrasare
- 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) ❖ dimostrare
- aspect (n) /'æspekt/
  a part of a situation or topic We examined
  every aspect of the problem. ❖ aspetto
- 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. ❖ mandare in streaming
- 5.91 drawback (n) /'drɔːbæk/
  negative point lt's a fantastic plan; the only drawback is its high cost. ❖ inconveniente
   Syn: disadvantage
- 5.92 consequently (adv) /ˈkɒnsɪkwəntli/
  as a result He is usually rather rude and
  consequently doesn't have many friends.

  ➤ consequence (n) ❖ di conseguenza
- 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) ❖ dipendenza
- however (adv) /<sub>i</sub>haʊ'evə(r)/
   in spite of that I was feeling ill. However, I tried to get on with my work. ❖ tuttavia
   Syn: nevertheless
- 5.95 nevertheless (adv) /₁nevəðə'les/
  in spite of what has just been mentioned
  The weather was terrible. Nevertheless, they went out for a walk. ❖ ciò nonostante
  Syn: however
- furthermore (adv) /ˌfɜːðəˈmɔː(r)/
   in addition It's the job I always wanted to do. Furthermore, it's very well paid.
   ❖ inoltre Syn: additionally, moreover
- 5.97 moreover (adv) /<sub>i</sub>mɔː'rəʊvə(r)/
   in addition, also He enjoys his job and,
   moreover, he's really good at it. ❖ soprattutto
   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

- 5.98 infographic (n) /₁nfəʊ'græfɪk/
  a picture or diagram that presents information
  The infographic shows how smartphones have changed our lives in the last ten years.
  ❖ infografica
- 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. ❖ chiavetta
  USB
- 5.100 keep on top of (expr) /ki:p pn 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.
  tenersi al pari, sotto controllo
- 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) ❖ impegno
- 5.102 digital (adj) /'dɪdʒɪtl/
   using computer technology I bought a digital
   watch that also measures my blood pressure.
   ❖ digitale
- 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. ❖ tenere monitorato
- 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. ❖ scadenza

- 5.105 complicated (adj) /'komplikeitid/
  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)
   ❖ complicato 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) ❖ consapevole
   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. ❖ durata di una
  proiezione
- 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. ❖ equilibrio