

## Glossary

### Page 101

- 9.1 digital** (adj) /'dɪdʒɪtəl/  
showing information as electronic images  
• *Can you show me how to take a good photo with my new digital camera?* ❖ \_\_\_\_\_

### Reading Pages 102–103

- 9.2 weather forecast** (n) /'weðə fɔ:kɑ:st/  
a description of how sb says the weather will be the next few days • *We should check the weather forecast before we go hiking.*  
❖ \_\_\_\_\_
- 9.3 satellite** (n) /'sætəlaɪt/  
a large device that travels in space around Earth and sends images and sounds • *GPS satellites are in orbit thousands of miles above the Earth.* ❖ \_\_\_\_\_
- 9.4 spacecraft** (n) /'speɪskrɑ:ft/  
a vehicle that travels in space • *Would you like to travel in a spacecraft to the moon?*  
❖ \_\_\_\_\_
- 9.5 image** (n) /'ɪmɪdʒ/  
a picture • *The satellite took some wonderful images of the Earth from space.* ❖ \_\_\_\_\_
- 9.6 data** (n) /'deɪtə/  
information • *We put all the data in a document on the computer.* ❖ \_\_\_\_\_
- 9.7 broadcast** (v) /'brɔ:dkɑ:st/  
to send out a radio or TV programme • *The news is broadcast every evening at 9 p.m.* > broadcast, broadcaster (n) ❖ \_\_\_\_\_
- 9.8 keep track of** (phr) /ki:p træk əv/  
to follow the actions of • *Jim has changed jobs so many times that I can't keep track of what he's doing.* ❖ \_\_\_\_\_
- 9.9 NASA** (abbrev) /'næsə/  
National Aeronautics and Space Administration, an organisation that studies and sends people to space • *NASA, the American space agency, has sent a spacecraft to Mars.* ❖ \_\_\_\_\_
- 9.10 develop** (v) /dɪ'veləp/  
to become bigger, more advanced, etc.  
• *Young animals have to grow and develop and learn many things.* > development (n), developed (adj) ❖ \_\_\_\_\_

- 9.11 cube** (n) /kju:b/  
square object with six sides • *The dice we used to play the game were red cubes.*  
> cubic (adj) ❖ \_\_\_\_\_
- 9.12 3D printer** (n) /θri: di: 'prɪntə(r)/  
a machine that reproduces objects from digital information by using layers of material • *The protective face masks were made by a 3D printer.* ❖ \_\_\_\_\_
- 9.13 bounce** (v) /baʊns/  
to hit a surface and immediately move back away from it • *It was raining so hard the water was bouncing off the road.* > bounce (n)  
❖ \_\_\_\_\_
- 9.14 herd** (n) /hɜ:d/  
a group of animals • *A herd of cows came running towards us across the field.*  
❖ \_\_\_\_\_
- 9.15 buffalo** (n) /'bʌfələʊ/  
an animal like a very large cow or bull with thick curved horns • *On our visit to India, we saw a herd of water buffalo beside a river.*  
❖ \_\_\_\_\_ 📄 Plural: buffalo, buffaloes
- 9.16 stage** (n) /steɪdʒ/  
a part of a process • *The preparation for the mission to Mars is in its final stage.*  
❖ \_\_\_\_\_
- 9.17 gather** (v) /'gæðə(r)/  
to collect • *Have you gathered all the information you need?* ❖ \_\_\_\_\_
- 9.18 GPS** (n) /dʒi: pi: es/  
global positioning system, a system that shows where sb/sth is located using signals from satellites • *We didn't get lost on holiday because our GPS told us where we were.* ❖ \_\_\_\_\_
- 9.19 receiver** (n) /rɪ'si:və(r)/  
a piece of equipment that picks up signals and changes them to sound or images • *Most new cars now include a GPS receiver to make it easy to find the best route.* > reception (n), receive (v) ❖ \_\_\_\_\_
- 9.20 method** (n) /'meθəd/  
a way of doing sth • *An internet search is a fast method of finding news or checking facts.*  
> methodical (adj) ❖ \_\_\_\_\_
- 9.21 triangulation** (n) /traɪ,æŋgju'leɪʃn/  
a way of finding a position by measuring the distance between two points and the angle from them to a third point • *Explorers used triangulation to draw maps of the country.*  
❖ \_\_\_\_\_

- 9.22 precise** (adj) /prɪ'saɪs/  
exact • *This clock is precise and never loses even a second.* > precision (n), precisely (adj)  
❖ \_\_\_\_\_ ✎ Opp: imprecise
- 9.23 work out** (phr v) /wɜ:k aʊt/  
to find the answer to sth • *I didn't use a dictionary. I worked out the meaning of the word from the sentence.* ❖ \_\_\_\_\_
- 9.24 constantly** (adv) /'kɒnstəntli/  
all the time • *Technology is constantly developing and when you buy the latest device, a new one appears on the market.*  
> constant (adj) ❖ \_\_\_\_\_
- 9.25 migration** (n) /maɪ'greɪʃn/  
the movement of animals or people from one part of the world to another to find suitable living conditions • *The migration of people from villages to cities has led to cities becoming overcrowded.* > migrate (v), migrant (n) ❖ \_\_\_\_\_
- 9.26 photographic** (adj) /fəʊtə'græfɪk/  
connected with photography • *The latest cameras and other photographic equipment can be expensive, but you might find some bargains online.* > photograph, photography, photographer (n), photograph (v)  
❖ \_\_\_\_\_
- 9.27 battery** (n) /'bætəri/  
sth inside an engine, a radio, an MP3 player, etc. that supplies electricity to make it work  
• *My watch has stopped. It needs a new battery.* ❖ \_\_\_\_\_
- 9.28 sea level** (n) /si:'levl/  
the height of the sea • *The top of Mount Everest is 8,848 metres above sea level.*  
❖ \_\_\_\_\_
- 9.29 man-made** (adj) /mæn meɪd/  
not found in nature but made by man  
• *Plastic is a man-made material.*  
❖ \_\_\_\_\_
- 9.30 the Soviet Union** (n) /ðə'səʊviət 'ju:niən/  
the country USSR • *Moscow was the capital of the old Soviet Union.* ❖ \_\_\_\_\_
- 9.33 server** (n) /'sɜ:və(r)/  
the main computer in a network • *The company website is down because of a problem with the server.* > serve (v), service (n) ❖ \_\_\_\_\_
- 9.34 software** (n) /'sɒftweə(r)/  
computer programs • *When she got a new computer, she had to transfer all the software from her laptop.* ❖ \_\_\_\_\_
- 9.35 webcam** (n) /'webkæm/  
a camera on a computer • *My grandparents use their webcam so that we can see them when we talk on the laptop.* ❖ \_\_\_\_\_
- 9.36 screen** (n) /skri:n/  
the flat part of a television, computer, smartphone, etc. where the picture or information appears • *We bought a television with a 42-inch screen.* ❖ \_\_\_\_\_
- 9.37 program** (n) /'prəʊgræm/  
instructions in code that control the way a computer operates • *He writes computer programs for a living.* > program (v), programmer (n) ❖ \_\_\_\_\_
- 9.38 the World Wide Web** (n) /ðə 'wɜ:ld waɪd 'web/  
the system of documents on the internet that you can search for information, pictures or sound on a particular subject • *The majority of people around the world today have access to the World Wide Web.* ❖ \_\_\_\_\_  
✎ abbrev: www
- 9.39 install** (v) /ɪn'stɔ:l/  
to put a new program onto a computer  
• *You need to install an app to be able to read the news stories.* > installation (n)  
❖ \_\_\_\_\_
- 9.40 tablet** (n) /'tæblət/  
a thin computer with a touch screen • *Tablets are easier to carry around than laptops.*  
❖ \_\_\_\_\_
- 9.41 crash** (v) /kræʃ/  
fail (for computers) • *His computer crashed and now he has lost all his work.* > crash (n)  
❖ \_\_\_\_\_
- 9.42 experiment** (v) /ɪks'perɪmənt/  
to do a scientific test to find out if an idea is true • *Some researchers experiment on animals to test new medicines.* > experiment (n), experimental (adj) ❖ \_\_\_\_\_

## Vocabulary Page 104

- 9.31 hardware** (n) /'hɑ:dweə(r)/  
computer machinery and equipment  
• *My computer hardware is getting old, so I need to buy a new hard drive.*  
❖ \_\_\_\_\_
- 9.32 invention** (n) /ɪn'venʃn/  
sth created by sb for the first time • *The invention of the plane meant people could travel easily to foreign countries.* > invent (v), inventor (n), inventive (adj) ❖ \_\_\_\_\_
- 9.43 lab** (n) /læb/  
a room where scientific experiments are done • *In this lab, we do research on cancer.*  
❖ \_\_\_\_\_ ✎ Note: lab = short form of laboratory
- 9.44 technophobe** (n) /'teknəfəʊb/  
sb who dislikes or is afraid of using new technology • *Dad is a complete technophobe, who won't even use email!* ❖ \_\_\_\_\_

# Grammar Page 105

- 9.45 download** (v) /ˌdaʊnˈləʊd/  
put a file from the internet onto your computer or other device • *Sometimes Mike downloads books to read on his tablet.* ❖ \_\_\_\_\_
- 9.46 hand in** (phr v) /hænd ɪn/  
give sth to a teacher • *'Please hand in your homework tomorrow,' said the teacher.*  
❖ \_\_\_\_\_
- 9.47 smoke** (n) /sməʊk/  
white, grey or black gas that is produced by sth burning • *There was so much smoke from the fire that we couldn't breathe.* > smoke (v)  
❖ \_\_\_\_\_
- 9.48 factory** (n) /ˈfæktri/  
a building where things are made • *They make computer hardware in this factory.*  
❖ \_\_\_\_\_
- 9.49 tool** (n) /tu:l/  
a device that you use to make or fix sth • *Miranda took her tools out of the car to change the tyre.* ❖ \_\_\_\_\_
- 9.50 manufacturer** (n) /mænjuːˈfæktʃərə(r)/  
a company that produces sth • *Fiat is an Italian car manufacturer.* > manufacture (v, n)  
❖ \_\_\_\_\_

## Computer nouns

3D printer	image	tablet
app	lab	technophobe
data	screen	webcam
GPS	server	the World Wide
hardware	software	Web



# Listening Page 106

- 9.51 solar-powered** (adj) /ˈsəʊlə ˈpaʊəd/  
working by using energy from the sun  
• *There are some amazing solar-powered cars.* > solar power (n) ❖ \_\_\_\_\_
- 9.52 model** (n) /ˈmɒdl/  
a small copy of sth • *There is a model of the Parthenon in the Acropolis museum.*  
❖ \_\_\_\_\_
- 9.53 kit** (n) /kɪt/  
a set of parts ready to make sth • *My little brother wants a model aircraft kit for his birthday.* ❖ \_\_\_\_\_

- 9.54 entertainment** (n) /ˌentəˈteɪnmənt/  
activities for people to enjoy themselves • *TV is not such a popular form of entertainment as it was in the past.* > entertain (v), entertaining (adj), entertainer (n) ❖ \_\_\_\_\_

# Speaking Page 107

- 9.55 electronic** (adj) /ɪˌlekˈtrɒnɪk/  
working by using small parts, e.g. batteries, that control an electric current • *The pilot told the passengers to turn off their electronic devices, such as phones and laptops, for take-off.* ❖ \_\_\_\_\_
- 9.56 depend on** (phr v) /dɪˈpend ɒn/  
to need help or support from sb/sth • *As a student, Jackie had a part-time job so she didn't have to depend on her parents to pay for her studies.* ❖ \_\_\_\_\_
- 9.57 convenient** (adj) /kənˈviːniənt/  
useful because it saves you time or does not cause you problems • *Modern appliances are convenient and make life much easier.* > convenience (n) ❖ \_\_\_\_\_  
📎 Opp: inconvenient
- 9.58 value** (n) /væljuː/  
what sth is worth compared to its cost • *The electronic devices on this website are cheap, but if they break easily, they aren't very good value for money.* > value (v), valuable (adj)  
❖ \_\_\_\_\_
- 9.59 safety** (n) /ˈseɪfti/  
being safe from danger • *The rescue team is worried about the safety of some climbers after the storm.* > safe (adj), save (v) ❖ \_\_\_\_\_
- 9.60 emergency** (n) /ɪˈmɜːdʒənsi/  
a dangerous or serious situation where you must react quickly • *Teachers have to know how to cope in an emergency, such as an earthquake.* ❖ \_\_\_\_\_
- 9.61 definitely** (adv) /ˈdefɪnətli/  
without a doubt, certainly • *We will definitely eat out on your birthday.* > definite (adj)  
❖ \_\_\_\_\_
- 9.62 on the whole** (phr) /ɒn ðə həʊl/  
in general • *On the whole, I'm really happy with my new phone.* ❖ \_\_\_\_\_

- 9.63** **click** (v) /kɪk/  
to press the computer mouse or touchpad to choose sth on the screen • *Just click on the screen to see the photos.* > click (n)  
❖ \_\_\_\_\_
- 9.64** **connect** (v) /kə'nekt/  
join together two or more things • *If I can connect to the internet, I'll send you an email.*  
> connection (n), connected (adj)  
❖ \_\_\_\_\_  Opp: disconnect
- 9.65** **delete** (v) /dɪ'li:t/  
to remove sth, e.g. words, emails or files on a computer • *Paul deleted all the emails that weren't important.* ❖ \_\_\_\_\_
- 9.66** **drag** (v) /dræg/  
to move text or images, etc. across a computer screen by using the mouse • *Click on the photo and drag it into the folder.* ❖ \_\_\_\_\_
- 9.67** **sign up** (phr v) /saɪn ʌp/  
to put your name down to become a member or take part in sth • *I've just signed up for yoga classes at the gym.* ❖ \_\_\_\_\_
- 9.68** **upload** (v) /ʌp'ləʊd/  
to transfer files from one computer to another through the internet • *George uploaded some holiday photos onto Instagram for his friends to see.* ❖ \_\_\_\_\_
- 9.69** **app** (n) /æp/  
a piece of software that you can use on a device, such as a phone or tablet, to connect directly to a particular site or play a game, etc. • *Tracy checked in for her flight using the app on her smartphone.* ❖ \_\_\_\_\_  
 Note: app = short form of application
- 9.70** **carry out** (phr v) /'kæri aʊt/  
to do a task • *The scientist carried out a number of experiments in the lab.*  
❖ \_\_\_\_\_
- 9.71** **trillion** (n) /'trɪljən/  
a million million • *The night sky was so clear that we could see trillions of stars.*  
❖ \_\_\_\_\_

## Computer verbs

broadcast	drag
click	experiment
connect	install
crash	post
delete	upload
download	

- 9.72** **drop** (v) /drɒp/  
to let or cause sth to fall • *She felt so annoyed at herself for dropping her new phone and breaking the screen.* > drop (n) ❖ \_\_\_\_\_
- 9.73** **break into** (phr v) /breɪk 'ɪntuː/  
to force entry into a place and steal things • *Our house was broken into and my laptop was stolen.* ❖ \_\_\_\_\_
- 9.74** **emotion** (n) /ɪ'məʊʃn/  
a strong feeling such as love or anger • *She couldn't control her emotions and she started crying.* > emotional (adj), emotionally (adv)  
❖ \_\_\_\_\_
- 9.75** **invent** (v) /ɪn'vent/  
make or design sth that has not existed before • *Everyone knows that Alexander Graham Bell invented the telephone.* > inventor, invention (n), inventive (adj) ❖ \_\_\_\_\_
- 9.76** **role** (n) /rəʊl/  
the function sb/sth has • *James takes his role as a parent very seriously.* ❖ \_\_\_\_\_

## Phrasal verbs

break into	depend on	sign up
carry out	hand in	work out

# Writing Pages 110–111

- 9.77** **in the first place** (phr) /ɪn ðə 'fɜːt ,pleɪs/  
firstly • *Why do I use a smartphone? In the first place, I need it to keep in touch with my family.* ❖ \_\_\_\_\_
- 9.78** **secondly** (adv) /'sekəndli/  
the second point (is) • *Secondly, the landscape was beautiful, so we took loads of photos.* > second (adj, n) ❖ \_\_\_\_\_
- 9.79** **in addition** (phr) /ɪn ə'dɪʃn/  
also • *The river is polluted and dangerous for swimmers. In addition, fish are at risk too.*  
❖ \_\_\_\_\_
- 9.80** **thirdly** (adv) /'θɜːdli/  
the third point (is) • *Thirdly, the camera can connect to the app on your phone or tablet to upload photos.* > third (adj, n) ❖ \_\_\_\_\_
- 9.81** **lastly** (adv) /'lɑːstli/  
the final point (is) • *Lastly, we were disappointed with the picture quality on the screen.* > last (adj, n) ❖ \_\_\_\_\_
- 9.82** **comment** (n) /'kɒment/  
sth you say which gives an opinion on sth • *'Rose made some interesting comments about the situation.'* 'What did she say?'  
> comment (v), commentary (n)  
❖ \_\_\_\_\_



- 9.83** **society** (n) /sə'saɪəti/  
people in general, living as communities  
• *Technology plays an important role in modern society.* ❖ \_\_\_\_\_
- 9.84** **real life** (n) /,ri:əl 'laɪf/  
what really happens, not fantasy • *He looks like a tough guy in the posts on his Facebook page, but in real life he's pretty ordinary and quiet.* > real-life (adj) ❖ \_\_\_\_\_
- 9.85** **private** (adj) /'praɪvət/  
sth personal that we don't share with lots of people or maybe with anybody • *What Jack does in his private life isn't your business.*  
> privacy (n) ❖ \_\_\_\_\_
- 9.86** **social network** (n) /,səʊʃl 'netwɜ:k/  
a group of people who are connected with each other and socialise • *Kelly has a wide social network of colleagues and friends on Facebook.* ❖ \_\_\_\_\_
- 9.87** **culture** (n) /'kʌltʃə(r)/  
the beliefs, art and way of life of a civilisation  
• *When I went to Italy, I learnt a lot about Italian food and culture.* > cultural (adj)  
❖ \_\_\_\_\_
- 9.88** **medicine** (n) /'medsn/  
a substance used for treating illnesses  
• *For me, the best medicine for a headache is aspirin.* ❖ \_\_\_\_\_
- 9.89** **living** (n) /'lɪvɪŋ/  
a style of life • *Sleep patterns affect whether people have a healthy way of living.* > live (v), living, alive (adj), life (n) ❖ \_\_\_\_\_
- 9.90** **punctuation** (n) /pʌŋktʃu'eɪʃn/  
the system of using marks to separate sentences, phrases and questions in writing  
• *Using incorrect punctuation, such as missing out commas, can change the meaning of a sentence.* > punctuate (v) ❖ \_\_\_\_\_

- 9.91** **inactive** (adj) /ɪn'æktɪv/  
not physically active • *Pablo has become inactive since he left the school basketball team, but he wants to take up jogging soon.*  
> inactivity (n) ❖ \_\_\_\_\_ 📝 Opp: active

## Live well, study well

### Page 112

- 9.92** **to sb's face** (phr) /tu 'sʌmbədɪz feɪs/  
directly to sb, not to anyone else • *Anita made some horrible unkind comments on my Facebook post that she wouldn't have the courage to say to my face.* ❖ \_\_\_\_\_
- 9.93** **post** (v) /pəʊst/  
to write a comment or upload an image on the internet, especially on social media or a personal blog • *I never post any personal details on Twitter. I just post the most important or interesting news.* > post (n) ❖ \_\_\_\_\_
- 9.94** **take (sth/sb) seriously** (phr) /teɪk ('sʌmθɪŋ / 'sʌmbədi) 'sɪəriəsli/  
to believe sb/sth is important or true • *When Irene told us she was going to climb Mount Everest, we didn't take her seriously.*  
❖ \_\_\_\_\_
- 9.95** **survey** (n) /'sɜ:veɪ/  
information you get from asking many people the same questions • *In a survey we did at school, one hundred pupils were asked what they thought about the facilities.* > survey (v)  
❖ \_\_\_\_\_