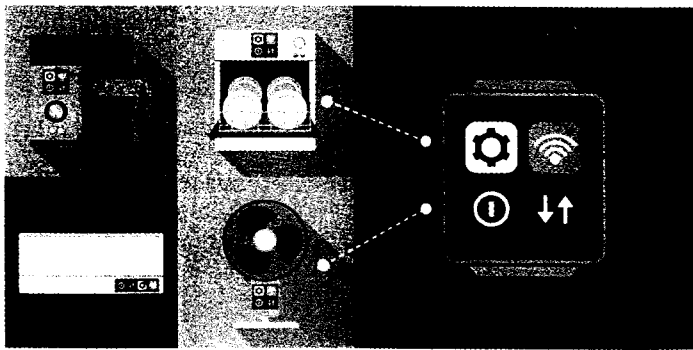


Old and new

8.1 The Internet of Things

Vocabulary smart technology



1 Match words 1-12 to definitions a-l.

- | | | | |
|----------------------------|----------|-----------------------------|-----|
| 1 advances (<i>n pl</i>) | <u>i</u> | 7 threat (<i>n</i>) | ___ |
| 2 broadband (<i>n</i>) | ___ | 8 remotely (<i>adv</i>) | ___ |
| 3 data (<i>n pl</i>) | ___ | 9 smart (<i>adj</i>) | ___ |
| 4 device (<i>n</i>) | ___ | 10 technical (<i>adj</i>) | ___ |
| 5 fault (<i>n</i>) | ___ | 11 privacy (<i>n</i>) | ___ |
| 6 hack (<i>vb</i>) | ___ | 12 wireless (<i>adj</i>) | ___ |

- a connected with the practical use of machinery, methods, etc. in science and industry
- b facts or information, often used to find things out or make decisions
- c not using wires
- d from a distance
- e the freedom to be alone and not disturbed by other people
- f something that is wrong
- g a connection to the internet which allows you to receive information and images quickly
- h get into someone else's computer system without permission
- i progress or developments
- j (about a device) controlled by a computer so it appears to be 'intelligent'
- k a thing that is likely to cause trouble or danger
- l an object or machine designed for a particular job

2 Complete the sentences with the correct form of suitable words from exercise 1.

- My elderly neighbour has just had broadband installed. Before that, she didn't use the internet.
- A _____ phone is a perfect _____ for listening to podcasts on the go.
- If your product develops a _____ within a year, we will repair or replace it free of charge.
- If your phone is stolen, you can lock it _____ to stop thieves from accessing your personal _____.
- Any internet-connected device, e.g. phone, computer or a smoke alarm, can be _____.
- The plane took off at 11.40, but had to turn back after a _____ fault was discovered.
- I think parents of small children should respect their children's _____ and not post photos of them online.
- Internet-connected devices are useful, but the data can be made available to many people, making them a _____ to security.
- At home I use _____ broadband, but at work I connect my computer to the internet using a cable, as it is more reliable.
- If we want to compete in today's business world, we need to keep up with _____ in technology.

PRONUNCIATION same sounds in words (3)

3a 8.1))) Decide if the underlined vowels sound the same or different. Write S or D. Then listen and check.

- | | | |
|----------------------|---------------------|-----|
| 1 develop | techn <u>o</u> logy | ___ |
| 2 priv <u>a</u> cy | priv <u>a</u> te | ___ |
| 3 bro <u>a</u> dband | lo <u>a</u> d | ___ |
| 4 d <u>a</u> ta | l <u>a</u> ter | ___ |
| 5 th <u>ea</u> t | w <u>e</u> t | ___ |
| 6 f <u>au</u> lt | l <u>au</u> gh | ___ |
| 7 inst <u>a</u> ll | tech <u>n</u> ical | ___ |
| 8 wire <u>l</u> ess | acc <u>e</u> ss | ___ |
| 9 dev <u>i</u> ce | not <u>i</u> ce | ___ |

b 8.2))) Listen to the words again and repeat.

Grammar relative clauses

4a Complete the text with *who, which, that* or *whose*. Sometimes there is more than one possible answer.

Web-connected toothbrush joins the Internet of Things

The list of objects ¹ which/that can be connected to the web is growing rapidly, and one of the latest household objects to join the Internet of Things is the toothbrush.

The electronic toothbrush market has recently seen the launch of toothbrushes ² _____ track your brushing habits. The toothbrushes, ³ _____ internal sensors can monitor how long you brush for and how much pressure you apply, were designed with the aim of encouraging people to brush for longer and to brush more gently.

The brushes are controlled by an app ⁴ _____ collects data about your brushing habits and displays it on your phone. The data can also be accessed by your dentist, ⁵ _____ can then give feedback on your technique and remotely programme special brushing routines into your toothbrush.

As well as monitoring the tooth-brushing techniques, the app also provides news headlines, weather forecasts and other information, ⁶ _____ helps to maintain the user's attention and motivation while brushing.

But is an internet-connected toothbrush, ⁷ _____ currently costs between \$100 and \$300, something which consumers will want to buy? Are there really people out there ⁸ _____ are interested in tracking their



tooth-brushing habits? The manufacturers clearly believe so. Perhaps they are right, when you consider that we now live in a world in ⁹ _____ more and more people choose to measure and record data about themselves. There is a name for this global trend. It is known as the 'Quantified Self' or QS. QS accounts for the growing popularity of apps ¹⁰ _____ enable you to monitor health and fitness, for example, by counting the number of steps ¹¹ _____ you take, the number of calories ¹² _____ you consume, or by tracking your sleeping patterns.

If the manufacturers are right, then the smart toothbrush may have a significant impact on the future of oral care.

5 Add commas to the following sentences if they contain a non-identifying relative clause. Tick them if they do not need (further) commas.

- 1 Kevin, who I went to university with, is now CEO of a large software development company.
- 2 I decided not to buy the laptop which I'd seen in the sale. ✓
- 3 Tim Berners-Lee is the man who invented the World Wide Web.
- 4 My phone charger which is the only one I've got seems to have disappeared.
- 5 Kim is one of those people who has to own the latest gadget, even those which aren't very useful.
- 6 Headphones which cancel out external noise tend to be more expensive than those which don't.
- 7 I know someone whose phone has been hacked twice.
- 8 My sons who are ten and twelve both own smartphones.
- 9 The wireless speakers which I bought only last week don't work.

6 Rewrite the sentences as one sentence with an identifying or non-identifying relative clause.

- 1 I've bought a kettle. I can turn it on remotely using my phone.
I've bought a kettle which/that I can turn on using my phone.
- 2 Tom works with me. He has got a driverless car.

- 3 My uncle's a multimillionaire. His fortune was made by investing in smart technology.

- 4 My mother has an app. It measures her blood pressure.

- 5 He was offered a job. Over a hundred people had applied for it.

b Which of the relative pronouns in exercise 4a can be omitted?

I can ...	Very well	Quite well	More practice
talk about smart technology.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
use relative clauses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8.2 Gen X, Gen Y, Gen Z

Vocabulary describing people

1 Match sentences 1–8 to words a–h.

- 1 No matter how hard you try to persuade Claire to do something, she refuses. g
- 2 Geoff isn't the sort of person you can trust to do the right thing. He tends not to think about the consequences of his actions. —
- 3 Roger is one of those people who is knowledgeable about all sorts of different subjects. —
- 4 The thing about Jenny is that it's all about her. She never thinks about other people's needs or feelings. —
- 5 I can always rely on Sasha to support me, even when I'm in the wrong. —
- 6 Alex is very quick to find fault with things and tell you what he doesn't like about them. —
- 7 Samantha clearly thinks she's better and more important than others around her, and can be quite rude, too. —
- 8 Craig is able to accept things as they are – he isn't over-optimistic. —

- | | |
|-----------------|-----------------|
| a arrogant | e realistic |
| b critical | f self-centred |
| c irresponsible | g stubborn |
| d loyal | h well-informed |

2 Unscramble the words in bold to complete the conversations.

- 1 A Emily always gets so tense and anxious about everything.
B True, she isn't very _____, is she? **syea-nggoi**
- 2 A Ted's quite unusual in the way he thinks and behaves, isn't he?
B Yes, he's not at all _____. **convonalenti**
- 3 A Jack is quite insecure, isn't he?
B True, he needs to be a bit more _____. **flse-centdonfi**
- 4 A Katy is pretty good at fixing computer issues, isn't she?
B She's one of the most _____ people I know. **tche-vysav**
- 5 A Nicola isn't the kind of person who doesn't listen to or accept new ideas, is she?
B Not at all. She's really _____. **enop-demdin**
- 6 A Adrian's life revolves around his kids, doesn't it?
B Yes, he's very _____. **flimay-fusoced**
- 7 A Did you know Victor has two Masters degrees?
B No, I didn't know he was that _____. **elwl ecateddu**

PRONUNCIATION word stress in compound adjectives

3a 8.3))) Listen and underline the word with the strongest stress in these compound adjectives. In two of them, there is equal stress on both words.

- 1 easy-going
- 2 self-confident
- 3 well educated
- 4 self-centred
- 5 tech-savvy
- 6 well informed
- 7 open-minded
- 8 family-focused

b Complete the rules about word stress in compound adjectives.

- 1 When the first word is an adjective or advert and the second word ends in *-ed*, the stress is on the *first / second* word.
- 2 When the first word is *self*, the stress is on the *first / second* word.
- 3 When the first word is a noun, the stress is on *both words / the second word*.

STUDY TIP Note that if a compound adjective is followed by a noun, both words in the compound adjective have equal stress. Compare *he's self-centred* and *he's a self-centred person*.

c 8.3))) Listen again to the compound adjectives in exercise 3a. Pause the listening and repeat the words.

Grammar participle clauses

1 Complete the article with the correct participle form of the verbs in brackets.

A 4G FUTURE:

Four generations in the same workplace by 2030



Imagine a thirty-year-old ¹ *managing* (manage) someone twice his age or a university graduate ² _____ (work) for someone old enough to be her grandfather. Then consider what a team ³ _____ (consist) of four generations would be like. This is the working environment ⁴ _____ (predict) for the future, according to a recent UK study.

The Future of Work study, ⁵ _____ (conduct) by the UK Commission for Skills, suggests that an aging population, ⁶ _____ (combine) with improved health, will create four-generation or 4G offices ⁷ _____ (make) up of staff in their 70s and 80s ⁸ _____ (work) alongside those in their 20s.

Is this likely to lead to problems caused by differences in attitudes between the generations? Not according to the results of another major survey of 3,000 employees and 900 employers. This survey, ⁹ _____ (call) 'Managing an age-diverse workforce', found that employers and employees very much welcomed the benefits ¹⁰ _____ (offer) by a multi-generational workplace. Employers commented on benefits ¹¹ _____ (include) knowledge-sharing and improved customer service, while employees claim to enjoy the new perspectives and fresh ideas ¹² _____ (inspire) by working with people of diverse ages.

2 Complete the sentences with the correct participle form of the verbs in the box.

book come contain leave sing situate ~~stand~~ take

- 1 There was a crowd of people *standing* outside the building.
- 2 Any luggage _____ unattended will be removed.
- 3 Tickets _____ in advance can be collected from the box office.
- 4 There's a burning smell _____ from the kitchen.
- 5 He won't eat anything _____ meat.
- 6 All you could hear was the birds _____.
- 7 This photo, _____ when I was in Greece, is one of my favourites.
- 8 The apartments _____ at the back of the building have the best views.

3 Join the sentences to make one sentence.

- 1 I almost didn't hear the phone. It was ringing. *I almost didn't hear the phone ringing.*
- 2 The meeting has been cancelled. It was scheduled for 10 a.m. tomorrow. _____
- 3 I am sure I recognize that woman. She is waiting at the bus stop. _____
- 4 The mountain climber was reported missing two days ago. He has now been found safe and sound. _____
- 5 There was a lot of rubbish. It had been left on the beach. _____
- 6 We saw some wonderful paintings at the gallery. They were painted by Rembrandt. _____
- 7 I found a wallet on the street. It contained over £200 in cash. _____
- 8 There was a huge storm. It resulted in many fallen trees. _____

I can ...

Very well Quite well More practice

describe people.

use participle clauses.

8.3 Vocabulary development

Vocabulary development adjectives + dependent prepositions

- Match the sentence halves and add a preposition.
 - The economies of some African countries are dependent on d
 - Are you fussy _____
 - New York is sometimes known _____
 - Green chillies are rich _____
 - Who's responsible _____
 - People tend to associate Mexican food _____
 - Roberto wasn't very enthusiastic _____
 - 'the Big Apple'.
 - what kind of coffee you drink?
 - the idea of cooking a meal tonight.
 - revenue from coffee exports.
 - tacos and burritos.
 - making this mess in the kitchen?
 - vitamin C.
- Choose the correct options to complete the sentences.
 - Some young children are suspicious *with / at / (of)* new foods.
 - Reusing leftover food is preferable *for / to / of* throwing it away.
 - He's vegetarian, not because he's sympathetic *towards / with / for* animals, but because he dislikes meat.
 - Molecular gastronomy is the study of the physical and chemical processes involved *on / in / for* cooking and eating.
 - Consumers are becoming more aware *with / on / of* the health benefits of organic food.
 - I was very impressed *by / of / for* the cake he made.



Vocabulary extension

- Match the adjectives and prepositions in bold to meanings a-f.
 - It was **unreasonable of** her to criticize his cooking. c
 - This soup tastes **identical to** the one my mother makes. _____
 - I'm very **familiar with** South Korean cuisine, having lived in Seoul for two years. _____
 - Do you think fresh pasta tastes **superior to** dried pasta? _____
 - I read that tomatoes and chillies are closely **related to** the tobacco plant. _____
 - He is strongly **opposed to** animal experimentation. _____
 - in disagreement with
 - exactly the same as
 - not fair or acceptable
 - know something very well
 - better in quality than
 - connected to, or from the same family as
- Complete the sentences with an adjective and preposition from exercise 3.
 - There is a wild mushroom whose flavour is identical to chicken. It tastes exactly the same.
 - Vegans are _____ eating animal products.
 - Are you _____ the Argentinian drink *maté*?
 - I thought it was _____ her to complain about the food.
 - Your cooking skills are far _____ mine
 - The doctor thinks his stomach problems are _____ eating dairy.

➔ **STUDY TIP** *It was* + adjective + *of* + somebody *to* ... (e.g. *unreasonable of her to* ...) is a very common pattern. It can be used with many adjectives which describe behaviour, for example:
It was arrogant of him to say that.
It was irresponsible of her to leave the child alone in the house

8.4 Speaking and writing

Speaking giving your impressions of an event

- 1a** Complete the conversation between Chris (C), Emma (E), Joe (J) and Sarah (S) with suitable words. The first letter is given.
- C So what did you think of the sculptures?
 E I loved them. They were very ¹ *inspiring* and I really liked the ² w_____ that art and nature combined to produce such a ³ s_____ landscape.
 C Exactly. And what I ⁴ p_____ liked was seeing how each one was just a little bit different because of how the weather has changed them.
 E Yes, me too. It was definitely ⁵ w_____ seeing it, wasn't it? Yes, and wasn't it wonderful when the sun started to set behind them? For me that was the ⁶ h_____.
 C What did you make of them, Joe?
 J Mmm... I wasn't ⁷ t_____ impressed by them, to be honest. I didn't really see the ⁸ p_____ of them. Just a bunch of statues standing in the sea ...
 E How can you say that?
 J I don't know - they just didn't live up to my ⁹ e_____. Also, it was much too cold for my ¹⁰ l_____. Maybe that's why I didn't appreciate them.
 E Er, what about you, Sarah?
 S I liked them, but I ¹¹ f_____ them a bit disturbing.
 E That's what the artist was trying to do, I think - provoke different reactions in people.

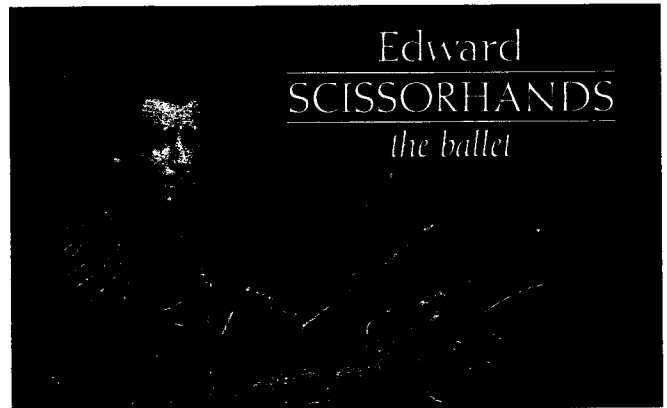
- b** 8.4))) Listen to the conversation in exercise 1a and check your answers.



Writing writing a review

- 2** Complete the review with words from the box.

based convinced created happening leaving
 leaping starring



When a friend bought tickets for the ballet *Edward Scissorhands*, ¹ *based* on the 1990 film ² _____ Johnny Depp, I didn't expect I'd enjoy it. I couldn't imagine being engaged by a show without dialogue or song. However, I was captivated from start to finish.

The choreography, the set and the costumes were stunning and the talent of the dancers was breathtaking. I was transported into a different world. Despite not saying a single word, the dancers were able to bring to life the story of Edward Scissorhands, a young man ³ _____ by an inventor who dies, ⁴ _____ him alone in the world to navigate the challenges posed by having only scissors for hands.

At times there was so much ⁵ _____ on the stage that it was difficult to know where to look - characters ⁶ _____ into swimming pools, rollerbladers dancing - but this added to the magic of the show.

I would recommend this show to anybody not ⁷ _____ by ballet. You will see it in a different light!

- 3** Add the following punctuation to sentences 1-3: comma (,), quotation marks (') and colon (:).

- The only word to describe the show is breathtaking.
- I've seen two ballets before *Swan Lake* and *Cinderella*.
- The show is on tour in Europe America and Asia.

I can ...

	Very well	Quite well	More practice
give my impressions of an event.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
write a review.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>