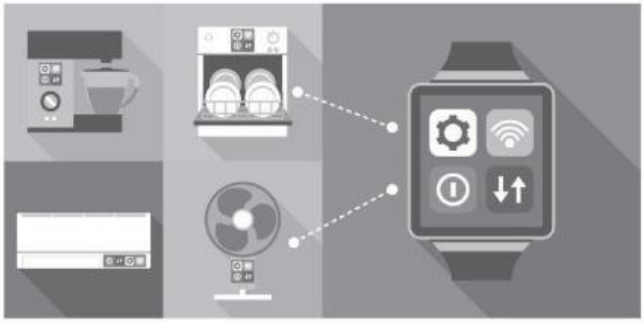
8 Old and new

8.1 The Internet of Things

Vocabulary smart technology



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

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

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**.

1 My elderly neighbour has just had *broadband* installed. Before that, she didn't use the internet.
2 A _____ phone is a perfect _____ for listening to podcasts on the go.
3 If your product develops a _____ within a year, we will repair or replace it free of charge.
4 If your phone is stolen, you can lock it _____ to stop thieves from accessing your personal _____.
5 Any internet-connected device, e.g. phone, computer or a smoke alarm, can be _____.
6 The plane took off at 11.40, but had to turn back after a _____ fault was discovered.
7 I think parents of small children should respect their children's _____ and not post photos of them online.
8 Internet-connected devices are useful, but the data can be made available to many people, making them a _____ to security.
9 At home I use _____ broadband, but at work I connect my computer to the internet using a cable, as it is more reliable.
10 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	technology	___
2	privacy	private	___
3	broadband	load	___
4	data	later	___
5	threat	wet	___
6	fault	laugh	___
7	install	technical	___
8	wireless	access	___
9	device	notice	___

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

LIVEWORKSHEETS

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.

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

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.
   _____

I can ...	Very well	Quite well	More practice
talk about smart technology.	○	○	○
use relative clauses.	○	○	○

LIVEWORKSHEETS