

1 Design

LISTENING 1	Inferring from context
LISTENING 2	Listening for key terms and definitions
ACADEMIC SKILL	Reiterating other people's ideas
VOCABULARY	Design vocabulary
GRAMMAR	<i>Wish</i> when referring to present or future time
SPEAKING	Talking about problems and solutions

Warm-up

Have students close their books. Write the word *design* on the board. Use these questions to discuss with the class:

- 1 What is the difference between art and design?
(Possible answer: Art is about creating visual impact [e.g., something beautiful, shocking, or thought-provoking]. Design involves a combination of visual impact and usefulness [e.g., something that looks amazing and also works brilliantly].)
- 2 What are some examples of things that are designed?
(Possible answers: cars, clothes, websites, books)
- 3 What are some examples of good design? What is good about them?

DISCUSSION POINT

Go through the infographic with the class. Point out that some of the words are explained in the *Glossary*. For each numbered principle, check meaning by eliciting examples of products that meet or don't meet the criteria (e.g., the first smartphones were innovative, but later models were just slight improvements, so they were less innovative). Check pronunciation, especially *aesthetic* /ɛ'sθetɪk/, *honest* /'ɒnəst/, *innovative* /'ɪnəvətɪv/, *thorough* /'θɒrə/ and *unobtrusive* /ʌnəb'trʊsɪv/.

Students work with a partner to discuss the three questions. At the end, discuss with the whole class.

Extension activity

Elicit who Dieter Rams might be and why he created his ten principles. Students are unlikely to know any details, but they should be able to guess some information. (Answer: Dieter Rams [born 1932] is a German industrial designer and academic. He formulated his ten principles in the 1970s as a way of deciding whether his own designs were good enough.)

VIDEO

BEFORE YOU WATCH

- 1 Check the meaning of *VR* (virtual reality). Students work alone to complete the sentences, using dictionaries if necessary, and check with a partner. Go through the answers carefully with the class to make sure everyone understands all the words.

ANSWERS

- 1 gimmicky 2 headsets 3 gadget 4 kit

Extension activity

Use these questions with the class to check everyone understands the target vocabulary:

- 1 How do VR headsets work?
- 2 What are some other examples of gadgets?
- 3 Why do people buy gimmicky products?
- 4 What kit do you need for VR?

(Possible answers: 1 They have screens in front of your eyes, so it feels like you're seeing something real. 2 The latest electronic devices and toys; 3 Because they are "cool," perhaps as a result of expensive marketing, or they look great, but they might not be very useful.; 4 A headset, a powerful computer (or smartphone), plus possibly a handset, etc.)

- 2 Students work with a partner to discuss the statements. After a few minutes, open up the discussion to include the whole class.

WHILE YOU WATCH

Go through the statements with the class. Check everyone understands *base station* (a powerful computer or electronic device that other smaller devices connect to). Play the video for students to complete the task. Ask students to check with a partner, then check as a class.

ANSWERS

- 1 F (to take part in an annual technology conference)
2 T 3 F (includes 2 base stations) 4 T 5 T

See the video script at the back of this book.

AFTER YOU WATCH

Students work with a partner to discuss the three questions. After a few minutes, open up the discussion to include the whole class.

LISTENING 1

PRINCIPLES OF GOOD DESIGN

A VOCABULARY PREVIEW

- 1 Students work alone to match the words and definitions. Ask students to check with a partner, then check as a class.

ANSWERS

1 g 2 f 3 d 4 h 5 b 6 e 7 a 8 c

- 2 Students work alone to complete the sentences. Ask students to check with a partner, then check as a class.

ANSWERS

1 complex 2 device 3 figure out 4 features
5 come up with 6 measure 7 operate 8 functional

- 3 Students discuss the statements with a partner. Encourage them to justify their answers with reasons and examples where possible. When they are ready, open up the discussion to include the whole class.

B BEFORE YOU LISTEN

Activating prior knowledge

Students discuss the questions in small groups. They could use Dieter Rams's principles to evaluate the four designs. When they are ready, ask volunteers to share their ideas with the class. Avoid confirming or rejecting their suggestions.

C GLOBAL LISTENING

Listening for text organization

- 1 Draw students' attention to the information in the *Glossary* box. Then play the recording for students to number the products. Ask students to check with a partner, then check as a class.

AUDIO SCRIPT

Track 1.1

MARTA: Jack! Over here!

JACK: Oh, hey Marta. How's it going?

MARTA: OK ... I just went to Professor Malik's office to ask about the assignment for the class I missed. He says we're supposed to evaluate a product using the design principles of Dieter Rams. Who is he? I'm kind of behind on the reading for that class.

JACK: Again? OK well, he's a German industrial designer who used to work for Braun, you know, the consumer products company? Back in the 1970s, he came up with

ten principles of good design that are still being followed today. Like, for example, a good design is innovative, long-lasting, environmentally friendly ... And the most important one, I think, is that it should make the product understandable. He doesn't believe in designs that have a lot of unnecessary features. You know the classic Braun calculator? Rams designed that and you can see the influence in the iPhone calculator today.

MARTA: Really? I think my dad has one of those calculators—they're ancient. He's not very good with technology, so I guess it must be fairly "understandable!" Ha-ha! Anyway, have you chosen a product to evaluate for the assignment yet?

JACK: Yeah. A door.

MARTA: A door?

JACK: Yeah. The door to the college library, to be exact. Look, here's a photo ... Can you see the problem?

MARTA: Um ... no. Not really.

JACK: Look at the handle. Are you supposed to pull or push it?

MARTA: Well ... hmm. It's not clear.

JACK: See, that's the problem. It's not clear. The handle is vertical, so naturally you want to pull on it. But that's not how it works. You have to push. Dieter Rams would say it's not understandable. Therefore ... it's a bad design.

MARTA: That's so interesting. I'd never have thought of that.

JACK: I found out that there's actually a name for badly designed doors. They're called "Norman doors," after Don Norman, who wrote a book called *The Design of Everyday Things*. He believes in what he calls "designing for humans," which is similar to Dieter Rams's principle that products should be understandable. Norman says doors are really simple devices. We shouldn't need written instructions like "pull" or "push" to figure out what to do—it should be obvious from the design.

MARTA: I completely agree with him. I wish all products were designed like that.

JACK: Especially electronic devices, like phones or tablets ...

MARTA: No kidding! My parents need a set of written instructions to use the TV remote!

JACK: Ha-ha! Yeah, mine can't operate the microwave ...

MARTA: Well, to be fair, I got a new coffee machine a few months ago, and I still don't really understand how to use it. It's got lots of great features, but I seem to spend more time reading the instruction manual than I do drinking the coffee.

JACK: Yeah, that's just bad design. Complex equipment doesn't need to be difficult to use.

MARTA: True. Argh ... what am I going to evaluate for this assignment?

JACK: Try to think of something that is attractive, but also functional.

MARTA: Yeah, I need something simple ... Oh, how about the glass measuring jug you use in the kitchen? You know the thing that has ounces and milliliters printed on the side so you can measure liquids or dry foods like rice?

JACK: Well, it's certainly useful ...

MARTA: Right, and I'm sure Rams would agree it's "understandable." It's not like you need instructions to use it.

JACK: True. Also, it pioneered the use of a new heat-proof glass so you could say it was "innovative" at the time and the design hasn't changed for at least 100 years, so I guess you could argue it's "long-lasting" too.

MARTA: Definitely.

JACK: Well it sounds like you've found a product for the assignment. Let me know if you need any help with anything.

MARTA: I will do. Thanks, Jack.

ANSWERS

1 the Braun calculator 2 Norman doors 3 TV remotes
4 microwaves 5 coffee machines 6 measuring jugs

- 2 Check that everyone understands the word *vertical* (in an up-down direction). Play the recording again for students to complete the sentences. Ask students to check with a partner, then check as a class.

AUDIO SCRIPT

Track 1.1

ANSWERS

1 c 2 b 3 a 4 b 5 c

D CLOSE LISTENING

Inferring from context

Warm-up

Tell students to close their books. Elicit the meaning of the verb *to infer* (to guess something based on evidence). On the board, write the sentence, *That's the worst design I've seen all semester*. Elicit from the class what we can infer about the speaker just from this sentence. (**Possible answers:** He / she speaks English; he / she might be a student or a teacher at a university; he / she knows about design, and perhaps spends a lot of time looking at / thinking about designs; he / she might not be very friendly.) Discuss why "inferring from context" might be a useful skill. Then tell them to read the information in the box to compare it with their ideas.

Exam skills

The IELTS listening exam focuses mainly on clear facts, but it might include a few multiple-choice questions where students have to infer information from context. In the TOEFL exam, however, inferring from context is a key skill. The exam includes the following listening question types:

- Gist-Purpose (working out why somebody did something)
- Understanding the Function of What Is Said
- Understanding the Speaker's Attitude

Tell students to read the questions to try to work out the answers. Then play the recording again for them to check. Go through the answers with the class.

AUDIO SCRIPT

Track 1.1

ANSWERS

1 c 2 c 3 c 4 a

Extension activity

Students work in small groups to infer more information about Marta and Jack (and their parents). Play the recording again if necessary. When they are ready, discuss the answers with the class. (**Possible answers:** They are both students who attend the same class at university / college. Perhaps they are studying to become designers; They both think their parents aren't very good with technology; Marta probably doesn't live with her parents—she has just bought her own coffee machine. She might be quite rich (or else she loves good coffee); Jack is patient and helpful—he explains everything clearly to Marta and offers to help at the end.)

E CRITICAL THINKING

The three questions all develop the critical thinking skill of relating information that you have read / heard to their own experience. This is a good way of testing whether the source information is plausible and logical. Additionally, the tasks encourage students to think critically about everyday objects, and perhaps notice things about them that they never noticed before. Students work in small groups to discuss the three questions. After a few minutes, open up the discussion to include the whole class.

Extra research task

Tell students to find out more about Dieter Rams, Don Norman, or another important industrial designer. They work alone or in groups to produce a short presentation about their designer and some of his / her best designs. They complete the research task at home, and give the presentation in the next lesson.

ACADEMIC SKILLS

REITERATING OTHER PEOPLE'S IDEAS

Warm-up

As you start the class, explain what you are going to teach during the class and list five different ideas. Then ask students to work individually and write down what you have just said. Then tell them to order the ideas from 1 to 5 by how confident they are that they accurately remember what you said. 1—remembering exactly the words you said, 3—remembering exactly the idea but not the words, 5—not remembering the exactly idea nor the words.

When students have decided how confident they are about remembering what was said, ask them to work with a partner and check their memory by telling their partner what you said. This will lead to conversations in which they describe what you said (reiterate) and don't just quote you.

After they have discussed how much they remember, ask them to read the *Academic Skills* box about ways to mention the ideas that other people have talked about. Practice the pronunciation and intonation of the expressions.

- 1 Ask students to read the student exchanges and how they reiterate what the other student has said.

ANSWERS

1 b 2 c

After checking the answers with the class, have students work with a partner to practice the dialogues. Monitor the conversations, recording any good examples of language use and any common errors. Analyze the language of reiteration using examples from the students but without naming the particular students. See if the class can reiterate what you said in the *Warm-up* using the same expressions.

- 2 Go through the examples of topics to discuss and clarify difficult vocabulary. Have students work with a partner as Student A and Student B. Explain that the partners are going to choose one of the topics and Student A will argue for or against the topic for 20 seconds then Student B will reiterate what their classmate has said using one of the phrases of reiteration.

Extension activity

It can be useful to have students repeat what each other have said at different points in a class. Encourage the students to practice reiterating each other ideas any time you have a discussion.

LISTENING 2

THE REALITIES OF DESIGN

A VOCABULARY PREVIEW

- 1 Students work alone to make sentences from the beginnings and endings, using dictionaries if necessary. Ask students to check with a partner, then as a class.

ANSWERS

1 c 2 g 3 f 4 a 5 b 6 h 7 d 8 e

- 2 Ask students to complete the definitions with the words from Exercise 1.

ANSWERS

1 three-dimensional 2 computer generated
3 artificial 4 layer 5 similarity 6 train
7 simulation 8 feedback

B BEFORE YOU LISTEN

Activating prior knowledge

Students work with a partner to discuss the two questions. After a few minutes, open up the discussion to include the whole class.

C GLOBAL LISTENING

- 1 Encourage the students to read the six topics carefully before listening to the recording. Tell them they will need to listen as you play the recording and number the six topics in the order the speaker mentions them.

ANSWERS

c 1 d 2 a 3 b 4 f 5 e 6

Audio Script

Track 1.2

The realities of design.

Hello everyone, my name is Luke, I work as an interior designer, although I actually trained as an architect years ago. And today I want to talk to you about a golden rule of design, and by that I mean a principle that's so

important that it applies to all creative professionals, from engineers and software developers to hairdressers and fashion designers. It's simply this: design must always be a collaborative process, involving the client working with the designer at every stage of the journey.

So let me illustrate the point by telling you a little anecdote. OK, so this guy right, he commissions an architect to build him his dream house. And he's very particular about what rooms he wants on the ground floor, how many bedrooms and bathrooms he wants on the upper floor. So the architect and the client go their separate ways, and this beautiful house gets built. But then the architect gets an angry phone call from the guy—When you designed my house, why didn't you include any stairs?! And the architect's response was, Well, you never said you wanted stairs...

OK, you may be thinking Luke, that story just doesn't ring true, I mean, surely, nobody would forget to include such a key element of the building like the stairs, right? And yes, it's most likely an urban myth, that is to say, it's one of those stories that no one can really verify, because it's probably not true! But it illustrates what can go wrong if the designer and their client don't talk to each other. You see, the client could have looked at the architect's drawings and said, Hey, haven't you forgotten the stairs? Feedback like that from the client would have been so valuable. Better still would be to have a feedback loop; what this means is a cycle of continuous improvement, where the designer shows the design to the client, gets feedback from the client, then uses this to alter the initial design, then shows it again, gets further feedback and makes more changes. And it may be that the end product, in other words, the final design, looks absolutely nothing like how the initial design did right at the beginning. Now that's not to say the initial design was terrible, far from it, it shows that the designer is being flexible, in order to deliver what the client wants.

You see, in the old days, people such as architects had to rely on technical drawings, such as a floor plan. Now, in case you're not familiar with the term, a floor plan can be defined as a diagram, showing all the areas of the floor of a building from above, so that you can see where the walls are, and how the space is divided up. The thing is though, a floor plan doesn't really show you the building as you'd ever see it. So it's really an artificial view, and not something that a member of the public could easily understand, unless they have some sort of training in architecture. I'd say off the top of my head that maybe, I don't know, 50% of people struggle to interpret technical architectural drawings, like floor plans. So why, if you were an architect, why would you insist on going to a client and showing them a bunch of drawings that they may struggle to make sense of? For me, that just flies in the face of this central principle: that designers and clients must work together.

OK, so here's the good news—it's never been easier for design professionals to show their clients what a design will look like, and that's thanks to VR and architectural

visualization. Now virtual reality could just be computer-generated images to show a client what a building will look like.

Or complete simulations the clients see with a virtual reality headset, experiencing three-dimensional views of the building as they move through it. So you're in a 3D immersive world.

And then we come to AR, or augmented reality. Designers can of course also layer the CG images on top of what you actually see. When I say layering in the context of AR, what I mean is adding an image of something that doesn't exist onto something else that already does. So you could see an image of an as-yet unbuilt building next to the cafe you walk past every day. So much more powerful than just a bunch of drawings, and believe me, these animations really speak to people, they get across so effectively what a design will look like once it's realized. And it's by embracing these technologies, by adopting a collaborative approach, that we as designers can give clients the designs they want and deserve. And isn't that much better than working all on our own, and then forgetting to include the stairs? Well, I think it is!

- 2 Ask students to reiterate Luke's explanation of virtual reality. Ask them which image (A or B) best illustrates his explanation.

ANSWER

B (image A illustrates augmented reality)

D CLOSE LISTENING

Listening for key terms and definitions

Warm-up

Tell students to close their books. Elicit from the class some examples of words and phrases that were defined in the listening (e.g., virtual and augmented reality). Elicit some useful phrases for signaling definitions. Tell students to read the information in the box to compare it with their ideas.

- 1 Play the recording once or twice and the students complete the definitions. Ask students to check with a partner, then check as a class. Point out that many of the defined terms here are quite technical, so they don't need to learn them.

ANSWERS

1 by; mean 2 say 3 words 4 defined 5 say; what

Audio Script

Track 1.3

- 1 I want to talk to you about a golden rule of design, and by that I mean a principle that's so important that it applies to all creative professionals.
 - 2 It's most likely an urban myth, that is to say, it's one of those stories that no one can really verify.
 - 3 And it may be that the end product, in other words, the final design, looks absolutely nothing like how the initial design did.
 - 4 A floor plan can be defined as a diagram, showing all the areas of the floor of a building from above.
 - 5 When I say layering in the context of AR, what I mean is adding an image of something that doesn't exist onto something else that already does.
- 2 Ask students to read the statements before listening to the recording. Play the recording and ask students to choose *T* (true) or *F* (false).

ANSWERS

- 1 T 2 F (the architect and client go their separate ways)
3 T 4 F (it shows that the designer is being flexible)
5 F (50 percent of people struggle to interpret technical drawings) 6 T

Audio Script

Track 1.2

E CRITICAL THINKING

This question encourages students to think creatively in order to generate ideas. Make sure that difference between VR (virtual reality) and AR (augmented reality) is very clear to the class. Ask students to suggest three designed objects which VR or AR could help people envisage and understand different ideas in the same way that VR and AR help architects explain their designs.

CRITICAL THINKING

DEVELOPING AND APPLYING EVALUATION STANDARDS

Warm-up

Tell students to close their books. On the board, write the phrase *developing and applying evaluation standards*. Use the following questions to explore what it means. Finally, tell students to read the information in the box to compare it with their ideas.

- 1 What does *evaluation* mean?
- 2 What do you think *evaluation standards* are?

- 3 What is the connection between *evaluation standards* and *critical thinking*?
- 4 What is the difference between *developing standards* and *applying standards*?

(Possible answers: 1 Deciding how good / bad something is, often by giving it a value [a number]. **2** Standard ways of evaluating different things, so we can compare the different values and make good decisions. **3** An important part of critical thinking is moving away from feelings and opinions, and moving toward measuring things in order to evaluate them. For example, we might need to evaluate how reliable a particular website is, so we might develop some standards to enable us to do that. **4** *Developing standards* involves working out what to measure; *applying standards* means actually measuring things in order to learn something.)

- 1 Students look back at Dieter Rams' principles on page 11 and discuss the questions with a partner.
- 2 Go through the list of possible principles with the class. With a partner students decide which of Rams' principles are most / least important for the given products.
- 3 Students work in a group to identify five of Rams' principles to evaluate a house or apartment. They then evaluate where they live. When they are ready, ask volunteers to share their ideas with the class.

Extension activity

Students work in groups to develop standards for checking the reliability of websites as sources of factual information. When ready, ask volunteers to share their ideas.

(Possible answers: Is it the official website of a well-known and respected organization?; Is it possible that the writer is trying to influence readers [e.g., to buy something, to support something]?; Has the writer been paid to promote a particular viewpoint?; Do you have any evidence that the writer knows what he / she is writing about?)

VOCABULARY DEVELOPMENT

WORDS TO TALK ABOUT DESIGN

- 1 Students match the words and definitions alone. Ask students to check with a partner, then check as a class.

ANSWERS

1 e 2 f 3 g 4 a 5 d 6 b 7 c 8 h

- 2 Students work alone or with a partner to complete the sentences. Check with a partner, then check as a class.

ANSWERS

- 1 measurements 2 Industrial 3 flexible
- 4 environmentally friendly 5 classic 6 elements
- 7 process 8 images

Extension activity

Use these questions with the class to generate some additional discussion using the target vocabulary:

- 1 What are some examples of classic designs that still look good after many years?
- 2 Which looks better: a product with many small elements, or one with only one or two?
- 3 How can designers make their products more environmentally friendly?
- 4 How can designers make their products more flexible?
- 5 How important are images in the design of magazine covers / book covers, etc.? Why?
- 6 What do you think industrial design means? (**Possible answer:** designing things to be made in factories)
- 7 What are some important measurements in the design of smartphones? (**Possible answers:** the screen size (in inches from corner to corner); the width; the weight, etc.)
- 8 What do you think are the steps in the process of designing a piece of furniture?

ACADEMIC WORDS AND IDIOMS

- 1 Students work alone to match the words and definitions. Ask students to check with a partner, then check as a class. Check pronunciation of *alter* /'ɒltər/ and *interact* /ˌɪntər'ækt/.

ANSWERS

- 1 b 2 d 3 g 4 i 5 a 6 k 7 h 8 c
- 9 j 10 f 11 e

- 2 Students work alone to complete the sentences. Ask students to check with a partner, then check as a class.

ANSWERS

- 1 alter 2 contrast 3 Eventually 4 off the top of my head
- 5 income 6 flies in the face of 7 interact
- 8 status 9 ring true 10 substitute 11 extract

- 3 Students discuss the sentences with a partner. When they are ready, open up the discussion to include the whole class. Go through the examples of the idioms in the exercise and in the *Academic idioms* box.

SPEAKING MODEL

Warm-up

Tell students to read the information in the box to find four things they are going to do. Elicit the connection between wishes and designing new products. (**Possible answer:** The first step in the design process is to identify a need. We often talk about needs with the phrase “*I wish...*”)

A ANALYZE

Tell students to read the conversation to answer the questions. They discuss their answers with a partner and feed back to the class.

ANSWERS

- 1 Badly-designed umbrellas.
- 2 They constantly break, are dangerous, and are difficult to close properly.
- 3 Making the frame out of plastic instead of aluminum and adding a simple closing mechanism.
- 4 “Any ideas?”; “What about making it easier to close?”
- 5 “Umbrellas are terribly designed”; “it’s so annoying”

Extension activity

Students work with a partner to find two phrases in the conversation for responding positively. Check with the class. (**Answers:** What you’re saying rings true actually.; That would be really useful.)

B DISCUSS

Students work with a partner to discuss the questions. Encourage them to use some of the techniques and phrases from the model conversation (as identified in *Analyze*, questions 4–5). When they are ready, ask volunteers to share their stories briefly with the class.

GRAMMAR

WISH WHEN REFERRING TO PRESENT OR FUTURE TIME

Warm-up

Tell students to close their books. Use these questions to check what students already know about wishes. Then tell them to read the information in the box to compare it with their ideas.

- 1 When do we make wishes?
- 2 What are some things we might wish for?
- 3 If I say, “*I wish you were here,*” am I talking about the past or the present?
- 4 Which is better, “*I wish I was taller*” or “*I wish I were taller*”?

- 5 If I say “*I wish you would visit more often*,” am I talking about the present or the future?
- 6 What’s the difference between “*I wish you would visit more often*” and “*I hope you visit more often*”?
- 7 What’s wrong with this sentence: “*I wish I would pass my exams next week*”?

(Possible answers: 1 When we want to imagine an unreal present or future situation where things are better. There is a second meaning of *wish*, used in greetings like “*We wish you good luck*” or “*I wish you a happy birthday*.” This grammar lesson is about the first meaning of wishes. **2** Better health, more money, more time, better weather, etc. **3** The present. We use a past tense, because we’re talking about an unreal present situation. It’s not about past time. **4** Both versions are commonly used by native speakers, but in standard English and academic English, we use *were* for all persons. This is different from when we use the past simple to talk about past time. **5** The future. We usually use *would* to make wishes about the future. **6** We use *hope* + present to talk about the likely or possible future; we use *wish* + *would* to talk about the unlikely or impossible future. **7** We usually have some control over our own future actions, so it sounds very strange to use *would* to make wishes about ourselves. Use *wish* + *could* [“*I wish I could pass my exams*”] or *hope* + present [“*I hope I pass my exams*”] instead.)

- 1 Students work alone to complete the sentences, then check with a partner. When you go through the answers carefully with the class, elicit which sentences are about the present (**Answer:** 1, 2, 4) and which are about the future (**Answer:** 3, 5, 6).

ANSWERS

- 1 were 2 had 3 could fly 4 were 5 would move
6 would come

- 2 Students work with a partner to discuss the questions. Monitor the activity and help with vocabulary where needed. When they are ready, elicit a range of answers from the class, paying attention to any problems or misunderstandings.

SPEAKING SKILL

TALKING ABOUT PROBLEMS AND SOLUTIONS

Warm-up

Tell students to look back at the *Speaking model* on page 20. With a partner, they identify the useful phrases for speaking about problems and solutions. Elicit a list from the class. Then tell them to read the information in the box to compare their list with the list of useful phrases in the box.

(Possible answers:

Talking about problems: *Let’s start by identifying a problem that needs to be solved.; And then we’ll try to come up with a product or process for solving it.; It’s so annoying.; And it’s a real pain to ...; You have to ...; and it’s hard to ...*

Talking about solutions: *That problem has been solved.; I wish someone would ...; So we need to ...; I think we could solve the (first) problem if (+ subject + past simple); What about ...?; What if (+ subject + past simple)?; All we’d need is ...)*

- 1 Students work with a partner to describe the problems and suggest solutions. Monitor the activity and help with vocabulary where needed. When they are ready, elicit a range of answers from the class.
- 2 Students work in groups to discuss the objects. Encourage them to explore a range of creative solutions to each problem. When they are ready, ask volunteers to present their solutions to the class.

PRONUNCIATION FOR SPEAKING

USING INTONATION TO MAKE DECLARATIVE STATEMENTS

Warm-up

Tell students to close their books. On the board, write the sentences *It’s a poorly designed door* and *She didn’t understand the assignment*. Ask volunteers to read the two sentences aloud. Elicit what happens to the speaker’s voice at the end of each sentence, and why there is a difference between the two intonation patterns. You could use hand gestures to signal the high (position 3), neutral (position 2), and low (position 1) tones. Then tell them to read the information in the box to compare it with their ideas.

- 1 Go through the instructions with the class. You could ask students to identify the last stressed syllable before listening. Play the recording for students to draw the intonation contours. When you check with the class, ask volunteers to say the sentences with the correct intonation. You could encourage them to use hand gestures to show the tones while speaking.

Audio Script

Track 1.4

ANSWERS

- 1 The instructions weren't clear.
- 2 Don Norman is an American designer.
- 3 The kitchen has a lot of fancy tools.
- 4 Virtual reality is used to train surgeons.
- 5 Arachnophobia is a fear of spiders.
- 6 Someday soon there may be augmented cooking lessons.

- 2 Students work with a partner to mark the stress and draw contour lines. Check with the class before getting students to practice with a partner.

ANSWERS

- 1 I have a real problem with umbrellas.
- 2 Plastic is flexible.
- 3 The product is environmentally friendly.
- 4 I have an idea.

SPEAKING TASK

BRAINSTORM

Students brainstorm in groups. They don't need to find exactly one problem or need for each area—the prompts are just there to generate ideas. Monitor carefully to help any students who are struggling to come up with ideas.

PLAN

Allow plenty of time for the planning stage. Encourage them to choose one problem as quickly as possible in order to spend more time on the problem-solving tasks. Encourage them to use the creative problem-solving techniques and language from this unit. Monitor carefully to ensure all groups are making good progress.

SPEAK

Students work in their groups to plan and practice presenting their new product. They should also plan which group members will deliver each part of the presentation.

Extension activity

If you have access to computers and a projector, students could use a program like PowerPoint to plan their presentations. If you have large sheets of paper and colored pens, they could make poster presentations instead.

REVIEW

The groups take turns presenting their new products. Make sure they know to pay attention to each other's presentations. You could encourage them to ask questions about other groups' presentations. At the end, hold a class vote to choose the most creative new product.

REFLECT

Students discuss the questions in small groups.

REVIEW

WORDLIST

Students work with a partner or in a small group to work through the *Wordlist*, checking that they all remember what each word or phrase means, how to pronounce it, and how it was used in the unit. Go through the list carefully with the class.

ACADEMIC WORDS AND IDIOMS REVIEW

Students work through the sentences, then check with a partner and provide feedback as a class.

ANSWERS

- 1 substitute
- 2 Off the top of my head
- 3 altered
- 4 ring true
- 5 flies in the face of
- 6 income

UNIT REVIEW

Students work through the list alone to decide what they can and can't do. They discuss their answers with a partner, including what they remember from the unit about each point. Finally, open up the discussion to include the whole class. Pay particular attention to any boxes that the students didn't check. Explore with them ways of overcoming any remaining problems.

INTEGRATED SKILLS 1

SPARK CREATIVITY WITH
THOMAS EDISON’S NAPPING
TECHNIQUE

WARM-UP

Write the lesson title on the board and ask the following:

- Who is Thomas Edison? (American inventor; patented over 1,000 inventions, including the phonograph, motion picture camera, and electric light bulbs.)
- What is a nap? (A short sleep, often during the day)
- How might napping spark creativity?

Avoid confirming or rejecting students’ ideas to the third question at this stage, but make a note of their ideas and come back to them after reading the text.

A CLOSE READING

As a class, go through the statements. Explain that *dozing* is the same as *napping*, and that *polysomnography*, *N1*, and *eureka moment* are explained in the text.

ANSWERS

- 1 F (It was because he wanted to remember his thoughts as he was nodding off.)
- 2 F (They were simply given a 20-minute break.)
- 3 T
- 4 F (more than twice—close to three times more.)
- 5 F (It happened after the break and many subsequent attempts to solve the math problem.)

B READING ANALYSIS

Students discuss the questions with a partner. Elicit whether students have had a eureka moment while / after dozing, and why we might be creative during a nap.

POSSIBLE ANSWER

- Discussions will vary.
- 67%
 - 2% more were able to solve right away

C CLOSE LISTENING

Point out that the podcast focuses on different aspects of the research. Elicit what students know about *Salvador Dali*. Point out that *clang* means a sudden loud noise.

See the audio script at the back of this book.

ANSWERS

- 1 slumber, key 2 plate, physical
- 3 wake, sleep 4 bottle
- 5 thoughts, creativity 6 sweet

D LISTENING ANALYSIS

After the activity, elicit why the sources focus on different things, and what we can learn from those differences (i.e., sources often contain different information which may be omitted from one source but is present in another).

POSSIBLE ANSWERS

- 1 Dali’s technique; the fact that the bottle was made of plastic; the different lengths of people’s naps; the number of math problems; Oudiette’s analysis of what the research means; her plans for future research.
- 2 Edison’s technique; the technical names for being half-asleep; the 20-minute break; the use of polysomnography; the difference between sleep stages and the results; the time it took for the eureka moment.

E INTEGRATED SPEAKING

Ask students to work with a partner to summarize the information from the reading text, diagram, and audio.

MODEL ANSWER

Thomas Edison and Salvador Dali led different lives, but both were known for their creativity and used a similar technique to spark it. Edison liked to nap while holding a ball. As he dozed the ball fell and woke him up. Dali held a key above a plate, and as he drifted off, the key fell, clanged on the plate, and woke him up. These techniques helped them remember ideas that they had as they nodded off. Delphine Oudiette, a sleep researcher, wanted to find out why this worked. She asked volunteers to complete a series of math problems, which had a hidden shortcut. Sixteen volunteers found the shortcut and were excluded. The others were then told to nap while holding a plastic bottle, but not all of them managed to fall asleep. Later, she gave them more math problems. The people who had slept lightly managed to work out the shortcut more often than those who had fallen deeply asleep and those that hadn’t slept at all. The experiment suggests that our brains are able to solve problems while we’re falling asleep. But if we fall deeply asleep, we lose that creativity. This may be because when we’re half asleep, we lose control of our thoughts and can have loose associations, but we must also stay awake enough to recognize a great idea.

LISTENING 1	Understanding the structure of a formal argument
LISTENING 2	Listening for repair and elaboration
ACADEMIC SKILL	Anticipating opposing views
VOCABULARY	Words to describe the brain and mind
GRAMMAR	Concession
SPEAKING	Responding to an argument

Warm-up

With the class, elicit onto the board a list of five–ten important functions of our brains. (**Possible answers:** *perception* [e.g., seeing, hearing, feeling]; *memory*; decision-making; *emotions*; conscious motor control [i.e., moving our arms and legs]; *language production* [speech / writing] and *reception* [understanding]; *reflexes* and *instincts* [things we do without thinking]; *creativity*, etc.)

Write the following questions on the board.

- 1 Will computers ever be able to do any of these things as successfully as our brains can?
- 2 Will computers ever be able to help our brains do these things more successfully than we can now?
- 3 How soon do you think these things might happen?

Students work in small groups to discuss the questions. When they are ready, open up the discussion to include the whole class.

DISCUSSION POINT

Students work with a partner to discuss the infographic and answer the three questions. At the end, open up the discussion to include the whole class.

VIDEO

Warm-up

Use these questions about the image from the video to generate interest in the topic.

- 1 What can you see in the image? (**Answer:** A person [a woman] wearing a yellow headset, looking at a small face on a screen)
- 2 Why do you think the woman has wires attached to her head?
- 3 What kind of information can we know about what a brain is doing?

BEFORE YOU WATCH

Have students work with a partner to discuss the questions. Go through their ideas as a class and see if the students know any of the science mentioned (e.g., EEG)

WHILE YOU WATCH

Tell students to read through the questions first to make sure they understand everything. Then play the video for them to choose the correct answers. Ask students to check with a partner, then check as a class. You could play the video a second time if appropriate, so students can check any answers or information they missed.

ANSWERS

- 1 the University of Toronto Scarborough
- 2 collect the EEG data associated with visual stimuli, such as human faces
- 3 study what is happening in someone's head
- 4 it can recreate the mental representation of a human face the way you perceive it.
- 5 Not yet but it could be used to retrieve the image of that criminal's face directly from the brain of the witnesses

See the video script at the back of this book.

AFTER YOU WATCH

Students work with a partner to discuss the opinions. After a few minutes, open up the discussion to include the whole class.

LISTENING 1

BRAIN TRAINING

A VOCABULARY PREVIEW

- 1 Students work alone to match the words and definitions. Students check with a partner, then check as a class. Check pronunciation, especially *dishonest* /dɪs'ʌnəst/ and *criticism* /'krɪtɪsɪzəm/.

ANSWERS

1 b 2 c 3 d 4 a 5 e 6 h 7 f 8 g

- 2 Students discuss the statements with a partner. Encourage them to justify their answers with reasons and examples where possible. When they are ready, open up the discussion to include the whole class.

Extension activity

Students work in small groups to find at least one word from the family as each target word. For example, they could try to find nouns, verbs or adjectives, or words with prefixes or suffixes. When they are ready, elicit a range of words from each family and write them on the board.

Possible answers:

claim (n): to claim that ... (v); a claimant (n); to reclaim / exclaim (v); an exclamation (n)

function (n): to function (v); functional (adj); to malfunction (v)

sample (n): to sample sth (v)

task (n): to task sb with sth (v)

evidence (n): evident (adj)

dishonest (adj): honest (adj); (dis)honesty (n)

criticism (n): to criticize sb / sth (v); a critic (n); critical / uncritical / hypocritical (adj)

potential (n): potent (adj)

B BEFORE YOU LISTEN

Activating prior knowledge

Students work with a partner to discuss the three questions. After a few minutes, open up the discussion to include the whole class.

C GLOBAL LISTENING

Listening for main ideas

Go through the instructions with the class. For question 4, point out that they need to listen for the main idea, not just things that were mentioned or discussed. Draw students' attention to the information in the *Glossary* box on page 30, and check pronunciation of *anecdotal* /æˈnɒk.dɒt(ə)l/ and *neuroscience* /ˈnɒrəʊ.saɪəns/. Then play the recording for students to complete the task. Ask students to check with a partner, then check as a class.

AUDIO SCRIPT

Track 2.1

STEVE: Hey Frankie. What are you doing?

FRANKIE: Oh, hi Steve, hi Anna. I'm just trying out one of those brain training apps. It's supposed to make you more intelligent and improve your memory and focus. At least that's what the company's ads claim.

ANNA: Oh, I tried some of those games! They're really fun!

STEVE: They may be fun, but there's no evidence they make you more intelligent. We actually talked about this exact topic in my neuroscience class last week. The companies that sell these apps have done hundreds of studies to try to prove that their products really work, but a team of psychologists from the University of Illinois

reviewed the studies, and they identified some big problems with the research.

FRANKIE: What kind of problems?

STEVE: OK. Well, in the first place, the psychologists disagreed with the claim that the brain-training games affect intelligence. Dr. Warner of the Mayweather Institute said that, "Playing the games a lot seems to make you better at those games, but the improvement doesn't appear to transfer to real-life contexts."

FRANKIE: What does that mean?

STEVE: Like for example, the studies couldn't prove that playing word games helped older people remember to take their medicine every day.

ANNA: Wait a minute, Steve. I think you're only telling one side of the story. First of all, there's a pretty big group of researchers who claim brain training does work. One website published a list of 132 studies showing that brain training can improve brain function. Moreover, the website included a report signed by more than a hundred scientists, so I believe it must be true.

STEVE: Yeah, I know about that website too, but in my opinion, most of those studies were poorly designed. Some of them only tested 20 people; that's not a big enough sample to show clear results. Another study had one group using the brain training app and another group watching DVDs. I don't believe that's a fair test—of course the group using the app showed more improvement!

FRANKIE: You know, my aunt signed up for one of those brain training courses, and she is certain the exercises have helped her be sharper, you know, more focused.

STEVE: That may be true, Frankie. But as one of my psychology professors always says, "One person's anecdotal experience isn't proof that something works."

ANNA: Can I just jump back in here? Even if all your criticisms are true, I would argue that brain training has the potential to make our brains work better. In a recent interview with *Future Tech*, Mark Vanderburg said, "Brain training companies are working with some of the best scientists in the world and I'm convinced that sooner or later they're going to develop tasks that really do make people smarter." I think he's right—it's only a matter of time.

STEVE: Well, I agree with you there. I think the potential for brain training to make us smarter is really exciting. What bothers me is that today, the companies marketing the brain games generate revenues of over \$25 million dollars a year for products that don't deliver what they promise. I believe that's dishonest.

FRANKIE: Right. So, let me ask you something. If you're right and brain training games don't work, then what does? I'd love to find an easy way to improve my memory and concentration.

ANNA: I've read a lot of research supporting the value of regular physical exercise as a way of improving brain function.

FRANKIE: What ... like jogging?

ANNA: Yeah.

STEVE: And the other thing that's helpful is mastering new concepts and skills. You don't have to pay a lot of money for a brain training course. You can sign up for a language class or take piano lessons. Anyway, enjoy your game Frankie, I've got to get to class.

FRANKIE: OK ... thanks Steve. See you later.

ANNA: See ya.

ANSWERS

1 a 2 b 3 c 4 c

D CLOSE LISTENING

Understanding the structure of a formal argument

Warm-up

Tell students to close their books. Write the phrases *formal argument* and *informal argument* on the board, and elicit what they might mean. (**Possible answer:** An "informal argument" is when two or more people disagree about something [e.g., whose turn it is to do the dishes], and use a range of emotions, e.g., anger, tricks [e.g., lies, exaggeration], and techniques, e.g., threats, to "win" the argument. A "formal argument" is when people disagree, but use logic and reason to persuade the other people. In a good formal argument, all emotion and tricks should be removed from the process. Note that the term "informal argument" typically refers to a whole conversation, while the term "formal argument" usually refers to one section of a larger text, presentation, or formal debate.)

Elicit two parts of a good formal argument. (**Possible answers:** a *claim* and *supporting evidence* and some useful phrases for each part. Finally, tell students to read the information in the box to compare it with their ideas.)

Exam skills

The TOEFL and IELTS listening tests might include extracts from debates or formal discussions. Discuss with the class how it can be useful to understand the structure of formal arguments during a listening test. (**Possible answer:** If a question requires you to listen for a particular fact, a good clue that the fact is about to be mentioned is that the speaker first makes a claim about that topic. So when you hear one of the "claim phrases," it probably means that the speaker is about to present some evidence to support that claim.)

- 1 Tell students to read the claims first to try to remember who made each claim (with strong classes, you could also get them to try Exercise 2 before listening again).

Then play the recording again for them to check.

They compare their answers with a partner and feed back to the class.

AUDIO SCRIPT

Track 2.1

ANSWERS

1 Steve 2 Anna 3 Steve 4 Anna 5 Steve

- 2 Students listen and complete the matching task. Go through the answers with the class.

AUDIO SCRIPT

Track 2.1

ANSWERS

a 3 b 5 c 1 d 2 e 4

E CRITICAL THINKING

Students work in small groups to discuss the questions. After a few minutes, open up the discussion to include the whole class.

ACADEMIC SKILLS

ANTICIPATING OPPOSING VIEWS

Write these two sentences on the board:

- 1 Playing computer games is linked to increased problems with attention in children.
- 2 Playing computer games improves how fast you can see and react to things.

Explain that studies have shown that there is both positive evidence for and negative evidence against playing computer games. Ask which of the sentences is for computer games (Sentence 2) and if students know any of the arguments against computer games that people often make. Ask them what arguments could be made for computer games. Ask students to read the *Academic Skills* box about anticipating opposing views.

- 1 Ask students to identify which technique (a–c) is used in each extract (1–5).

ANSWERS

1 b 2 a 3 c 4 b 5 a

- 2 Go through the topics with the students and ask for some possible opposing arguments for each topic.

LISTENING 2

SCREEN TIME

A VOCABULARY PREVIEW

- 1 Students work alone to match the sentence halves 1–8 to a–h. Ask students to check answers with a partner, then check as a class.

ANSWERS

1 h 2 b 3 d 4 g 5 f 6 e 7 a 8 c

- 2 Students write the words in Exercise 1 next to the definitions. Check the pronunciation of capacity /kə'pæsəti/, characteristic /kə'rəktə'rɪstɪk/, and interfere /ɪntər'fɪr/.

ANSWERS

a capacity b impact c interfere d affect e critical thinking f efficiently g versions h characteristic

- 3 Have students work with a partner to discuss which of the sentences in Exercise 1 are true for them.

B BEFORE YOU LISTEN

Activating prior knowledge

Students work with a partner to discuss the three questions. After a few minutes, open up the discussion to include the whole class.

C GLOBAL LISTENING

Listening for main ideas

- 1 Play the recording for students to number the topics in the order they are discussed. They check with a partner, including a brief discussion of what they remember about each topic, and feed back to the class.

ANSWERS

1 a 2 c 3 h 4 e 5 f 6 d 7 g 8 b

AUDIO SCRIPT

Track 2.2

OK everybody, I'm about to start, so if you could just put your phones away please. Which is very topical actually, because the topic of my session today is screen time and how it affects us in all sorts of ways, both positively and negatively.

So let me start by making clear what precisely I mean by the concept of screen time. I'm using the term to denote the amount of any activity which involves a screen, however small or large. So, in other words, if you're checking out a music video on your tablet, preparing a new version of your

assignment on your laptop, scrolling through your socials on your phone, video-gaming on your console, or binge-watching a box set on your flatscreen TV, whatever it is ... all these activities share one key characteristic. They're all dependent on a screen of some sort, and so they would all be considered as screen time.

Now you might be thinking, well, isn't that obvious? But in actual fact, it's not, at least not to many people. You see, these activities are quite diverse. What I mean by that is that looking at your social media feed and redrafting your essay, they feel like completely different sorts of activities. You might even do one to get away from the other. Sorry, let me rephrase that. As students, if you were writing an essay, you might take a quick look at your social media on your phone. Just to have a quick break, improve your concentration. But the thing is that both of these activities boil down to just one thing—you, staring at a screen. So while you think you're having a complete break, you're kidding yourself, because all you're doing is yet more of the same—you're still staring at a screen. And it's because of this that people often underestimate the number of hours they spend onscreen on a typical day. You'd expect people to have a pretty good idea of what they get up to each day, but they have no idea. Or, well, perhaps I should have said that they don't have a clear idea of the extent of their screen time.

Now, if I asked you how many hours of screen time a regular American has on a typical day, you might say, oh I don't know, maybe two to three hours, right? Well, let me tell you: it's been established that it is in fact over seven.

Equally, the average British person looks at a screen every 12 minutes, sorry, I meant they check their cell phone once every 12 minutes.

Now, you may well say that there are all sorts of valid reasons for constantly looking at your phone, I mean, they add to our lives in so many ways. To take a couple of examples, well, first, smartphones and other devices have an enormous capacity to help us stay connected with friends. And in addition to that, they enable us to gather information efficiently,

But that all goes without saying, and what I want to focus on instead are some of the adverse impacts that our devices and screen time are having on us. Now, part of the problem is that we all love the ping! Let me explain what I mean—the noise your phone makes when you get a notification that a message has come in, that's highly addictive. And once a person picks up their phone and starts scrolling, they can be doing it for far longer than intended. According to one study from the University of Florida, uh, of California sorry, it takes an average of 23 minutes to get fully back to work after getting distracted in this way. You may find that hard to believe, but that's what they found. So what I'm getting at is that this can really interfere with how productive you are—if you're trying to get an essay finished, you may be better off keeping your phone on silent and well out of reach. And essentially, that's the take home message from today's talk—for all the

benefits that we get from our electronic devices, there are just as many disadvantages, and it's important that we try to understand these as best as we can.

Some of the valuable work psychologists have done in this area has been examining how excessive screen time can affect the cortex. In case you don't know, that's the area of the brain responsible for critical thinking. And what they've identified is that too much screen time leads to a thinning of the cortex. Let me explain what I mean. It can have the effect of reducing a person's faculties, such as the ability to plan, and to empathize with how other human beings are feeling.

So, there are all sorts of implications, and there's a lot more research that needs to be undertaken. But it is clear that we need to ensure that the technology that we have at our disposal from a young age is an asset, and that we use it to our advantage.

- 2 Students work with a partner to choose the sentence that best expresses the speaker's main point. Check with the class.

ANSWER
Sentence c

D CLOSE LISTENING

Listening for repair and elaboration

Warm-up

Tell students to close their books. Elicit from the class what *repair* and *elaboration* mean. Elicit some phrases people might use for repair or elaboration. Tell students to read the information in the box to compare it with their ideas.

Exam skills

The TOEFL listening test includes many features of natural speech, including pauses, sentence fragments and repairs. The IELTS exam may also include occasional examples of repair. Elicit from the class why it is especially important to listen for repairs during exams. (**Possible answer:** In a multiple choice task, the speaker might say one answer and then change it to a different answer. Examinees need to be ready for surprises like this, and not simply "switch off" when they hear what seems to be the correct answer.)

Play the recording again and ask students to decide if the statements are true or false.

ANSWERS

1 T 2 F (... all you're doing is yet more of the same—you're still staring at a screen.) 3 F (... they check their cell phone once every 12 minutes.) 4 T 5 F (University of California) 6 T

AUDIO SCRIPT

Track 2.2

E CRITICAL THINKING

Students work in small groups to discuss the three questions. After a few minutes, open up the discussion to include the whole class.

CRITICAL THINKING

APPEAL TO POPULARITY

Warm-up

Ask the students some of the following questions (or similar questions to suit your own country / teaching context):

- 1 Which company makes the best smartphones?
- 2 What's the best search engine?
- 3 What's the best soft drink?
- 4 What is the best brand of ketchup?

Encourage students to justify their claims. Hopefully, somebody will choose one of the most popular brands, and take this popularity as justification of why it must be "the best." (If this doesn't work, ask them what most people in their country would say in answer to the questions.) Point out that in fact, we have no way of knowing which smartphone, search engine, etc., is the best, unless we conduct proper research.

Elicit from the class whether something similar happens in academic contexts, why it is a problem, and what we can do about it. Then tell students to read the information in the box to compare it with their ideas.

- 1 Check that everyone understands what a *valid argument* is (an argument that is based on good evidence, not just opinions). Play the recording for students to complete the task. Ask students to check with a partner, then check as a class.

AUDIO SCRIPT

Track 2.3

1 **STEVE:** OK. Well, in the first place, the psychologists disagreed with the claim that the brain-training games affect intelligence. Dr. Warner of the Mayweather Institute

said that, “Playing the games a lot seems to make you better at those games, but the improvement doesn’t appear to transfer to real-life contexts.”

- 2 ANNA:** Wait a minute, Steve. I think you’re only telling one side of the story. First of all, there’s a pretty big group of researchers who claim brain training does work. One website published a list of 132 studies showing that brain training can improve brain function. Moreover, the website included a report signed by more than a hundred scientists, so I believe it must be true.

ANSWERS

- 1** valid argument **2** appeal to popularity

- 2** Students work with a partner to identify the appeals to popularity. Ask students to check with a partner, then check as a class.

ANSWER

Statements 3 and 4 illustrate appeals to popularity.

- 3** Students work in groups to discuss the three questions. For question 1, you could offer some prompts (e.g., Think about what people believed about the world 1000 / 500 / 100 years ago; Think about inventions that people thought would be impossible; Think about fashions that changed suddenly). After a few minutes, go through the discussion questions with the class.

Extra research task

As a homework task, tell students to search the Internet for “things that most people believe but are actually false.” They then choose the one or two most surprising or interesting examples of “non-facts,” and prepare a very short presentation of their findings. They complete the research task at home, and report back in the next lesson. Hold a class vote to choose the most surprising non-fact.

VOCABULARY DEVELOPMENT

WORDS TO DESCRIBE THE BRAIN AND MIND

Warm-up

Elicit from the class the difference between the brain and the mind. (**Possible answer:** They are two ways of describing [more or less] the same thing: the word “brain” focuses on the part of the body, a physical object; the word “mind” describes the activities of the brain, things like thinking, remembering, and knowing. Some people say the brain is a piece of hardware [like a computer] and the mind is software [like a computer operating system]. Some people also claim that there are parts of the mind in other

parts of our bodies, not just our brains.)

As a follow-up, write the following “mind” phrases on the board. Elicit from the class what they mean and how to use them.

I can't make up my mind. (I can't decide.)

I don't mind. (I have no preference.)

Please bear in mind that ... (Please remember this fact when you're planning what to do.)

I'll keep it in mind. (I won't forget.)

Out of sight, out of mind. (It's easy to forget something when you don't see it for a long time.)

Mind the step! (Be careful of the step!)

It's all in your mind. (It's not real—it's just your imagination.)

- 1** Students work alone to match the words and definitions. Ask students to check with a partner, then check as a class.

ANSWERS

- 1** d **2** e **3** g **4** b **5** c **6** h **7** a **8** f

- 2** Students discuss the questions with a partner. When they are ready, ask volunteers to share their ideas with the class.

ACADEMIC WORDS AND IDIOMS

- 1** Students work alone to match the words and definitions. Ask students to check with a partner, then check as a class.

ANSWERS

- 1** c **2** g **3** f **4** a **5** e **6** j **7** d **8** b
9 h **10** i

- 2** Students work alone to complete the sentences. Ask students to check with a partner, then check as a class.

ANSWERS

- 1** contemporary **2** intelligence **3** context **4** revenue
5 take-home message **6** contradict **7** identify
8 boil down to **9** establish **10** diverse

- 3** Have students work with a partner to discuss which of the sentences in Exercise 2 they agree with. When they are ready, open up the discussion to include the whole class.

Extension activity

Students work in teams to come up with sentences that use as many of the words as possible. Set a time limit of around five minutes. At the end of the time limit, ask volunteers to share their ideas. The class votes for the best (or funniest) sentence. **(Possible answer:** I'm sorry to contradict you, but in contemporary society, it is wrong to identify a person's level of intelligence only in the context of their financial revenue.)

SPEAKING MODEL

Warm-up

Tell students to read the information in the box to find three things they are going to learn about. Elicit possible examples for each of the three things.

(Possible answers: Concessions: It's true that typing enables us to write down almost everything ... , but that isn't necessarily ... ; Responding to an argument: I agree with your observation.; Word stress in a contradiction: recording every word **doesn't** require us ...)

A ANALYZE

Tell students to read part of a debate and answer the questions. They discuss their answers with a partner and feed back to the class.

ANSWERS

- 1 Typing notes is better than writing by hand, because it is quicker and less tiring.
- 2 Writing notes by hand is better than typing, because it requires students to listen and decide what to write. This enables them to understand, apply and remember concepts better.

Extension activity

Discuss the structure of Evan's argument with the class, focusing on the purpose of each sentence and useful phrases that students can use in their own debates.

(Possible answers: Sentence 1 ["I think ... "]: He makes his main claim.; Sentence 2 ["Basically, ... "]: He introduces his first supporting argument.; Sentences 3 and 4 ["Most people can ... "; "That way ... "]: He elaborates on his first supporting argument.; Sentence 5 ["And another thing ... "]: He introduces his second supporting argument.; Sentence 6 ["Typing on a ... "]: He elaborates on his second supporting argument.)

Students then discuss the structure of Jay's argument in the same way. After a few minutes, discuss the answers with the class. Point out that these are not necessarily the best

or the only ways of structuring a good argument, but they are both very effective. Encourage students to structure their own debates in a similar way at the end of this unit.

(Possible answers: Sentence 1 ["Well, I agree ... "]: He partially agrees with Evan's arguments, then identifies the area of disagreement.; Sentence 2 ["It's true that ... "]: He partially agrees with Evan's arguments, then makes his own main claim.; Sentences 3, 4, and 5 ["In fact, ... "; "And the take-home ... "; "And they were ... "]: He introduces evidence to support his claim: some research findings.; Sentences 6 and 7 ["The researchers' explanation ... "; "In contrast, ... "]: He reports the research conclusions.; Sentence 8 ["So, the fact that ... "]: He paraphrases his main claim.)

B DISCUSS

Students discuss the questions with a partner. When they are ready, ask volunteers to share their ideas briefly with the class.

GRAMMAR

CONCESSION

Warm-up

Tell students to close their books. Write the following sentences on the board:

- 1 *I can speak English quite well, but I can't speak Russian at all.*
- 2 *I can speak English quite well, but I make too many mistakes.*

Explain that sentence 1 shows *contrast*, while sentence 2 shows *concession*. Elicit the difference between *contrast* and *concession*. **(Possible answer:** Contrast is all about comparing two or more topics [here: English vs. Russian], to show how they are different; concession is about one topic [here: English], and the difference between positive and negative facts about that thing. Contrast and concession use very similar words in English [e.g., but], but there are a few important differences.)

Elicit some words and techniques for concession in English. Then tell students to read the information in the box to compare it with their ideas. Elicit some other words and phrases for concession (e.g., *while*, *whereas* /**wɜr'æz**/, *however*, *on the other hand*).

Point out that the conjunctions *although*, *even though*, and *though* all have the same meaning. *Although* is the most common for concession. We mainly use *even though* for strong or surprising contrasts. We often place *though* at the end of a sentence, especially in informal English. *While*, and *whereas* are mainly used for contrast, but they can also be used for concession. All six conjunctions can come at the beginning or in the middle of a sentence.

The adverbials *nonetheless*, *nevertheless*, *however*, and *on the other hand* all have the same meaning. They typically link separate sentences, and come at the beginning of the second sentence.

- 1 Students work alone to match the sentence halves, then check with a partner. Note that there are several possible endings for some sentence beginnings, but there is only one way of matching all the sentences correctly. When you check with the class, discuss what clues they used to work out the answers.

ANSWERS

1 d 2 a 3 c 4 e 5 b

Extension activity

Students work in small groups to discuss whether they agree with the five statements in Exercise 1.

- 2 Students work alone or with a partner to rewrite the sentences. Point out that there may be several ways of rewriting some sentences. Check carefully with the class, paying attention to any problems or misunderstandings.

ANSWERS

- 1 Although students may enjoy using mobile devices in the classroom, studies show this has a negative effect on exam performance.
- 2 While some students are easily distracted by the Internet, others find it a useful research tool.
- 3 Modern websites may be more interesting, but they actually have a negative effect on our memory.
- 4 Technology can have a powerful impact on learning. Nevertheless, most teachers think cell phones are a distraction in class.
- 5 Even though students say technology has improved their education, much more research is needed to prove this is true.

Extension activity

Students work with a partner to read the *Speaking model* on page 40 and find examples of contrast and concession. Go through the answers with the class.

(Answers: Well, I agree with your observation that typing is more comfortable than writing by hand, I think there's a problem with your first argument.

It's true that typing enables us to write down almost everything the professor says, but that isn't necessarily a good thing ...

... this mental effort helps comprehension and memory. In contrast, it's easy to type automatically, without any critical thinking.

So, the fact that handwriting is slower turns out to be an advantage, while the fact that typing is faster is actually a disadvantage.)

SPEAKING SKILL

RESPONDING TO AN ARGUMENT

Warm-up

Tell students to close their books. On the board, write the sentence *I think smartphones make us smarter—I certainly feel smarter when I use my phone*. Elicit from the class three ways the listener could respond to this argument. Then tell students to read the information in the box to compare it with their ideas. (Possible answers: **1** We can point out weaknesses in the argument [e.g., "But that's just anecdotal evidence"]; **2** We can state an opposite claim [e.g., "I actually think they've made us less smart"]; **3** We can partially agree [e.g., "You're right, up to a point, but ..."].)

- 1 Tell students to read through the dialogues to predict what is missing. Then play the recording once or twice for students to complete the task. Ask students to check with a partner, then check as a class.

AUDIO SCRIPT

Track 2.4

- 1 A:** A professor at Stanford University, Clifford Nass, says that listening to music with words can interfere with a person's ability to focus on reading and writing tasks.
B: On the other hand, lots of studies have shown that listening to classical music can help boost concentration.
- 2 A:** I think students take better lecture notes when they use a laptop instead of writing by hand.
B: There's no evidence to support that idea. In fact, the sources I've read say that students remember information better if they take notes by hand.
- 3 A:** Online courses are super-convenient, don't you agree?
B: That may be true, but I think face-to-face courses are a lot more interesting.

- 4 A:** This article says that lost or damaged brain cells aren't replaced in adults.
- B:** That research is way out of date. Scientists have known for a long time that some parts of the brain can continue to produce new cells even into old age.
- 5 A:** Kids are spending too much time playing games online. It's a waste of time.
- B:** I disagree. Studies have shown that online games can increase teamwork among children and promote creativity.

ANSWERS

- 1** On the other hand **2** There's no evidence
3 That may be true **4** out of date **5** I disagree
- 2** Check that everyone understands the statements. With weaker classes, you could give them preparation time to read the statements and find counter-evidence in this unit. Students work with a partner to practice the techniques. Encourage them to provide evidence for their claims and to elaborate on their arguments. When they are ready, ask volunteers to present their counter-arguments to the class.

PRONUNCIATION FOR SPEAKING

STRESS IN STATEMENTS OF CONTRADICTION

Warm-up

Tell students to close their books. On the board, write the sentence, *The brain is an amazing thing*. Ask volunteers to read the sentence aloud. Elicit which words (or parts of words) are stressed, which are not, and why. (**Possible answer:** Content words [i.e., the words with the most meaning] like *brain*, *amazing*, and *thing* are usually stressed; grammar words like *the*, *is*, and *an* are not normally stressed.) Then elicit which word gets the strongest stress in this sentence and why. (**Possible answer:** *thing*, because it is the last content word in the sentence.)

Now write the following dialogue on the board: **A:** *I think typing notes is better.* **B:** *Really? I think writing by hand is better.* Elicit which word gets the main stress in B's response and why. **Possible answer:** *hand*, because B wants to focus on the contrast with A's statement. *Hand* is a content word, but it isn't the last one.

Next, write the following dialogue on the board: **A:** *You failed your exam because you didn't study.* **B:** *But I did study for it.* Elicit which word gets the main stress in B's response and why. (**Possible answer:** *did*, because B wants to focus on the contrast with A's statement. *Did* is a grammar word, but words like this can be stressed when we need to make a contrast.)

Finally, tell students to read the information in the box to compare it with their ideas.

- 1** Students predict what the missing words might be. Then play the recording for them to check. When you check with the class, ask volunteers to practice pronouncing the sentences with the right stress pattern.

AUDIO SCRIPT

Track 2.5

STEVE: OK. Well, in the first place, the psychologists disagreed with the claim that the brain-training games affect intelligence. Dr. Warner of the Mayweather Institute said that, "Playing the games a lot seems to make you better at those games, but the improvement doesn't appear to transfer to real-life contexts."

FRANKIE: What does that mean?

STEVE: Like for example, the studies couldn't prove that playing word games helped older people remember to take their medicine every day.

ANNA: Wait a minute, Steve. I think you're only telling one side of the story. First of all, there's a pretty big group of researchers who claim brain training does work. One website published a list of 132 studies showing that brain training can improve brain function. Moreover, the website included a report signed by more than a hundred scientists, so I believe it must be true.

ANSWERS

- 1** does **2** can

She stresses these words to contradict the other speaker's arguments.

- 2** Students work alone to predict the stress patterns in B's responses. Play the recording for them to check, then discuss the answers with the class.

AUDIO SCRIPT

Track 2.6

- 1 A:** These statistics aren't correct. The numbers are too large.
B: They ARE correct. I reviewed them myself and I'm sure they're right.
- 2 A:** We don't need to remember numbers anymore because we can store them on our cell phones.
B: I think we DO need to remember them. What if you lose your cell phone?
- 3 A:** Taking notes by hand is inefficient because we can't write everything.
B: Researchers say that's a GOOD thing because it forces you to think about what you choose to write.
- 4 A:** It's not good for young children to learn two languages at the same time. It confuses them.
B: It DOESN'T confuse them. In fact, it makes them smarter!

ANSWERS

- 1** They ARE correct. I reviewed them myself and I'm sure they're right.
2 I think we DO need to remember them. What if you lose your cell phone?
3 Researchers say that's a GOOD thing because it forces you to think about what you choose to write.
4 It DOESN'T confuse them. In fact, it makes them smarter!

Extension activity

Students work with a partner to practice the dialogues, paying particular attention to stress patterns. Make sure they each have a chance to practice the target intonation. At the end, ask volunteers to model their dialogues for the class.

SPEAKING TASK

BRAINSTORM

Go through the brainstorm task with the class. With weaker classes, you could go through the topics to check that everyone understands (e.g., *What do you think "access to information" means?*) Point out that students should aim for a few positive and negative effects for each topic. Monitor the activity and help with vocabulary where needed.

PLAN

Students work with a partner to plan for the debate. If they have access to the Internet, they could research some evidence to support their arguments. Alternatively,

they could conduct this research at home between lessons. As a last resort, you could allow them to invent their own evidence, on the understanding that they should never do this for a real debate. Encourage them to plan how to use the language and techniques from this unit.

SPEAK

Students work in their groups to hold their debates, following the structure of the model on page 40.

REVIEW

Ask volunteers from each group to report back to the class. Discuss the quality of the evidence they used, and their use of techniques from this unit.

REFLECT

Students discuss the questions with a partner or in small groups.

REVIEW

WORDLIST

Students work with a partner or in a small group to work through the wordlist, checking that they all remember what each word or phrase means, how to pronounce it, and how it was used in the unit. Go through the list carefully with the class.

ACADEMIC WORDS AND IDIOMS REVIEW

Students work through the sentences, then check with a partner and provide feedback to the class.

ANSWERS

- 1** take home message **2** contradict **3** boil down to
4 identify **5** diverse **6** Establishing

UNIT REVIEW

Students work through the list alone to decide what they can and can't do. They discuss their answers with a partner, including what they remember from the unit about each point. Finally, open up the discussion to include the whole class. Pay particular attention to any boxes that the students didn't check. Explore with them ways of overcoming any remaining problems.