

5) Choose the correct answers.

- 1 Mark, can you go to the grocer's and get some vegetables? I _____ a salad.
a make b 'll make c am going to make
- 2 Let's hurry up, shall we? The match _____ in a few minutes.
a starts b will start c is starting
- 3 Let's start. I think Martha _____ a bit later.
a comes b will come c is going to come
- 4 I need to pick up Tom tomorrow morning. He _____ hospital at 9.30.
a leaves b will leave c is leaving
- 5 Look at Brenda! She's so pale! She _____ in a moment.
a is fainting b will faint c is going to faint
- 6 At what time _____ leave?
a does your train b will your train c is your train going to
- 7 _____ you a cup of coffee?
a Will I make b Shall I make c Do I make
- 8 If you don't know how to do this, I _____ you post the photos.
a 'm helping b 'll help c 'm going to help

6) Complete the second sentence so that it means the same as the first, using the word given.

- 1 The guy on the bike may fall off any moment.
The guy on the bike _____ off. **GOING**
- 2 I have one hour before the flight.
The _____ an hour. **TAKES**

- 3 We've arranged to have a party on Saturday.
We _____ on Saturday. **ARE**
- 4 Jason is planning to create his own website.
Jason _____ his own website. **TO**
- 5 Do you want me to call you in the afternoon?
_____ you in the afternoon? **SHALL**

7) Translate the Polish parts of the text into English.

Hi Peter,

Remember how much I've always wanted to study IT? Well, I've just decided to enrol on a computer course, and it ¹_____ (*zaczyna się*) next Monday. And that's not all the good news. My dad ²_____ (*zamierza kupić*) me a new laptop with all the latest software to help me learn more.

The course is quite advanced. We ³_____ (*nie będziemy się uczyć*) the basics. During the course, I ⁴_____ (*będę się uczyć*) computer programming. I think in the future everybody ⁵_____ (*będzie musiał*) know how to write code. It ⁶_____ (*będzie*) absolutely essential. I find it really fascinating, so I hope it ⁷_____ (*będzie*) great fun.

⁸_____ (*Czy robisz*) anything this weekend? We could meet on Saturday. I ⁹_____ (*zadzwońię*) later.

Mark

Future time clauses

W zdaniach okolicznikowych czasu przyszłego stosujemy następujące spójniki: **after** (po tym, jak), **as soon as** (jak tylko), **as long as** (jeśli tylko/o ile), **once** (kiedy już), **when** (kiedy), **before** (zanim), **until** (do czasu aż), **unless** (chyba że), **in case** (na wypadek).

Uwaga!

W zdaniach okolicznikowych tego typu, gdy odnosimy się do przyszłości, używamy czasu **present simple**:

Sheila **will** phone us **as soon as** her guests **leave**.

(NOT: her guests ~~will~~ leave)

Grammar challenge! » Student's Book, page 111, UNIT 4

Aby podkreślić, że coś wydarzy się dopiero wtedy, kiedy inna czynność zostanie zakończona w przyszłości, stosujemy czas **present perfect**:

I'll call you after I have done my homework.

1) Match the parts of the sentences.

- 1 Make sure all the windows are closed before ☐
 - 2 I'll make you some sandwiches in case ☐
 - 3 I promise I'll give you the results as soon as ☐
 - 4 Susan will text you once ☐
 - 5 As long as the match starts on time, ☐
 - 6 Unless I finish this project, ☐
 - 7 I need to see her! I'll wait here until ☐
- a I'll be home before midnight.
b you get hungry before supper.
c you leave the house.
d she comes back from school.
e she gets to the hotel.
f I get them.
g my parents won't let me go out.

2) Choose the correct options to complete each sentence.

- 1 It's a long story. I **tell** / **'ll tell** you everything when we **meet** / **will meet** tomorrow.
- 2 As soon as she **is** / **will be** back home, I **let** / **will let** you know.
- 3 Take an umbrella in case it **will rain** / **rains**.
- 4 We will continue playing the game after we **will have** / **have** lunch.
- 5 Don't turn off the kettle until the water **boils** / **will boil**.
- 6 **Do** / **Will** you help us after you **do** / **will do** your own work?
- 7 As long as you **won't break** / **don't break** anything, you can take my laptop.
- 8 You need to save your work before you **will turn off** / **turn off** the PC.
- 9 They won't do any research this year unless they **will get** / **get** the money.

3> Complete the mini-dialogues with the correct form of the verbs in brackets.

- 1 A I can't wait to get to the beach, can you?
B You bet I can't! I _____ (jump) into the water as soon as we _____ (get) there.
- 2 A Could you post this parcel for me?
B Yes, I _____ (do) it when I _____ (go) to the shops.
- 3 A Have you already decided what you're going to do at the weekend?
B No, but I _____ (call) you as soon as I _____ (know).
- 4 A Is there anything you can do now?
B I am afraid I cannot do anything now, sir, but I _____ (exchange) the radio as soon as you _____ (bring) your receipt.
- 5 A Can I talk to Dr Smith?
B He's busy at the moment, but he _____ (see) you after he _____ (finish) examining a patient.

4> Rewrite the sentences, using the linking words given.

- 1 I'll leave you my friend's phone number. My battery may run flat. **IN CASE**
- 2 You'll take up some sport. Then you'll feel much better. **AS SOON AS**
- 3 They will send me a catalogue first. Then I'll choose a new laptop. **ONCE**
- 4 I will tell Bob everything. He will hear it from somebody else, anyway. **BEFORE**
- 5 We will finish renovating the house inside. Then we'll clean up the garden. **AFTER**
- 6 He has to receive the spare parts. Then he will repair the machine. **WHEN**

5> Complete the text with the correct form of the words below.

focus do succeed manage not study finish

I developed an interest in medical research while I was attending the science club last year. I got so interested in medicine that I decided to go to pre-med school when I ¹ _____ secondary school. However, after I ² _____ the basic course, I ³ _____ to be a doctor. Once I get my BSc degree from pre-medical university, I ⁴ _____ on pharmacy. You see, I hope to invent a cure for cancer one day. And I am very determined. I won't give up until I ⁵ _____ or until somebody else ⁶ _____ to do it before me.

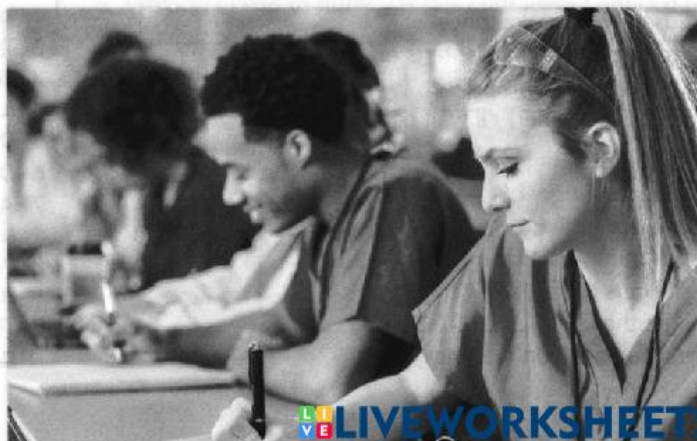
Grammar challenge! » Student's Book, page 111, UNIT 4, ex. 1

6> Complete the sentences, using the present perfect.

- 1 I want to eat lunch. Then we will talk.
When I've finished lunch, we will talk.
- 2 You need to do the washing-up first. Then you can watch TV.
You can _____
- 3 I'll give you my notes, but I need to do an experiment first.
As soon as _____
- 4 A photo uploaded to a website never disappears from the Internet.
Once you _____
- 5 First make a decision, and then let me know.
Once _____
- 6 We'll go out soon, but she needs to finish getting dressed first.
After _____
- 7 I'm reading the book now, so I'll lend it to you later.
When _____

7> CUMULATIVE GRAMMAR Use the words in brackets to complete the sentences. Add any extra words where necessary.

- 1 I _____ (sleep / friend / house) tomorrow. – She's invited me to her place for the weekend.
- 2 When _____ (Tim / finish / French / Wednesday)? I could pick him up.
- 3 A I'm going to the swimming pool.
B Great idea! I _____ (go / you).
- 4 Why don't you take a sandwich in case _____ (you / be) hungry.
- 5 Wait for me outside. I'll join you _____ (soon / I / write) this report.
- 6 Hurry up! _____ (bus / leave / five minutes).
- 7 This is delicious! You _____ (not know / until / you / taste) it.
- 8 A The TV is on. _____ (you / watch) something?
B Yes, _____ (my / favourite / film / start) 8.00.
- 9 He _____ (not be / on time) unless he runs.
- 10 I've already thought about my birthday, and I _____ (book / table) at Luigi's next week.



1) Read the texts and decide which of them

- a explains the origins of a famous concept. _____
- b shows how art and technology can be connected. _____
- c shows a possible future of our home and work. _____

2) Read the texts and choose the right answers.

Text 1

We're used to the word Internet being synonymous with the World Wide Web – a worldwide network of computers and servers connected through cables and wi-fi to allow us to communicate. But now there's also the IoT – the Internet of Things. This is a **network** of connected mechanical devices and potentially also living organisms with a built-in device such as a microchip. Each element of the IoT is given a unique IP address in order to be able to transfer data. The IoT collects the data from the devices and their **sensors**, analyses it and reacts to the outcomes. The IoT allows us to **increase efficiency** or fix small problems, without the need of a human intervention, although human administrator can interfere. The IoT is already widely used in business to save time and money, improve services and even make minor business decisions. Your future smart home will also be a part of the IoT. It will be up to you to decide if you want to leave the shopping and cooking decisions entirely to your IoT.

According to the text, the Internet of Things

- a uses microchips to connect human beings to the Internet.
- b is allowed to make human-independent decisions.
- c is used in business to collect data from various internet sources.

Text 3

FUTURISTIC POETRY EVENING

WHAT Poetry reading and cool competition for our audience (no, you do not need to be a poet, that's taken care of)

WHY University researchers and scientists all over the world have been working on teaching AI to write poetry. They've been **feeding AI data** such as rules of rhymes, meter and, of course, the use of grammar and vocabulary. And getting results! Their AIs have produced some really cool poetry and we want to give it the Turing Test.

HOW We've asked our creatively inclined students and teachers to write their own poems on similar topics. We want you to try and tell apart the human and machine written ones. Come and listen to the poetry reading and then vote on who wrote what. Will the poems pass the Turing test? Can you escape being fooled by a machine?

PRIZES FOR THE PARTICIPANTS!

Text 2

Alan Turing was an English mathematician, computer scientist and philosopher way ahead of his time. This was just the dawn of the era of computers, but the question of whether computers can think was already sparking huge discussions. Because 'thinking' is difficult to define, in 1950 Turing proposed to ask instead a closely related question whether a computer could imitate a human being well enough for the human being **interacting with** it not to be able to tell the difference. This became known as the Turing Test and to this day remains one of the most important concepts in the philosophy of artificial intelligence as well as one of the greatest challenges to AI creators. The annual competition known as the Loebner Prize, held since 1991, has yet to see an AI that would completely fool its judges in both writing and speech, although **chatbot** programs like ELIZA or MITSUKU have managed to fool unsuspecting human beings. Various analyses of the results suggest, however, that this is achieved through employing imitations of silly joking conversation tricks, whereas the test originated with idea of imitating human *intelligence*.

The author of this text suggests that Alan Turing

- a wanted to issue a challenge to all other computer creators.
- b predicted the invention of AI programs such as chatbots.
- c might have understood 'fooling' differently than chatbot creators.



The poetry evening will involve

- a a poem writing competition.
- b an explanation of how AI writes poetry.
- c guessing the origins of the poems.

3> Match the words in bold from the texts in exercise 2 with definitions a-f.

- a computer program designed to have a conversation with people
- a large system made of many parts
- communicate with or react to
- devices used to measure and record changes in sth, eg. temperature
- make it possible to do more work quicker and better
- give information to an artificial intelligence system

4> Are the sentences true (T) or false (F)? Correct the false ones.

- 1 You can use chatbot to talk to your friends via the Internet. T / F
- 2 All your family computers, printers, smart TVs and local disks connected together, but not to the Internet, don't create a network. T / F
- 3 House alarms often have movement sensors which react to anything moving inside. T / F
- 4 Pets such as cats and dogs interact with their owners. T / F
- 5 Updates aren't supposed to increase the efficiency of your computer system. T / F
- 6 If you want AI to create a playlist especially for you, you should feed it data about your musical preferences. T / F

Revision ■ Student's Book, pages 44–45

5> Unscramble the words to complete the phrases. What is the hidden message?

- 1 make _____
- 2 _____ space
- 3 _____ the human race
- 4 colonise the _____
- 5 _____ a human _____
- 6 _____ on Mars

- 1 HIRSYOT

			5				
--	--	--	---	--	--	--	--
- 2 LERPOEX

		2					
--	--	---	--	--	--	--	--
- 3 EEFITBN

	9						
--	---	--	--	--	--	--	--
- 4 NEERVUIS

			8		6	1	
--	--	--	---	--	---	---	--
- 5 LISTAHBES

			3				
--	--	--	---	--	--	--	--
- TEELMTESTN

				10	4		
--	--	--	--	----	---	--	--
- 6 NADL

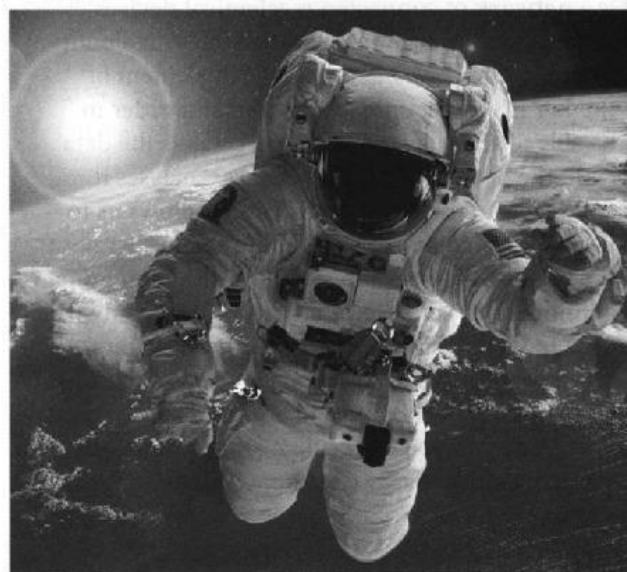
	7		
--	---	--	--

The hidden message:

			C						
1	2	3	4	5	6	7	8	9	10

6> Complete the sentences with the correct form of the phrases from exercise 5.

- 1 Most people think we won't be able to _____ unless we discover how to travel faster than the speed of light.
- 2 The discovery of water on Mars could help _____ there.
- 3 The first landing on the moon _____.
- 4 Finding energy sources on other planets would _____.
- 5 In the future, we will _____, looking for other planets to live on.
- 6 When we _____, we might discover that other intelligent life has already been there.



Vocabulary challenge! » Student's Book, page 110, UNIT 4, ex. 3 and 4

7> Complete the sentences with the correct form of the words in brackets.

- 1 Let's not go to the restaurant on Saturday, it will be _____ (crowd) and we'll never get a good table.
- 2 If you fail this exam, you'll have to _____ (take) it within two weeks.
- 3 Ironically enough, bright students often _____ (achieve) because the school does not motivate them enough.
- 4 Many people _____ (approve) of so much money being spent on space research when thousands are starving.
- 5 In multicultural societies, people from different backgrounds have to _____ (exist).
- 6 Do you think people who've bought tickets for space voyages have been _____ (lead) as they're unlikely to ever travel into space?
- 7 I thought I saw a UFO, but before I found my camera to take a picture, it _____ (appear).

SPEAKING

a stimulus-based discussion

- 1) Complete the sentences with the correct form of the words below. Two words do not need to be changed.

rather little write good text use far

- The _____ choice for me would be to contact my family via video chat.
- It is _____ more comforting to hear mum's voice than to read a text message.
- Email communication appeals to me the _____ because I can't see the person I am talking to.
- On top of this, I'd prefer _____ a video communicator so that I can show them where I live.
- I'd _____ chat with somebody than text them.
- I wouldn't go for the option of _____ them because the messages are very short.
- I find _____ long emails rather boring.

- 2) Write the sentences. Use the expressions below.

would rather would prefer prefer to

- Powiedz, że wolałbyś/wolałabyś rozmawiać z lekarzem człowiekiem niż z robotem.
- Zapytaj koleżankę, czy wolałaby pozwolić, by komputer prowadził samochód zamiast robić to sama.
- Nie zgódź się z opinią, że młodzi ludzie wolą komunikację przez media społeczne niż przez maile.
- Zapytaj, dlaczego kolega woli używać komunikatorów niż pisać smsy.

- 3) Do the speaking task and answer the two questions below. Write 4–5 sentences.

TEST IT! ⌚ 5 minut

Przygotowujesz się do egzaminu z chemii. Wyraż swoje zdanie na temat dwóch poniższych form przygotowania się do testu.

- Wybierz ten sposób, który byłby dla Ciebie najbardziej odpowiedni, i uzasadnij swój wybór.
- Wyjaśnij, dlaczego odrzucasz drugi sposób.



- Do you agree with the opinion that information technology makes life easier? Why?/Why not?
- What, in your opinion, is the better source of information about science: science books or science programmes? Why?

WRITING

a letter to the editor

4

- 1) Complete the sentences.

- I feel I should make my voice _____ r _____ in matters concerning my g _____ r _____ n.
- One must _____ r _____ in mind that smartphones have many h _____ d _____ features.
- I am u _____ l _____ convinced that such actions are pointless.
- In the future, technology is b _____ n _____ to play an even greater role in our lives.
- T _____ s, we need to be careful not to become a _____ c _____ d _____ to social media.
- It is e _____ s _____ t _____ l _____ that we are aware of these problems.
- It is w _____ h _____ remembering that g _____ m _____ k _____ applications are designed to draw us in.

- 2) Use the prompts to write sentences. Use the correct form of the verbs. Add extra words where necessary.

- go / without / say / younger kids / be / more likely / become addicted / technological gadgets.

- I / object / when / people / say / every teenager / abuse technology.

- I / hold / action / make / people / aware / problem / be worth a try.

- Our jobs / be / certain / require / use of technology.

- result / we / become / dependent / our phones.

- What / be / crucial / be / the ability / turn off the phone for a time.

- What / matter / be / we / use these gadgets sensibly.

- 3) Read the instructions and do the writing task.

TEST IT! W Twoim ulubionym magazynie pojawił się artykuł o eksperymencie, w którym, w ramach badań nad uzależnieniem od telefonów, uczniowie szkoły średniej zostali poproszeni o nieużywanie ich przez tydzień. Napisz list do redakcji (100–150 słów), w którym napiszesz, czy, Twoim zdaniem, Twoje pokolenie jest uzależnione od smartfonów, i uzasadnisz swoje stanowisko oraz przedstawisz swoją opinię na temat eksperymentów takich, jak ten wspomniany w artykule.

1) Choose the correct answers to complete the mini-dialogues.

1 X _____

Y As soon as I've finished my homework.

- a Have you seen this film?
- b When can you come over?
- c Why are you playing on your computer?

2 X Would you rather use the new search engine or the old one?

Y _____

- a To be honest, I prefer the old one.
- b No, I haven't found it.
- c Yes, it's rather old.

3 X I'd go for the smartwatch, what do you think?

Y _____

X Maybe you're right. It's too expensive.

- a OK, I'm ready to leave.
- b I think you should choose something else.
- c Yes, it's very expensive.

4 X Shall I help you set it up?

Y _____

- a Could you? I don't know what I'm doing wrong.
- b Yes, I've already finished creating my account.
- c I can see you bought a new smartphone.

5 X The news is likely to quickly spread over social media.

Y _____

- a Yes, it's bound to happen.
- b I don't like such news either.
- c No, I don't trust social media.

2) Complete the sentences with the correct form of the words in brackets. Add extra words where necessary. Use no more than five words.

1 I think that in the future people _____ (not have to / do) any housework thanks to special home robots.

2 You'll have to enter your personal details _____ (before / you / start) using their service.

3 I _____ (prefer / make / notes) by hand rather than on a laptop.

4 When I am learning chemistry, I _____ (rather / do / experiment) than read about it in my textbook.

5 The coffee machine _____ (switch on / automatically) 7.00 a.m.

6 If _____ (you / not update) your antivirus software, your computer will be at risk.

7 Unless _____ (he / use) secure websites, sooner or later he will have malicious software on his computer.

8 You can use the computer as _____ (soon / I / install) the parental controls.

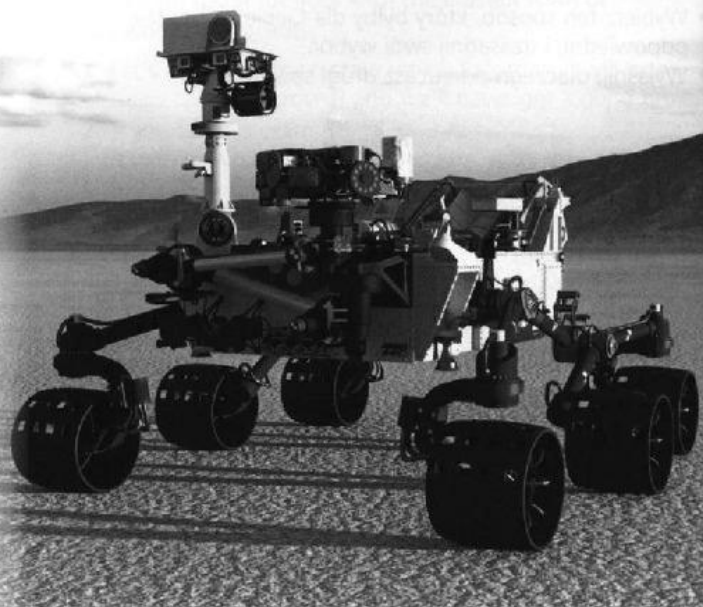
3) Read the text in exercise 4 below. What part of speech is missing in each space?

	noun	auxiliary verb (x2)	verb preposition (x2)	linking word
1 _____		4 _____		7 _____
2 _____		5 _____		
3 _____		6 _____		

4 Complete the text with appropriate words. Put one word in each space.

15th March

We're finally here. The spaceship shook worryingly as we were going through Mars' atmosphere, but we landed safely. Before any astronauts get out of the ship, we're sending the robots to check things out just in ¹ _____ there's any risk. They need to confirm that the area is safe to walk in, and that there's no harmful radiation. I ² _____ prefer to go by myself rather than wait for the robots to give us the green light, but those are the rules. It's been five hours ³ _____ they disappeared behind that hill. They should be back by now! Anyway, after they ⁴ _____ returned and confirmed it's safe, I'm out of here! I'd like to ⁵ _____ a look at the little flat area close to the ship. I think it might be a perfect place for my lab. Max disapproves ⁶ _____ it, he thinks the lab would be safer inside the ship. But that's impossible. While it ⁷ _____ without saying that safety is our top priority, there's just not enough space inside.



1) MP3 09 Listen to the radio programme and choose the options which complete them according to the text.

- a A virtual twin is like a *digital best friend* / *digital version of you*.
- b Trump Sidekick *imitates* / *helps create* Donald Trump's tweets.
- c Your virtual twin can suggest *improvements to your life* / *songs and videos you might like*.
- d The twin *may* / *must* be created on your phone.

2) Use expressions from A and B to create collocations and match them with the definitions.

A give browser store imitate know

B output inside out consent history in a cloud

- a _____ my _____: say/write things that sound like me
- b _____: list of websites you visited using a search engine
- c _____ sb/sth _____: know someone/something very well
- d _____ sth _____: keep data on a special server outside your computer
- e _____: give permission, agree

3) TEST IT! MP3 09 Wysłuchaj programu radiowego o nowinkach ze świata techniki i uzupełnij zdania 1–5 zgodnie z treścią tekstu.

- 1 The three things the digital twin learns from analysing your tweets and chats are the _____ that you engage in, your _____ and your _____.
- 2 The digital twin knows what you like to eat and watch from your _____ and _____.
- 3 The digital twin can interact with other people 'in your name' by _____ concerning you / your lifestyle / your preferences.
- 4 The suggestion to call your grandma is an example of how the twin could help to _____.
- 5 Both women agree that we should be cautious about _____ personal data.

4) Complete the sentences with your own ideas.

- 1 I'd rather search for information on the Internet because _____.
- 2 If we use a presentation program, we'll be able to _____.
- 3 Unless we have an overhead digital projector, we won't be able _____.
- 4 I'd prefer to work on my laptop rather than use a school computer because _____.
- 5 I find Wikipedia to be a bit unreliable as a source of information because _____.
- 6 I prefer searching for information to preparing presentations because _____.
- 7 As far as the topic goes, why don't we talk about _____.

5) Read the instructions and do the speaking task.

TEST IT! ⌚ 4 minuty

Razem z kolegą z klasy pracujecie nad prezentacją, w której przedstawicie najważniejsze, Waszym zdaniem, odkrycie naukowe ostatniego stulecia. W rozmowie z kolegą porusz następujące kwestie.

wybór tematu
prezentacji

niezbędne
materiały

przygotowanie
prezentacji

sprzęt, z którego
będziecie korzystał

Rozmowę rozpoczyna egzaminujący.

6) Which of the sentences are suitable for the writing task in exercise 7? Why are the remaining sentences unsuitable?

- a In my opinion, video calls will be the most popular way of communicating in the future because it's easier to speak than write and people are simply lazy. ☐
- b My friends and I rarely send emails, and I don't think we'll start sending more emails in the future. ☐
- c My favourite way of communicating with my friends is via social media since we can share not only our thoughts but also our favourite songs, films or interesting articles. ☐
- d I usually video chat with my friends as I'd rather speak than write, and also I like to be able to see the person I'm talking to. ☐
- e In the past, people used to write their letters by hand, but nowadays not many people use this form of communication. ☐

7) Read the instructions and do the writing task.

TEST IT! Magazyn młodzieżowy ogłosił konkurs pt. *Communication of the Future*. Napisz artykuł (200–250 słów), w którym opiszysz, w jaki sposób i dlaczego właśnie tak najchętniej komunikujesz się ze znajomymi, oraz wyjaśnisz, jak – Twoim zdaniem – komunikacja między ludźmi zmieni się w przyszłości.

