

9 NAUKA I TECHNIKA

1 Podpisz urządzenia elektroniczne. Pierwsze litery brakujących wyrazów zostały podane.



1 w ebcam

2 h _____



3 p _____ d _____

4 c _____



5 r _____ c _____

6 p _____

2 Uzupełnij luki czasownikami z ramki w odpowiedniej formie. Dwa czasowniki zostały podane dodatkowo.

click copy delete press print reset save set

My parents can't cope with technology very well, so they always ask me for help ...

- when they've deleted something important by accident.
- when they've forgotten their passwords and have to _____ them.
- when they want to _____ and paste a bank account number.
- when they're _____ the same page one hundred times by mistake.
- when they're trying to _____ a file to a full pen drive.
- when they can't _____ the alarm clock on their mobiles.

3 Zakreśl właściwe wyrażenia. Czasami obie opcje są poprawne.

- I need to charge my phone. The battery is **dead / low**.
- I often text **to my friends / my friends** instead of calling them.
- My dad **set up / topped up** my phone with 10 euros.
- There's no **signal / coverage** in the basement of my house.
- I have only **made / done** one phone call today.
- It's rude to hang **out / up** when you get the wrong number.

4 Wpisz brakujące wyrazy.

	Area of science	Person
1	biology	<i>biologist</i>
2		chemist
3	genetics	
4	history	
5	physics	

5 Uzupełnij zdania słowami z ramki.

bacteria cells liquid solid steam vaccine

- When water is heated to 100 degrees, it turns into steam.
- A substance that protects people or animals from disease is a _____.
- Living organisms are built of _____.
- In the past, people didn't know that diseases are caused by _____.
- When a liquid freezes, it becomes _____.
- _____ is a substance that is not a solid or a gas, for example water or milk.

6 Przeczytaj definicje i odgadnij słowa. Pierwsze litery brakujących wyrazów zostały podane.

- You can travel in space with this vehicle. – spaceship
- A place that shows you the movement of stars and planets. – p_____
- A type of gas that is necessary for most animals and plants to live. – o_____
- The energy that is necessary for most devices to function. – e_____
- Everything around you: plants, animals, weather, land, water etc. – e_____

7 Uzupełnij zdania czasownikami z ramki w czasie Past Simple.

carry discover invent measure observe prove

- The Scottish chemist William Ramsay discovered the gases argon, krypton, neon and xenon.
- Alexander Graham Bell and Elisha Grey _____ the telephone separately at about the same time.
- The French chemist Louis Pasteur _____ out an experiment to show that fermentation is caused by bacteria.
- The American astronomer Edwin Hubble _____ distant galaxies through a telescope.
- Copernicus _____ that the Earth goes around the Sun.
- In 1676, the Danish astronomer Olaf Roemer _____ the speed of light.

8 Uzupełnij tekst słowami z ramki.

come devices discoveries experiments
knowledge lab prize research scientist

Have you ever thought of being a ¹ scientist ?
It must be fascinating to ² _____ up
with different theories and ideas, to make
a lot of ³ _____ or design new
⁴ _____ and machines. But before you
receive your Nobel ⁵ _____ in science,
you have to work hard and practise certain skills.
You need to be focused and analytical. Patience
is also important because you will spend long
hours in the ⁶ _____, where you will
carry out ⁷ _____ that will prove your
theory (or maybe not). All in all, ⁸ _____
will certainly broaden your ⁹ _____ and
make you a better scientist.

9 Znajdź słowo, które nie pasuje do pozostałych. Następnie ułóż z tym słowem zdanie.

- 1 galaxy solar system vaccine universe
- 2 password screen mouse printer
- 3 text sb find out charge top up
- 4 chemistry maths physicist biology
- 5 plug in break down switch off device

- 1 I got a vaccine and now my arm hurts.
- 2 _____
- 3 _____
- 4 _____
- 5 _____

10 Uzupełnij zdania odpowiednimi rzeczownikami utworzonymi od słów podanych w nawiasach.

- 1 Marie Curie-Skłodowska was a famous chemist who discovered polonium and radium. (CHEMISTRY)
- 2 Thales, a famous Greek _____, used Maths to solve his everyday problems. (MATHEMATICS)
- 3 The Hubble Telescope allowed astronomers to make significant _____ about our galaxy. (DISCOVER)
- 4 In his lecture *Life in the Universe*, Stephen Hawking talked about the _____ of life in space. (POSSIBLE)

BBC VOX POPS

- to use something **for doing** something – używać czegoś do robienia czegoś, np. *I use Facebook for arranging my social life.*
- to use something **to do** something – używać czegoś, aby coś zrobić, np. *I use this lucky pen to write my tests.*

11 Zakreśl prawidłową formę.

- 1 My sister uses her tablet for **check / checking** social networking sites.
- 2 She also uses it to **communicating / communicate** with her friends.
- 3 She uses her smartphone for **Skyping / Skype** with her boyfriend.
- 4 She uses her laptop to **preparing / prepare** projects for school.
- 5 She also uses the Internet for **playing / play** games online with friends.

12 v1 What do you use technology for? Obejrzyj wideo i dopasuj osoby 1–5, o których jest mowa, do sprzętów A–E, których używają.



1 Roshni 2 Cecile 3 Adrian

Who uses what?

- 1 Roshni's dad A design programs
- 2 Roshni's mum B computer, tablet, smartphone
- 3 Roshni C computer, iPad, phone
- 4 Cecile's boyfriend D computer
- 5 Adrian's brother E computer, phone

13 v1 Obejrzyj wideo jeszcze raz i uzupełnij luki w zdaniach.

- 1 Roshni's dad uses his computer or iPad for emailing people at work.
- 2 Roshni's mum uses her computer to _____ programmes online.
- 3 Roshni uses her computer to _____ essays.
- 4 Cecile's boyfriend uses his computer for _____ the weather.
- 5 Adrian's brother uses design programs for _____.

14 Odpowiedz na pytanie *What do you use technology for?* Użyj 50–120 słów.

1 Uzupełnij zdania czasownikami z ramki w stronie biernej czasu Present Simple.

break charge construct download
observe use

- The car is broken, so you need to take it to the mechanic's.
- The remote control _____ to operate a TV from a distance.
- I usually buy headphones that _____ in Europe.
- When new apps _____ to your smartphone, you often need to give some personal information.
- When your laptop battery _____, it doesn't need to be plugged in.
- The solar system _____ in the Piwnice University Observatory near Toruń.

2 Przeczytaj zdania odnoszące się do polskich naukowców i ich wynalazków/odkryć. Przekształć zdania ze strony czynnej na bierną, używając czasu Past Simple.



- Mieczysław Wolfke constructed the hologram in 1920.
The hologram was constructed in 1920 by Mieczysław Wolfke.



- Jan Szczepanik and Kazimierz Żegleń designed the bulletproof jacket in 1902.



- The Mielec Aviation Works made the first Melex in 1971.



- Henryk Magnuski created the first Walkie-Talkie in the 1940s.

3 Uzupełnij zdania czasownikami w stronie biernej w czasie Present Perfect lub Future Simple.

- My digital camera (**steal**) has been stolen. I'm going to report this to the police.
- New TV sets (**install**) _____ in this hotel next week.
- My laptop (**repair**) _____ by my cousin. I can finally use it now.
- This switch (**replace**) _____ by the electrician. I've just called him.
- This charger (**break**) _____ by my children.

4 Wybierz poprawne tłumaczenie i uzupełnij luki w zdaniach opcjami A, B lub C.

- YouTube settings (**zostały zmienione**) _____.
A have been changed
B have changed
C changed
- My e-mail address (**nie został napisany**) _____ correctly. That's why I don't have the message.
A hasn't typed
B didn't type
C hasn't been typed
- Electric toothbrushes (**są używane**) _____ by everybody in my family.
A are used
B used
C is used
- The instruction manual (**nie został wydrukowany**) _____ because there was no paper.
A weren't printed
B wasn't printed
C didn't print
- My posts (**nie są czytane**) _____ by my parents.
A weren't read
B aren't read
C haven't been read
- Great photos (**robi się**) _____ with this camera.
A take
B are taking
C are taken
- My tablet (**będzie naprawiony**) _____ next week.
A will fix
B be fixed
C will be fixed

5 Ułóż zdania twierdzące, przeczące lub pytające w stronie biernej w czasie Present Simple.

- The best pictures / not take / with a smartphone / .
The best pictures aren't taken with a smartphone.
- How / smartphones / make / ?

- This TV / not know / as the best on the market / .

- How many / security cameras / install / around the school / ?

- Where / such cameras / sell / ?

- A new Bluetooth speaker / buy / every year / .

- What / this / call / ?

6 Przekształć zdania ze strony czynnej na bierną. Użyj podkreślonego wyrażenia jako podmiotu nowego zdania.

- Does she create a new folder for each subject?
Is a new folder created by her for each subject?
- Do you always switch off the TV at night?

- The police have arrested three hackers.

- Did British archaeologists find the remains of King Richard III in Leicester?

- They won't publish my article about Copernicus.

- Have they constructed the new bridge yet?

7 Uzupełnij luki w poniższym żarcie formą czynną lub bierną czasownika w odpowiednim czasie.

- A: Do you want to hear a story? The story ¹ (tell) *was told* by my older sister some time ago.
B: Perfect! I'm all ears*!
- A: This is a well-known story about Romeo and Juliet, but it's a new version. Romeo and Juliet came from rich families. They ² (meet) _____ online in a teenage chat room.
B: OK. What ³ (happen) _____ next?
- A: They ⁴ (fall) _____ in love, but their love ⁵ (tragically / end) _____ by some bad people.
B: ⁶ (they / kill) _____?
- A: No, they weren't. Juliet's computer ⁷ (hack) _____ and Romeo's laptop ⁸ (steal) _____!

* I'm all ears! – Zamieniam się w słuch!

8 Zamień podane zdania na stronę bierną. Jeśli to możliwe, użyj *by* lub *with*.

What does science promise for the future?

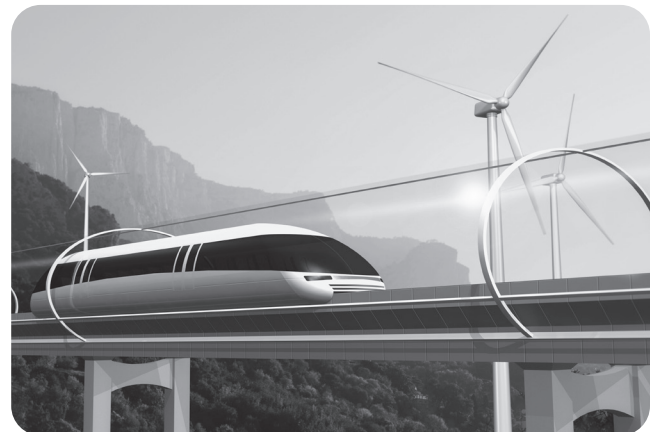
- In the future, stomach electronic chips will monitor your diet.
In the future, your diet will be monitored with stomach electronic chips.
- Magnetic levitation trains will transport people between cities.

- In twenty years, clothes will give us superpower skills!

- No one will use smartphones anymore in 2030.

- Drones will monitor endangered species.

- Patients will use smartphones to do all check-ups.



a magnetic levitation train


9 Pomyśl o trzech rzeczach, które będą wykonane dzięki technologii w przyszłości. Zapisz te zdania w stronie czynnej i biernej.

Rescue teams will use electronic noses to find people.
Electronic noses will be used by rescue teams to find people.

- _____
- _____
- _____


10 Uzupełnij zdania, wykorzystując podane w nawiasach wyrazy w odpowiedniej formie.

- I (often / tell) am often told by my friends and family that I'm very creative.
- In my opinion, creativity (not / measure) _____ school tests.
- To me, the Internet is the best thing that (ever / invent) _____.
- I think that too much time (waste) _____ on inventing useless products.
- I hope a universal language translator (invent) _____ soon.

11  Przeczytaj tekst. Spośród wyrazów podanych w ramce wybierz te, które poprawnie uzupełniają luki 1–3. Trzy wyrazy zostały podane dodatkowo i nie pasują do żadnej luki.

A keep B file C least D present E stored F screen

I got my first computer for Christmas when I was nine years old. It was a very simple and cheap laptop with a very small ¹ _____. At that time, a lot of my friends already had fast computers. But I wasn't unhappy. I used it to play games and it was fine. At ² _____, I've got a fantastic desktop computer that is fast and reliable. All my data is ³ _____ on it. I don't know what I would do if it crashed!


12  Przeczytaj opis zdjęcia. Uzupełnij każdą lukę (1–3) jednym wyrazem tak, aby powstał spójny i logiczny tekst zgodny ze zdjęciem.



This photograph was ¹ _____ in the IT classroom. There are three students in their teens. They are sitting in ² _____ of computers and they seem quite busy. The girl in the foreground is reading something. The other students have their hands on the computer mouses. They are probably ³ _____ on something.

13 Przetłumacz podane w nawiasach fragmenty zdań na język angielski, wykorzystując podane wyrazy w poprawnej formie.

- The pen drive (nie został odczytany) **READ**
wasn't read because it was broken.
- The Nobel prize (jest przyznawana) **AWARD**
_____ since 1901.
- When (został wynaleziony) **INVENT**
_____ the Internet
_____?
- This stain (została usunięta) **REMOVE**
_____, so now the
shirt is clean!
- A fascinating documentary (zostanie pokazany) _____ on TV. **SHOW**

14  Przeczytaj tekst i uzupełnij luki w zdaniach opcjami A, B lub C.



TWO WHEELS AND YOU ARE OFF!*

Travelling in traffic can be difficult and frustrating, so people are constantly looking for ways to make it easier. One type of vehicle that can be very useful is a two-wheel personal transporter ¹ _____ Segway. It ² _____ you around streets, parks or airports. The first such vehicle ³ _____ by Dean Kamen in 2001 and soon many versions became available all over the world. A typical vehicle ⁴ _____ by an electric motor and can reach a speed of about 12 kph. You stand on it and it is your movement that makes it go, stop or turn. It can cost you up to 10,000 zlotys, so it's a bit pricey, but it is fun and easy to drive.

Two wheels and you are off! – Dwa kółka i jedziesz!

- A is called B called C calls
- A is taken B can be taken C takes
- A showed B was shown C has been shown
- A is driven B was driven C drives

READING

1 Przeczytaj tekst oraz zdania 1–4. Do każdego zdania dopasuj właściwy wynalazek: A, B lub C. Uwaga! Jeden wynalazek pasuje do dwóch zdań.

- 1 The design of this invention has improved over time.
- 2 This inventor wanted to offer a cheaper solution to a problem.
- 3 Its inventor was inspired by something they had seen in nature.
- 4 The author of this invention observed another person repeat the same simple task.

INVENTIONS THAT CHANGED THE WORLD

Can you imagine yourself as an inventor? You might think that you need to know a lot about science to become one, but this isn't always true. The most important thing is a new idea, and ideas come to all kinds of people in many different situations.

A VELCRO

It was 1948. George de Mestral returned from a walk with his dog. He found out they were both covered in sticky balls from plants. He noticed how they caught hold of his clothes, and an idea for a new material was born! Today, Velcro is used on clothes and bags to hold two pieces together.

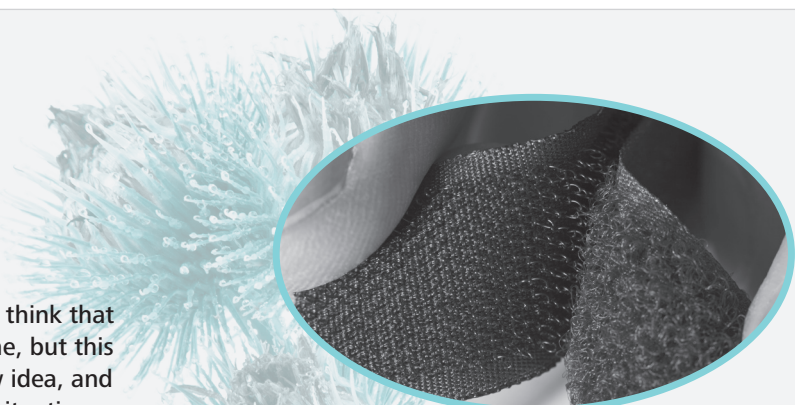
B THE WINDSCREEN WIPER

In 1903, Mary Anderson was on her way to New York by car. She watched the driver getting out of their car many times to brush snow from the windscreen. It was then that she came up with the idea of a long piece of rubber that could clean the glass. At the beginning, it was moved by hand from the inside. Now the wipers are powered by electricity.

C THE WIND-UP RADIO

In 1991, Trevor Bayliss saw a TV programme about Africa. A speaker said that it was difficult to reach some people with important information. In some areas people weren't able to listen to the radio because there was no electricity and batteries were expensive. So Bayliss had an idea for a new type of radio. In order to produce enough power to make it work, you have to turn a handle a number of times. His wind-up radio is now given to many people in places where communication is difficult. It is also bought by eco-friendly people who do not like batteries because they damage the Earth.

Adapted from 'Inventions that Changed the World' © David Maule 2005, Pearson English Readers



LISTENING

2 Ułyszysz dwukrotnie wypowiedź dotyczącą niekonwencjonalnego użycia rzepów. Na podstawie informacji zawartych w nagraniu uzupełnij luki w notatce. Luki należy uzupełnić w języku angielskim.


Velcro

- Kate agrees with her friends that she's a(n) ¹ _____ person.
- Kate used Velcro to keep the bathroom ² _____ in place.
- Kate tied all the cables under ³ _____ with a strip of Velcro.
- Kate stuck some pieces of Velcro ⁴ _____ to be able to place it on the bedroom wall.

FUNCTIONS

1 Przetłumacz podane w nawiasach fragmenty zdań na język angielski. W każdą lukę możesz wstawić maksymalnie trzy wyrazy.

- Can I (pomóc wam skopiować) _____ these documents?
- (Czy mam odłączyć od prądu) _____ your computer?
- Do you (potrzebujesz pomocy) _____ this app?
- Would you like (żeby naprawił) _____ your computer?
- (Pozwól, że pomogę) _____ you with the projector.

2  Uzupełnij luki 1–3 w dialogu tak, aby otrzymać spójny i logiczny tekst.

- X: Mum, ¹ _____ a favour and wash my jeans? I need them for tomorrow.
- Y: Sure, but I need to finish this first. I have to write down all the information from this page.
- X: You don't need to rewrite it. You can take a screenshot. ² _____ show you how to do it. Just hold down the Windows key and press this button: PrtScr.
- Y: And now what?
- X: Open your Pictures folder, then your Screenshots folder and there it is. Do you ³ _____ repeat?
- Y: No, thank you. It's really easy.

WRITING



Wskazówka

Na egzaminie możesz zostać poproszony o napisanie wiadomości z instrukcją. Często używa się w niej trybu rozkazującego lub czasowników modalnych. Pisząc instrukcję, warto używać wyrażen określających kolejność wykonywania czynności (np. *first, then, after that, finally*).

3 Przeczytaj poniższe fragmenty instrukcji obsługi różnych urządzeń i uzupełnij je czasownikami z ramki w trybie rozkazującym. Jakich urządzeń dotyczą te fragmenty?

close follow place press select

A

It's quite easy. ¹ Place the document you want to copy on the glass surface and ² _____ the green button. Before you start copying, ³ _____ the lid because the light is damaging to your eyes.

It's a _____.

B

If you'd like to save a new number in your phonebook, enter the phonebook menu and ⁴ _____ *new entry*. Then ⁵ _____ the instructions to enter the name of the contact and the number.

It's a _____.

4 Zdecyduj, czy autor odniósł się do wszystkich elementów polecenia i odpowiednio je rozwinął.

Obiecałeś/Obiecałaś siostrze, że pomożesz jej skonfigurować nowy telefon. Niestety musisz wyjść. W wiadomości do siostry:

- wyjaśnij, dlaczego nie możesz jej pomóc,
- napisz, jak włączyć telefon,
- zaproponuj, że dokończycie konfigurację po twoim powrocie.


↩ ✎ 📧 A 🗑

To: Julie

Hi Julie,

I can't show you how ¹(set up / you) to set up your new phone because I ²(have / go out) _____ now, but it's easy. First, ³(press / button) _____ which is on the side of the phone. When ⁴(light / come on) _____, you can be sure the phone is on. ⁵(not / forget) _____ enter the PIN number which you've received. I ⁶(be able / help) _____ you when I get back home later.

Good luck! Mark

5  Kolega z Anglii, który zatrzymał się u ciebie na weekend w czasie twojej nieobecności, poprosił cię o możliwość użycia drukarki. Zostaw mu wiadomość z instrukcją, w której:

- opiszysz, jak należy uruchomić drukarkę,
 - zaproponujesz osobę, do której można się zwrócić o pomoc w razie potrzeby,
 - wyrazisz nadzieję, że niedługo się zobaczycie.
- Limit słów: 50–120.

1 Uzupełnij zdania wyrazami z ramki.

1 has was

- a The photocopier was fixed two days ago.
- b Someone _____ installed the new software.
- c Why _____ their account deleted?

2 producing produced

- a Oxygen is _____ by plants.
- b Most devices in the lab were _____ abroad.
- c More and more homes are _____ their own electricity.

3 discovered invented

- a Alessandro Volta _____ the electric battery in 1800.
- b When was touch screen technology _____?
- c A new galaxy has been _____ by British astronomers.

4 by with

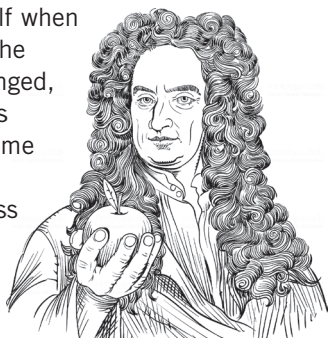
- a The game has already been downloaded _____ one million users.
- b Did you take this photo _____ a smartphone camera?
- c You can turn off the lights _____ a remote control.

2 Uzupełnij tekst, wpisując w każdą lukę jedno słowo z ramki. Cztery wyrazy zostały podane dodatkowo.

by created did discovery invention
making on was

The story of Newton's apple

Isaac Newton, a great British mathematician and physicist, is well-known for the ¹_____ of the laws of gravity. According to the popular story, Newton realised that gravity existed when he was in a garden and an apple fell ²_____ his head. But the truth is less exciting. In fact, Newton ³_____ not hit by a falling apple. He only saw one while he was sitting under an apple tree. Newton said that himself when he was quite old. Over the years, his story has changed, however. When a story is told again and again, some new elements are often ⁴_____ to impress the listener. This is how a true story becomes a legend.



3 Przetłumacz na język angielski podane w nawiasach fragmenty zdań.

- 1 a All the passwords (**zostały zmienione**) have been changed twice since last week.
- b The settings (**zostały zmienione**) _____ on Monday.
- 2 a This socket (**używa się**) _____ for charging phones.
- b The buttons (**używa się**) _____ to restart the system.
- 3 a The virus (**nie opisano**) _____ fully yet.
- b Is it a new species? When (**opisano go**) _____ for the first time?

4 Przetłumacz na język angielski podane w nawiasach fragmenty zdań tak, aby otrzymać zdania logiczne i gramatycznie poprawne. W każdą lukę możesz wpisać maksymalnie cztery wyrazy.

- 1 Research (**będzie kontynuowanych**) _____ in the future.
- 2 How many headphones (**sprzedaje się**) _____ every year?
- 3 What a beautiful car! When (**został zaprojektowany**) _____?
- 4 These types of bacteria (**nie badano**) _____ yet.

5 W każdej grupie zdań zaznacz dwa lub trzy zdania, które mają podobne znaczenie.

- 1 a We didn't protect our privacy.
- b Our privacy isn't protected.
- c No one protects our privacy.
- 2 a The printer has broken down.
- b The printer is broken.
- c This printer is out of order.
- 3 a My friend has just texted me.
- b I've just texted my friend.
- c I've just been texted by my friend.

6 Wykorzystując podane wyrazy, uzupełnij każde zdanie z luką tak, aby zachować sens zdania wyjściowego. Nie zmieniaj formy podanych wyrazów. W każdą lukę możesz wpisać maksymalnie cztery wyrazy, wliczając w to wyraz już podany.

- 1 How often do they clean the screens? **CLEANED**
How often _____?
- 2 An international team of scientists will develop a vaccine soon. **DEVELOPED**
A vaccine _____ an international team of scientists soon.
- 3 We have been told a lot of stories by our teacher. **TOLD**
Our teacher _____ a lot of stories.
- 4 They didn't do the experiments in the lab. **DONE**
The experiments _____ in the lab.