

# 4

## Invention

**WDYT?**  
(What do you think?)

What makes a good invention? What's the best way to present it to people?

**Vocabulary:** jobs in science; verb and noun collocations; science; describing products; negative prefixes

**Grammar:** past perfect; relative pronouns; essential adjective clauses

**Reading:** an online article about science making a difference

**Listening:** a talk about an invention

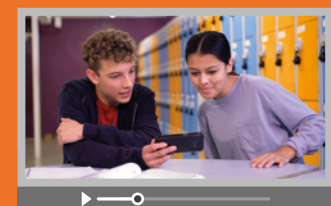
**Speaking:** checking information

**Writing:** a formal letter

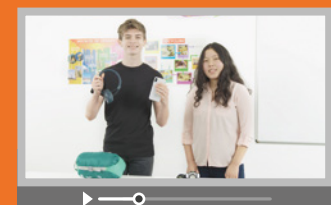
**Project:** a product pitch



Video skills p49



Real-world speaking p55



Project pp58-59



### Jobs in science

**1** Work in pairs. Look at the jobs. Add any more jobs in science you can think of. Which job is the most interesting? Why?

biologist chemist doctor engineer entrepreneur  
inventor physicist researcher scientist

**2** Complete the table with the jobs in exercise 1.

-er / -eer	-or	-ist	other spelling
engineer	inventor	scientist	entrepreneur

### Verb and noun collocations: science

**3** Look at photos 1-5. What do you think these things are? Use your imagination!

**4** In pairs, match photos 1-5 to descriptions a-e.

**5** Read the texts again and find the collocations. Match the verbs with the nouns in the boxes.

come up with create design develop discover  
do x2 invent investigate make research

a device a discovery an experiment  
an invention a product x2 research  
solution something x3

- a** How can you write or draw and erase it out? A scientist **came up with** the solution in 1795 by putting graphite between two pieces of wood. Engineers **developed** this product to make the popular modern pencil. That's how they **invented** it!
- b** Believe it or not, this is part of a mouse's brain! A biologist took the picture when she was **investigating** vision and how the brain works. She hopes to **make** some exciting discoveries.
- c** This is actually a soap bubble in water. The image was taken when scientists were **researching** how foam is made by drinks and washing up liquid.
- d** Imagine wearing this! Researchers **created** this invention to record brain activity. They **designed** the device to fit on someone's head. They were **doing** research to see how people's feelings change when they go to different places.
- e** It might look like modern art, but it's a fish's eye. The Zebrafish's eye responds to movement in water and scientists are hoping to **discover** how it does this. They are **doing** experiments to find out.

**6** Work in pairs. Circle the correct option and answer the questions. Then write 3-5 more for another pair.

### How much do you know about science?

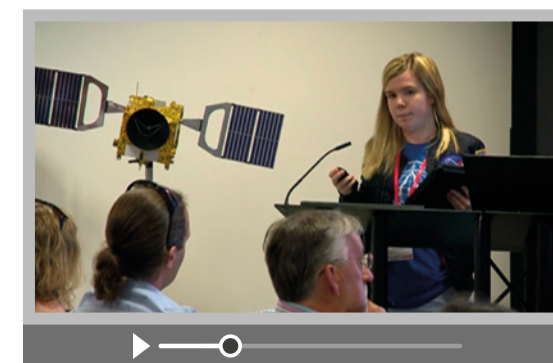
- 1 Who **invented/discovered** the cell phone?
- 2 Who **created/investigated** the radio?
- 3 Who **discovered/developed** radium and polonium?
- 4 Who **made/came up with** the idea of the internet?
- 5 Who **developed/did** early computer codes?
- 6 Who **discovered/invented** penicillin?

Martin Cooper Marie Curie  
Alexander Fleming Tim Berners-Lee  
Ada Lovelace Guglielmo Marconi

**7** Work in pairs. Discuss which things you would most like to do.

- discover a new planet
- design a device to save lives
- investigate a disease to find a cure
- develop a best-selling product
- invent a product to reduce pollution
- research alternatives to plastic

### VIDEO SKILLS



**8** Watch the video with no sound. What do you think it is about?

**9** Watch again with sound. Were your answers in exercise 8 correct?

**10** Work in pairs. Discuss the questions.

- 1 What have you learned from the video?
- 2 Which typical features of a documentary were in the video? How did they give us more information about the topic?
  - a** interviews
  - b** voiceover
  - c** footage of real-life events



An online article

1 What vocabulary do you remember? Copy and complete the table.

People in science	Things they do
scientist, engineer ...	invent a product, research ...

2 23 Look at the photos and the title of the article. Which words from exercise 1 do you think will be in the text? Read and listen to check your answers.

Subskill: Identifying text purpose

To understand the purpose of a text, think about: Where is it from? Who is it for? Why was it written?

3 Read the article again and circle the correct option. Give evidence to support your answer.

- The text is probably from
  - a popular science website
  - an online science textbook
- The text is probably for
  - researchers at university
  - people who are interested in science
- What is the writer's purpose?
  - To instruct people in building an invention.
  - To inform scientists about new research and inventions.
  - To encourage people to invent things.
  - To advise people how to be inventors.

4 Complete each sentence with E (Eesha), A (Anurudh) or B (both).

- \_\_\_ has/have personal experience of the problem.
- \_\_\_ loved science when she/he was younger.
- \_\_\_'s invention could be used with many different types of device.
- \_\_\_ won something because of the invention.
- \_\_\_ found a solution to the problem they wanted to solve.
- \_\_\_'s invention can also help people who need power at home.

5 Complete the sentences.

- Eesha's device can charge a phone \_\_\_\_\_.
- You can use a 'supercapacitor' with \_\_\_\_\_.
- Eesha designed the materials \_\_\_\_\_.
- Vaccines are important because \_\_\_\_\_.
- Anurudh couldn't have the vaccine because \_\_\_\_\_.
- The fridge stays cool when \_\_\_\_\_.

6 **Word work** Match the definitions to the words in bold in the text.

- far from other cities, towns or people \_\_\_\_\_
- produce power \_\_\_\_\_
- make something better \_\_\_\_\_
- the services that look after people's health \_\_\_\_\_
- put electricity into a battery \_\_\_\_\_
- something you can attach to a vehicle to move things \_\_\_\_\_

7 Complete the sentences with the words in exercise 6.

- I think the best way to \_\_\_\_\_ electricity is solar energy.
- It isn't necessary to \_\_\_\_\_ most devices like cell phones. They're fine as they are.
- I don't like cities. I'd like to live in a \_\_\_\_\_ village.
- You should \_\_\_\_\_ your phone every day, so that you'll always have power.
- It isn't the government's responsibility to provide \_\_\_\_\_. We should pay to see a doctor.
- All cars should come with a \_\_\_\_\_. Then you could transport more things easily.

8 Work in pairs. Do you agree or disagree with the sentences in exercise 7? Discuss.

**CRITICAL THINKING** **SUPER SKILLS**

- Remember** Think of a product that is designed to improve your life. Describe it.
- Analyze** List its strengths and weaknesses.
- Evaluate** Explain how the product could be improved.

# Science making a difference

Could you invent something that makes the world a better place? These two young people did that, and you could too! Find out what inspired them and how they did it.



Has your phone battery ever run out just when you needed to use it? Well, that could soon be a thing of the past! Eesha Khare, a young American engineer, has invented a device that could **charge** a phone in just 20–30 seconds! Not only that, but you'd have battery power for far longer. It's called a 'supercapacitor' and it could be used for any electronic device, even cars. For her device, Eesha used materials that she had designed at the University of California. Eesha had always loved chemistry so it's no surprise she wanted to **improve** technology using it. Eesha's device isn't just good news for tech-loving teenagers. It could help millions in countries where not everyone has electricity at home – not just to charge phones, but perhaps fridges, stoves and lights too. Eesha won a \$50,000 science prize for her invention.



Anurudh Ganesan created a simple, safe way to transport vaccines to **remote** health clinics. Vaccines protect people from diseases and save millions of lives every year. In some countries, health workers have to take vaccines long distances by bike or even on foot in containers with ice. If the vaccines get too warm, they don't work.

Anurudh lives in the United States, but he was born in India. When he was a baby, his grandparents took him to a health clinic. When they arrived, however, they found the vaccines there were all useless. The ice that kept the vaccinations cool had melted before the health worker reached the clinic. It was a common problem.

When Anurudh was 15, he wanted to find a solution. He designed a trailer with a fridge on it – the Vaxxwagon. It uses movement instead of electricity to keep the fridge cool. When someone pulls the **trailer**, the wheels turn and **generate** power.

His invention has already won an international science prize and now Anurudh's dream is to create better **healthcare** worldwide.

So, what are you waiting for? Your invention could be the next big thing!



**CELEBRITY CORNER**

Ellen Ochoa was the first Hispanic American woman to go into space. She also helped invent three things to improve images from space. When did she go into space?

## Past perfect

- 1 Read the examples, look at the timeline and circle the correct option in the rules.

After she **had come up with** the idea, she was able to develop the device.

The ice **had melted** before the health worker reached the clinic.

Anurudh **hadn't designed** anything before he created his invention.

**Had** Eesha **done** any research before she created the device?

First action → Second action → Now

She came up with the idea. She developed the device.

The ice melted. The health worker reached the clinic.

- We use the past perfect to talk about actions or situations that happened **before/after** a specific time or another action in the past. We use it to make it clear which action happened first.
- The past perfect clause **can/can't** come first or second in the sentence. The order isn't important.
- We **can/can't** use the short forms 'd (*had*) and hadn't (*had not*).

## after, before, when, by

**After** she **had done** a lot of research, she had an idea.

She **had worked** for months **before** she found a solution.

She **had** just **bought** the materials **when** I saw her.

**By** the time I arrived, they **had** already **tried** lots of ideas.

- 2 Complete the sentences. Use contractions where possible.

- We \_\_\_\_\_ (**try**) different things before we found a solution.
- After she \_\_\_\_\_ (**invent**) a new machine, she won a prize.
- The class \_\_\_\_\_ (**just/start**) when we got to the science laboratory.
- When I saw him, Mark \_\_\_\_\_ (**not finish**) his experiment.
- Before I chose this one, I \_\_\_\_\_ (**already/test**) a lot of other products.

- 3 Circle the correct option.

## Who invented chips?

In 1853, George Crum was cooking in a restaurant in Saratoga Springs. When he found out that a customer **1 complained/had complained** about his fries, Crum **2 decided/had decided** to cut the potatoes thinner. The customer **3 complained/had complained** again. By this time, Crum **4 had/had had** enough! After he **5 cut/had cut** the potatoes as thin as he could, he **6 cooked/had cooked** them in hot oil. The customer **7 loved/had loved** them – and Crum **8 invented/had invented** chips!

- 4 Write questions using the past perfect or simple past. Then answer the questions.

- who / complain / about the fries ?
- the customer / complain again ?
- why / Crum / have enough ?
- how / Crum / cook the really thin potatoes ?
- what / he / invent ?

- 5 Complete the text with the past perfect or simple past form of the verbs in parentheses.

## A tasty invention

In 1937, Ruth Wakefield and her husband owned a hotel and restaurant in America and Ruth **1 \_\_\_\_\_ (cook)** for the guests. One day while she was making cookies she **2 \_\_\_\_\_ (realize)** that she **3 \_\_\_\_\_ (run out)** of cooking chocolate. She **4 \_\_\_\_\_ (forget)** to buy it! Ruth **5 \_\_\_\_\_ (decide)** to use normal chocolate instead. She chopped a bar into small pieces and hoped the pieces would melt. When she **6 \_\_\_\_\_ (take)** the cookies out of the oven, she discovered the chocolate **7 \_\_\_\_\_ (not melt)**. By accident, Ruth **8 \_\_\_\_\_ (invent)** the chocolate chip cookie!



- 6 Answer the questions to solve the Brain teaser.

## BRAIN TEASER

Five friends were working on different inventions.

- John hadn't finished when the first invention was ready.
- Tobias had done his research before Kiera, but she developed her invention before him.
- Sami finished her invention after John.
- Ruth had created an invention before Tobias, but then she had a problem. She finished after he'd produced his final version.
- John wasn't the last to finish; three others had finished before him.

Who finished first? In what order did they finish?

## Describing products

- 1 Look at the photos of two products and answer the questions.

- What do you think they are?
- What adjectives could you use to describe them?



- 2 Read the reviews and match the descriptions to the photos. Then answer the questions.

- Was your answer in exercise 1 correct?
- Do the reviews use any of the adjectives you wrote in question 2?



- 1 The FITT360® is a **wearable** camera that records 360° images. It's also a **wireless** headset for music or phone calls. It's **comfortable** and **easy to use** and the images are **high quality**. It's **practical** too because you don't need to use your hands to record. It costs around \$150. **Gary16**



- 2 Play your music with this **innovative** wireless speaker. It's **handy** because it's also a lamp that changes color when you touch it, with six different colors to choose from. It's a **useful** gadget and at around \$20 it isn't **expensive**. It's **well made** and **reliable**. **TechRachel**

- 3 Match six of the words or phrases in bold with the definitions.

- technology that communicates using electronic signals \_\_\_\_\_
- useful \_\_\_\_\_
- new, original and advanced \_\_\_\_\_
- intended to be useful, not just look good \_\_\_\_\_
- you can carry it on the body \_\_\_\_\_
- very good or excellent standard \_\_\_\_\_

- 4 Match the adjectives to their opposites in exercise 2.

badly made cheap hard to use  
impractical inexpensive low quality  
uncomfortable unreliable useless

## A talk

- 5 Check the meaning of the words in bold. Then look at the photo and answer the questions.

- What do you think the product is?
- What do you think the **packaging** is made from?
- Do you think it **harms** the **environment**?
- Which words could you use to describe this product?



- 6 24 Listen to Lidia's talk and check your answers in exercise 5.

## Subskill: Listening for the information you need

Read the sentences and decide if you need a name, a number, a date, an adjective, etc to fill in the blanks.

- 7 Read the sentences and decide what information you need. Listen again and complete the sentences.

- Around \_\_\_\_\_ % of plastic bottles are recycled.
- Every year, between five and \_\_\_\_\_ tons of plastic bottles end up in the ocean.
- An Ooho is a small round \_\_\_\_\_ with a 'skin' you can eat.
- Oohos don't \_\_\_\_\_ so they are practical.
- The inventors have \_\_\_\_\_ the product out in London.
- \_\_\_\_\_ of people watched a YouTube video.

- 8 Read the sentences. Are they true, false or is there no information? Listen and check.

- Most recycled plastic bottles are used to make new bottles.
- Skipping Rocks Lab want to produce alternatives to plastic bottles, cups and plates.
- It takes a long time to make the packaging hold the water.
- Making Oohos is cheaper than making plastic bottles for water.
- You can buy Oohos in stores in London.
- It's possible to make Oohos at home fairly easily.

- 9 Work in pairs. Discuss the questions.

- Would you buy an Ooho? Why/Why not?
- Are there other ways to avoid plastic bottles?



## Relative pronouns

## 1 Read the examples and complete the rules.

London is the city **where** the company is based. It's a company **which/that** aims to produce alternatives to plastic bottles.

People **who/that** have tried them say you don't taste the skin.

He's the man **whose** idea it was.

Will there ever be a day **when** we don't use plastic?

- We use relative pronouns to refer to nouns. We use:
  - \_\_\_\_\_ and \_\_\_\_\_ to talk about people
  - \_\_\_\_\_ and \_\_\_\_\_ to talk about things
  - \_\_\_\_\_ to talk about places
  - \_\_\_\_\_ to talk about time
  - \_\_\_\_\_ to talk about possession
- The relative pronouns come **before/after** the noun.

## 2 Circle the correct options for descriptions 1–6. Then match them to the words in the box.

1942 Barack Obama his daughter  
Stephen Hawking the UK  
time, space and black holes

## FACT FILE:



- a scientist **who/whose** book *A Brief History of Time* has sold millions of copies and **who/which** was famous for his research
- the country **where/which** he was born
- the year **which/when** he was born (he died in 2018)
- the President of the United States **that/whose** gave Stephen Hawking a medal
- the person **who/which** he wrote a book with
- the subjects **where/which** most fascinated him

## Essential adjective clauses

## 3 Read the examples and circle the correct option.

They have tested it out in London. That's **the city where they're based.**

Some of **the people who** watched the online video made their own videos.

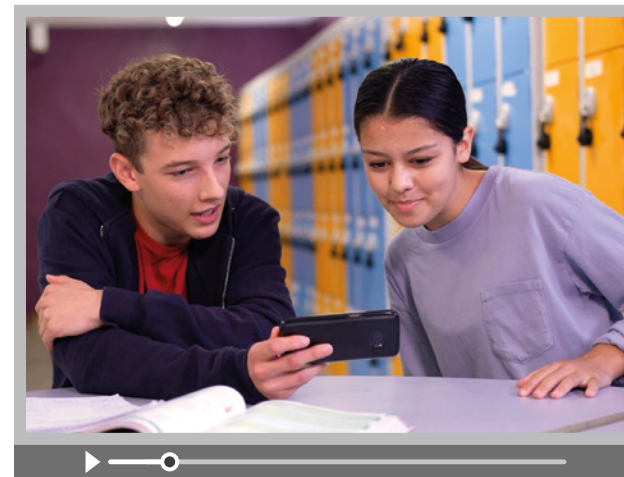
- We **can/can't** use essential adjective clauses to give essential information about someone or something.
  - We **need/don't need** this information to understand who or what we are talking about. The sentence doesn't make sense without it.
  - The clause **usually/never** comes immediately after the noun it refers to.
- Join the sentences using essential adjective clauses. Make any necessary changes.**
    - Alexander Graham Bell is the man. He invented the telephone.
    - Bell moved from Scotland to Canada. He started his experiments there.
    - He was investigating sound in 1879. He discovered a way to communicate over distance.
    - He used a magnet. It turned sound into electricity.
    - Bell is the man. His invention changed the way we communicate.

## 5 Complete the text with one word in each blank.

## GRAMMAR ROUND-UP

1 2 3 4 5 6 7 8

George Nissen invented the trampoline in 1934. Nissen 1 \_\_\_\_\_ an athlete 2 \_\_\_\_\_ loved gymnastics. He 3 \_\_\_\_\_ recently watched some acrobats at a circus. While they 4 \_\_\_\_\_ performing, they used a safety net. This inspired him to build an invention which he 5 \_\_\_\_\_ bounce up and down on. Nissen called it the 'trampoline'. Nissen started a company 6 \_\_\_\_\_ produced trampolines. He demonstrated his invention all over the country and at one demonstration he performed with a kangaroo. A photo appeared in newspapers and the trampoline 7 \_\_\_\_\_ popular worldwide. In 2000 trampolining became an Olympic event. 8 \_\_\_\_\_ then, trampoline parks have opened all over the world.



## Checking information

- Look at the photos. Have you ever seen a light show?
- Watch the video. What do Joe and Kate agree about the following?
  - the time to go
  - what to eat
- Watch again. Complete the dialogue with the words in the box.

do we don't you wasn't there weren't there

- Joe: I'm really excited about this light show.
- Kate: Me too. It starts at 6:00 pm, doesn't it?
- Joe: Yeah, that's right. So we can go at 6:00 pm and spend two hours at the show.
- Kate: But there was a lot to see last time, 1 \_\_\_\_\_?
- Joe: That's true. OK, so what about food?
- Kate: There were a lot of cafés, 2 \_\_\_\_\_?
- Joe: Yes, but we didn't eat there last time, did we? Remember? It was too expensive.
- Kate: OK. Let's take a sandwich and some snacks. We don't have to buy tickets, 3 \_\_\_\_\_?
- Joe: No, it's free.
- Kate: There is a bus stop nearby, isn't there?
- Joe: Yeah, I checked. You want to go, 4 \_\_\_\_\_?
- Kate: Yes, of course. Why?
- Joe: You're asking a lot of questions!



- Watch again. Which two Key phrases aren't in the dialogue?
- Create your own dialogue. Follow the steps in the Skills boost.

## SKILLS BOOST

## THINK

Choose an event that you and your partner would like to go to. Decide on the following and make notes.

- What time to meet
- How to get there
- Where/What to eat

## PREPARE

Prepare a dialogue. Remember to include Key phrases for checking information.

## PRACTICE

Practice your dialogue. Remember to use correct intonation in question tags.

## PERFORM

Act out your dialogue for the class.

- Peer review** Listen to your classmates. Answer the questions.

- Which event do they go to?
- Which Key phrases do they use?

## Key phrases

## Checking about the present:

The light show starts at 6:00 pm, **doesn't it?**▲  
We don't have to buy tickets, **do we?**▲  
It's on for four nights, **isn't it?**▲

## Checking about the past:

You checked the route, **didn't you?**▲  
We didn't eat there last time, **did we?**▲  
There was a lot to see last time, **wasn't there?**▲  
There were a lot of cafés, **weren't there?**▲



**SCIENCE TODAY**

Calling all inventors! Send us an article about your invention and we will publish the best ones. The writer of the winning article will appear on a radio show to present their invention. Articles should include photos.

**Send your article to:** The Editor, *Science Today*, 171 South Street, Detroit, MI 34521

45 Oak Lane [a]  
New York City, New York 22132 [b]  
Tel: 212-555-0001  
l.stokes33@mail.com

[c] Applications department  
Entrepreneur  
XYZ Broadcasting Company  
555 Maine Street  
New York City, New York 22132

December 2nd 2021 [d]

[e] Dear Sir or Madam,

[f] **I am writing** to apply to appear on your television show *Entrepreneur*! I feel strongly that my innovative new product will be of interest. It is an easy-to-use device which can significantly increase internet speed. It is well made and reliable.  
**I enclose** my résumé and photos of my invention. As you will see, I already have some experience in giving presentations. In addition, last summer I worked in a laboratory where I got useful experience in developing new products. Furthermore, I recently took part in a workshop for young designers which helped me improve my invention. I am sure that you will agree that it is a high-quality, practical device that viewers will enjoy learning about.  
**Thank you for considering** my application. **I would be happy to** attend an interview at any time. **Please contact me on** the number or email address given above if you require any further information. **I look forward to** hearing from you.

[e] Sincerely,

[g] **Lexie Stokes**  
Lexie Stokes

**XYZ Television are looking for candidates for our new show *Entrepreneur*.**

Are you 16–24 years old? Have you invented something? Would you like to develop and sell your product? Could you present it to a group of experts to win funding? If so, contact us now! This is an exciting opportunity to make your dream come true.

Send your résumé and cover letter to: Applications department, *Entrepreneur*, XYZ Broadcasting Company 555 Maine Street New York City, New York 22132

**A formal letter**

**1 Read the two ads and the letter and answer the questions.**

- Which ad is the letter for?
- Does the writer have any experience of presenting?
- What does Lexie's product do?

**2 Match 1–7 with a–g in the letter.**

- Write the date. —
- Sign the letter and type your name below it. —
- Write *Dear Sir or Madam*. If you know the name, write *Dear (Name)* and finish with *Sincerely*. —
- Include your contact details. —
- Write your address on the right. —
- Write the other person's title and the address. —
- Write the main part of the letter. —

**Subskill: Using formal language**

We use formal language to express what we need to say politely, e.g. **I am writing to ...**, **I enclose ...**, **Thank you for considering ...**, **I would be happy to ...**, **I look forward to ...**

**3 Read the letter again and match the phrases in bold to 1–6. Which phrase is used to ...**

- ask the person to phone or email you?
- explain the reason you are writing?
- say what you could do?
- politely thank someone for reading the letter?
- politely say you would like them to respond?
- say what you are including with the letter?

**4 Complete the sentences with one of the phrases in bold.**

- \_\_\_\_\_ my article. I hope you agree it is interesting for readers.
- \_\_\_\_\_ hearing from you.
- \_\_\_\_\_ in response to your ad.
- \_\_\_\_\_ answer any questions you may have about my invention.
- \_\_\_\_\_ my cell phone.
- \_\_\_\_\_ my article and some photos of my invention.

**5 Add two more expressions from the letter to each category.**

Introducing an opinion	Adding information
<i>In my view</i>	<i>Also</i>

**6 Complete the sentences with relative pronouns.**

- My invention is a pack \_\_\_\_\_ contains LED® strips.
- These are strips \_\_\_\_\_ you can cut to any length and attach to clothes.
- People \_\_\_\_\_ buy the LED strips can create their own costumes.
- This would be great for times \_\_\_\_\_ you go camping with friends.
- A person \_\_\_\_\_ wears one is easy to see, so they can stay safe on the roads.

**7 Write a formal letter to respond to ad B in exercise 1. Follow the steps in the Skills boost.**

**SKILLS BOOST**

**THINK**

Think of an invention or use the invention from exercise 6. Write notes to describe it.

**PREPARE**

Organize your notes into paragraphs:

- say why you're writing and give a brief description of the product
- give details to support your application
- close the letter and politely ask for action

**WRITE**

Write your letter. Use the model letter to help you.

**CHECK**

Read your letter. Answer the questions.

- Did you organize it into paragraphs?
- Did you use formal expressions?
- Did you use relative pronouns and essential adjective clauses?
- Did you include science vocabulary and vocabulary for describing inventions?

**8 Peer review** Exchange your letter with another student. Does the letter make you want to find out more about the invention?

**Quick review**

**Grammar**

**Past perfect**

We use the past perfect to talk about actions or situations that happened before a specific time or another action in the past. We use it to make clear which action happened first.

*We used strips that had already been cut to size. They had finished the presentation before we arrived. Had the inventors developed another product before this one?*

**Relative pronouns**

We use relative pronouns to talk about nouns.

We use **who** and **that** to talk about people.

*People who/that buy the strips can create their own costumes.*

We use **which** and **that** to talk about things.

*It's a product which/that will be popular with teens.*

We use **where** to talk about places.

*They can be used in places where there isn't much light.*

We use **when** to talk about time.

*They're useful at night when it's dark.*

We use **whose** to talk about possession.

*People whose costumes use the lights love them.*

**Essential adjective clauses**

*Eesha is the girl who/that invented that new device.*

*It's a device which/that can charge phones quickly.*

*Inventors are people whose job it is to create new designs.*

*It was a year when many new things were invented.*

*London was the city where the inventor was born.*

**Vocabulary**

**25 Jobs in science**

biologist, chemist, doctor, engineer, entrepreneur, inventor, physicist, researcher, scientist

**26 Verb and noun collocations: science**

come up with a solution, create an invention, design a device, develop a product, discover something, do an experiment, invent a product, investigate something, make a discovery, research something

**27 Describing products**

comfortable/uncomfortable, easy to use/hard to use, expensive/inexpensive/cheap, handy, high quality/low quality, innovative, practical/impractical, reliable/unreliable, useful/useless, well made/badly made, wearable, wireless



# 4 Project

## WDYT?

(What do you think?)

What makes a good invention?  
What's the best way to present it to people?

**TASK:** You successfully applied to appear on a television show for young entrepreneurs.

Prepare a one-minute product pitch to ask for funding for a product you invented.

### Learning outcomes

- 1 I can present an invention as a product pitch.
- 2 I can use communication to persuade people.
- 3 I can use appropriate language from the unit.

Graphic organizer → Project planner p131

### 1 Watch a video of a pitch. Answer the questions.

- 1 How did Oliver and Amelia come up with the idea for the product?
- 2 Do they look and sound confident?
- 3 Which information do they not include?
  - A description of the product
  - Who would find it useful
  - How much it costs to make the product
  - Where they would make it
  - How much money they need



### STEP 1: THINK

#### 2 Read the Model project and discuss the questions in pairs.

- 1 When do entrepreneurs have to give pitches?
- 2 Who might listen to a pitch?
- 3 What information should be in a pitch?

### STEP 2: PLAN

#### 3 Choose an invention (think of your own, or research one). Make notes.

- What is your invention/product called?
- What does it do?
- What are its selling points? Why/How is it unique?
- Who is it for? Why would they buy it?
- How much does it cost to make? What would you sell it for?

### STEP 3: CREATE

#### 4 Work in pairs. Read the tips in the Super skills box and practice saying the Key phrases with a partner.

### COMMUNICATION

### SUPER SKILLS

#### Using language to persuade people

##### Tips

Give people useful and relevant information.

Give convincing arguments to persuade them.

##### Key phrases

*This amazing product is affordable and high quality.*

*This exciting product will be practical and well made.*

*People will find it very useful / easy to use because ...*

#### 5 Read the How to ... tips on p131. Then use your notes in exercise 3 to write your pitch.

#### 6 Practice and review your product pitch as necessary.

## Model project

### Sleep suit

Notes for product pitch



- Keeps you warm
- You can sleep in it and walk around in it
- It has a light and pockets
- Useful when camping, traveling, or staying at a friend's house
- Suitable for all ages
- Practical, comfortable and easy to use

### STEP 4: PRESENT

#### 7 Present your product pitch to the class.

#### 8 Peer review Answer your classmates' questions about your product.

## Product Ideas



Need to get somewhere in a hurry?  
Our jet suit with five mini-jet engines lets you fly through the sky at up to 80 kilometers an hour!



The ping-pong door is the ultimate solution for small spaces.

## 4 FINAL REFLECTION

### 1 The task

How successful was your product pitch?



How easy was it to produce it?



### 2 Super skill

How well did your group communicate?



How well did you use language to persuade?



### 3 Language

What new language did you use from this unit?



### Beyond the task

Is it useful to be able to give a good presentation? Why?

When (else) do you have to give presentations?

How do they differ from this one?

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  - Student's Resource Center
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## COMMON EUROPEAN FRAMEWORK

A1

A2

**B1**

B2

C1

C2



9 781380 072214



## Jobs in science; science

- 1 ☆ Complete each job in science with the endings in the box.

eer eur er ist ist ist or or tist

- biolog ist
- chem \_\_\_\_\_
- doct \_\_\_\_\_
- engin \_\_\_\_\_
- entrepren \_\_\_\_\_
- invent \_\_\_\_\_
- research \_\_\_\_\_
- scien \_\_\_\_\_
- physic \_\_\_\_\_

- 2 ☆☆ Circle the correct option.

- I'd like to invent/discover a robot that knows what I need to take to school every day and puts it in my bag for me!
- I hope we can create/come up with a solution to the problem of air pollution in cities.
- Is it possible to design/do a computer that can do homework for you?
- Scientists can learn a lot about the human body by doing/making experiments in space.
- The company is developing/coming up some exciting new products at the moment.
- Experts have done/made some exciting discoveries about volcanoes recently.
- It would be great if scientists could discover/make a way to clean up the oceans.
- People who are designing/investigating climate change often have to travel all over the world.
- It's important to research/discover new medicines carefully before testing them on patients.
- It must be an amazing feeling when you investigate/create a new invention that works!
- Scientists don't spend all their time making/doing research in laboratories.

- 3 ☆☆☆ Complete the information about the three inventions with the verbs in the box. There are two verbs you don't need.

came create developed discovered do  
doing inventing investigating made making

Scientists are 1 doing research and 2 \_\_\_\_\_ new discoveries all the time, and this results in products that we can buy and use. Here are three things that are part of our everyday lives now, but didn't exist before the year 2000.

## 1 FaceTime®

People first started 3 \_\_\_\_\_ the possibility of video phones in the 1930s, but they didn't 4 \_\_\_\_\_ any serious research until the 1960s. With video calls becoming more popular, FaceTime only became available for individuals to use in 2010.

## 2 e-readers



In 1949, Ruiz Robles, a Spanish teacher, 5 \_\_\_\_\_ up with a smart idea. She decided to put information from different books onto one portable device, her 'mechanical encyclopaedia', so that her students didn't have to carry so many books.

With more advanced technology, in the early 2000s, Sony® 6 \_\_\_\_\_ a commercial e-reader, an amazing device that allows you to carry hundreds of books with you all the time!



## 3 YouTube™

Three people worked together to 7 \_\_\_\_\_ the video site YouTube in 2005. And, as a result, people 8 \_\_\_\_\_ internet movie stars!

- 4 ☆☆☆ Answer the questions. Give reasons for your answers.

- What would you most like to research? Why?
- What would you most like to invent? Why?

## Past perfect

- 1 ☆ Find the past perfect verb in each sentence.

- The researcher soon realized that he had discovered a new medicine.
- She had finished work for the day when she suddenly noticed something interesting.
- I hadn't thought about becoming a scientist before I saw this program.
- They couldn't finish their experiment because a storm had destroyed their equipment.

- 2 ☆☆ Complete the sentences with the correct past perfect form of the verbs in parentheses.

- I was excited because I had discovered (discover) something new.
- The machine didn't work because we \_\_\_\_\_ (forget) to turn it on!
- They continued working because they \_\_\_\_\_ (not finish) their experiments.
- We were disappointed because we \_\_\_\_\_ (not find) the answer we were looking for.

- 3 ☆☆ Circle the correct option.

- Had the experiments been/The experiments had been successful?  
'No, they weren't/hadn't.'
- They found/Had they found a solution to the problem?  
'Yes, they had/did.'
- Did you met/Had you met Sasha before?  
'No, I haven't/hadn't.'
- Had they won/Had they win the game?  
'Yes, they won/had.'

- 4 ☆☆ Circle the correct option.

- They stopped/had stopped the research last year because all their experiments failed/had failed.
- Stella soon talked/had talked to her friends about the machine that she invented/had invented.
- Before she decided/had decided to become a scientist, she tried/had tried several other jobs.
- A letter arrived/had arrived last week to say that I won/had won a prize in a science competition.
- By the time Jack arrived/had arrived, we finished/had finished testing the products.

- 5 ☆☆☆ Read sentence a. Does sentence b have the same meaning or a different meaning?

- a She developed the new product after she had done some research.

b She did some research and then she developed the new product. same/different
- a Paul had already gone home when I arrived at the laboratory.

b Paul went home and then I arrived at the laboratory. same/different
- a I visited NASA, then I decided to become an astronaut.

b I had decided to become an astronaut before I visited NASA. same/different
- a Before everyone else had arrived at the laboratory, she made an amazing discovery.

b She made an amazing discovery and then everyone else arrived at the laboratory. same/different
- a He had just started his research when I met him.

b I met him, and then he started his research. same/different

- 6 ☆☆☆ Complete the text with the correct simple past or past perfect form of the verbs.

## The boy who built a windmill

William Kamkwamba 1 grew up (grow up) in a village in Malawi, in south east Africa. When he was only 14, he 2 \_\_\_\_\_ (decide) to build a windmill to supply electricity to his home. He 3 \_\_\_\_\_ (not design) anything like this before, but he wanted to help. He 4 \_\_\_\_\_ (stop) going to school when he was very young because his family didn't have enough money to pay the school fees. At 14, William 5 \_\_\_\_\_ (not know) anything about windmills, but he copied some pictures that he 6 \_\_\_\_\_ (see) in a library book when he was at school. He 7 \_\_\_\_\_ (use) all kinds of things to make his windmill, including parts of cars and an old bike wheel. But the windmill worked, and when people saw it, they were amazed at what he 8 \_\_\_\_\_ (manage) to achieve. He now works as an inventor, and a few years ago, a movie company 9 \_\_\_\_\_ (produce) a movie about his life, called *William and the Windmill*.





**Describing products**

1 ☆ Find eight words or phrases for describing products in the word square.

W	E	A	R	A	B	L	E	D	E
I	P	C	O	S	S	I	E	R	U
R	C	H	A	N	D	Y	L	E	S
E	R	E	X	T	M	O	K	E	E
L	T	A	C	G	O	B	R	I	L
E	X	P	E	N	S	I	V	E	E
S	R	E	L	I	A	B	L	E	S
S	B	R	A	K	L	K	N	A	S
B	A	D	L	Y	M	A	D	E	Z

2 ☆☆ Write the opposites of the adjectives.

- hard to use easy to use
- practical \_\_\_\_\_
- useless \_\_\_\_\_
- badly made \_\_\_\_\_
- expensive \_\_\_\_\_
- comfortable \_\_\_\_\_
- reliable \_\_\_\_\_
- high quality \_\_\_\_\_

3 ☆☆ Read what people say about products that they like or dislike. Choose the two adjectives in the box that match each description.

1 My new fitness tracker is amazing! It has a lot of smart new ideas and ways to watch what you eat and how much exercise you do. The instructions on the screen are really simple to follow, so you can't go wrong! It's cheaper than lots of others that are available too!

easy to use expensive innovative useless

easy to use innovative

2

I bought these new headphones to listen to music on the bus. The best thing is that you don't have to attach them to your phone, which is great. The sound is amazing – much better than my old ones, and they feel really nice over my ears.



cheap high quality uncomfortable wireless

3

I was worried about spending so much money on a smart watch, but it was worth it! It's strong and stylish, and it looks great on me. It can do everything a phone can do. I can call people, send messages and get on the internet. I was always losing my phone, so it's really useful to have something that's always there when I need it.



badly made cheap handy wearable

4

I bought a selfie drone last week – what a disappointment! The idea is that you send it up into the air to take a selfie from above, but it's really difficult to get it in the right position to take a good photo. The camera doesn't always work properly, either. I'm so annoyed that I spent so much money on it!



expensive hard to use practical reliable

4 ☆☆☆ Write a short paragraph about a product that you've bought recently. Say why you like/don't like it. Use at least four adjectives from the box and your own ideas.

comfortable easy to use handy high quality innovative practical reliable well made

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Relative pronouns**

1 ☆ Circle the correct relative pronouns in the sentences.

**Did you know ...?**

1 Microsoft is a name which/who is now famous all over the world. Bill Gates and Paul Allen started the company in 1975.

2 *Spacewar!* was the first computer game. The person which/who created it in 1962 was Steve Russell.

3 A lot of different people worked towards creating the first computer, but Charles Babbage was the person whose/which work was perhaps the most important.

4 People first used the name Silicon Valley in the 1970s. It is the area in California that/where a lot of big computer companies have their offices.

5 It is difficult to think about a time when/where there were no cell phones, but it isn't very long ago. The first cell phones only went on sale in the 1980s.

6 The Black Diamond iPhone® is made of real gold. It looks beautiful, but the price that/who you have to pay for it isn't so nice – \$15.3 million!

2 ☆☆ Complete the sentences with *who, which, where, when* or *whose*.

**The story of recorded music**

Before the 19th century, the only way to hear music was to listen to live musicians. The time 1 when this changed was the 1870s, and the person 2 \_\_\_\_\_ changed it was Thomas Edison. He invented the phonograph – the first machine to record and play music. However, Edison's machine was impractical and the sound 3 \_\_\_\_\_ it produced wasn't of high quality. The first music records were made in Washington D.C., but it was difficult to move them to places 4 \_\_\_\_\_ people could buy them because they were made of glass, and they broke easily! The early 1900s was a period 5 \_\_\_\_\_ records improved in quality, and famous singers started to sell recordings of their music. Records continued to be popular until the 1970s when companies developed the technology 6 \_\_\_\_\_ replaced them – CDs. These remained the most popular way of listening to music until the 2000s. The man 7 \_\_\_\_\_ company changed the way we listen to music forever was Steve Jobs. His company, Apple, developed the iPod®, the device 8 \_\_\_\_\_ made the company famous throughout the world.

**Essential adjective clauses**

3 ☆ Match 1–6 with a–f to make sentences.

- You can now buy robots that e
- My brother is someone who \_\_\_\_\_
- I'd love to be someone whose \_\_\_\_\_
- Australia is one place where \_\_\_\_\_
- Sunday is the only day when \_\_\_\_\_
- My neighbors are artists who \_\_\_\_\_

- invention changes the world!
- I'd love to live one day.
- don't use any modern technology!
- loves new technology.
- can clean your room for you!
- we don't have to get up early!

4 ☆☆ Complete the joined sentence using an essential adjective clause.

- Fire was the first big invention. It changed the lives of humans forever.  
Fire was the first big invention which changed the lives of humans forever.
- Some people need glasses. They know that glasses were a really important invention.  
People \_\_\_\_\_ know that they were a really important invention.
- Johannes Gutenberg was a German printer. His invention changed the world.  
Johannes Gutenberg was a printer \_\_\_\_\_ changed the world.
- China is a country. People invented paper there in about 100 BCE.  
China is the \_\_\_\_\_ invented paper in about 100 BC.
- The 1890s was an important time. People built the first cars.  
The 1890s was the \_\_\_\_\_ built the first cars.

5 ☆☆☆ Complete the sentences with an essential adjective clause and your own ideas.

- I'd like to invent a device \_\_\_\_\_.
- I'd like to live in a place \_\_\_\_\_.
- I get along with people \_\_\_\_\_.
- The summer is a time \_\_\_\_\_.



A magazine article

**The fictional inventions we would all love to have**

Real inventions are great, but the real world has rules, like people can't fly and animals can't talk. In books and movies, there are no rules. That's why writers and movie directors can create inventions which are really fun! We look at our favorite fictional inventions, and how we would like to use them. Which one is your favorite?

**Transporter**

The Transporter in the *Star Trek* movies is a device that can break people down into tiny parts. It then moves them to another place as energy, and puts them back together again a few seconds later.

**Useful?** Well, getting to school on time would be much easier, and it would be a great way to escape when someone just keeps talking to you!

**DeLorean Time-Travel Car**

This is the time-travel car that Dr. Emmett Brown develops in the movie *Back to the Future*. Teenager Marty McFly uses it to go back to 1955, where he meets his parents as teenagers.

**Useful?** Definitely! Great for finding out about life in the past. You could also travel into the future and look at the answers to exam questions, then come back and take the exams!



**Translation Collar**

Who said animals can't talk? The movie *Up* came up with a way for people and animals to talk to each other – a translation collar. When the animal wears the collar around its neck, it can communicate with humans.

**Useful?** Maybe. But what if your dog tells you he would rather go and live with your friend, or your pet fish asks to go and swim in the river?

**Invisibility Cloak**

This features in the *Harry Potter* books – a magic cloak that makes you disappear completely when you put it on.

**Useful?** Yes! You could use it for going onto a soccer field and secretly helping your team to score a goal!

**FUN FACTS**

Scientists believe that one day it might be possible to invent clothes that can make us disappear. We can see things because light shines on them. If an object can push light away, it could become impossible to see!

**Subskill: Identifying text purpose**

To understand the purpose of a text, look at the kind of language that it uses. Some texts address the reader directly by using 'you'.

**1 ☆ 10 Read and listen to the article. Circle the correct option.**

- The text uses formal/informal language.
- It asks/doesn't ask the reader direct questions.
- It is written in a serious/fun tone.
- The text is probably from a textbook/magazine.
- It is written for scientists/teenagers.
- The writer's purpose is to educate/entertain people.

**2 ☆☆ Read the article again. Which invention are the sentences about? Write T (Transporter), D (DeLorean), TC (Translation Collar) or IC (Invisibility Cloak).**

- This helps with language difficulties. TC
- This might help you to get better grades at school. —
- This allows people to go somewhere quickly. —
- You can use this to visit different periods of history. —
- This might cause problems if animals ask for what they want. —
- When you wear this, people can't see you. —
- This would be useful if you want to end a conversation. —

**3 ☆☆☆ Read the article again and answer the questions.**

- What is a 'fictional' invention?
- How does the Transporter work?
- What disadvantages does the writer mention with the Translation Collar?
- Which of the fictional inventions would you most like to have? What would you use it for?

A talk

**1 ☆ 11 Listen to a talk about the Museum of Failure. Circle the correct answers.**



- What can you find in the museum?
  - information about inventors who had bad ideas
  - examples of products that were not successful
  - information about why some ideas fail
- What is the aim of the museum?
  - to teach people how to make successful and popular products
  - to warn people about the dangers of failing when you try something new
  - to encourage people to accept failure and learn from their mistakes

**Subskill: Listening for the information you need**

When you listen for detailed information, read the sentences first and think about the type of information you need to listen for.

**2 ☆☆ Match the type of information that is missing with sentences 1–6.**

- a material
  - an adjective to describe a product
  - a place
  - an adjective to describe a feeling
  - a number
  - a date
- The Museum of Failure started in Sweden.
  - The museum has more than \_\_\_\_\_ failed products.
  - The Itera bicycle was made of \_\_\_\_\_.
  - Bic started selling pens for women and girls in \_\_\_\_\_.
  - Kids loved green ketchup at first because it was \_\_\_\_\_.
  - Jack says the museum teaches you that you shouldn't feel \_\_\_\_\_ if you fail.

**3 ☆☆ Listen again and complete the sentences in exercise 2.**

**4 ☆☆☆ Answer the questions. For questions 5 and 6, give your own opinion.**

- Why did the company make the Itera bicycle out of plastic?  
\_\_\_\_\_
- How do we know that Bic is a successful company?  
\_\_\_\_\_
- Why did children stop eating green ketchup?  
\_\_\_\_\_
- What has Jack learned from the museum?  
\_\_\_\_\_
- Do you agree that we shouldn't be scared of failure? Why/Why not?  
\_\_\_\_\_
- Would you like to visit the museum? Why/Why not?  
\_\_\_\_\_

**Checking information**

**1 ☆ Circle the correct option.**

- The museum opens at nine o'clock, isn't it/ doesn't it?
- There are some really interesting things there, aren't they/aren't there?
- Matt doesn't want to come with us, does he/ doesn't he?
- You enjoy going to art galleries, don't you/ didn't you?
- The installations were really amazing, aren't they/weren't they?
- We didn't book in advance, did we/didn't we?

**2 ☆☆ Use question tags to check the information about the Cancun Underwater Museum.**

- The Cancun Underwater Museum opened in 2010, didn't it?
- It became popular immediately, \_\_\_\_\_?
- There are over 5,000 sculptures, \_\_\_\_\_?
- Visitors swim around the sculptures, \_\_\_\_\_?
- There aren't many museums like this, \_\_\_\_\_?
- It is the biggest underwater museum in the world, \_\_\_\_\_?



A formal letter

1 ☆ Are the sentences formal or informal?

- 1 Hi, Jack. How are you? informal
- 2 I am writing to apply to take part in your show. \_\_\_\_\_
- 3 I know you'll love my new product. \_\_\_\_\_
- 4 I enclose a photo of my product. \_\_\_\_\_

2 ☆☆ Complete the formal letter with the phrases in the box.

As you will see Dear Sir or Madam for considering  
I am writing In addition look forward to hearing  
Sincerely you will agree

1 \_\_\_\_\_,  
2 \_\_\_\_\_ to suggest that you visit my school as part of your **Innovation Schools** TV series.  
I enclose details of all the activities that we take part in at my school. 3 \_\_\_\_\_, we hold regular **Top Inventor** competitions. 4 \_\_\_\_\_, last summer we organized a special festival for young entrepreneurs. I am sure that 5 \_\_\_\_\_ that this is something that will interest your viewers.  
Thank you 6 \_\_\_\_\_ my application. Please contact me if you require further information.  
I 7 \_\_\_\_\_ from you.  
8 \_\_\_\_\_,  
Sam Johnson

SUPER SKILLS

COMMUNICATION

Using language to persuade people

Complete the presentation for a new product with the words and phrases in the box.

came up with financial side funding  
happy to answer product unique

Good afternoon. The 1 \_\_\_\_\_ which I invented is a spoon that you can eat. I 2 \_\_\_\_\_ the idea because I love ice cream, but plastic spoons are bad for the environment. My product is 3 \_\_\_\_\_ because you can eat the spoon. What about the 4 \_\_\_\_\_? The spoons cost three cents to make, and I'd sell them for five cents. I'm asking for 5 \_\_\_\_\_ of \$600. Thank you for listening to my presentation. Now, I'm 6 \_\_\_\_\_ any questions.

Vocabulary review

Jobs in science; science

1 Circle the correct option.

We've all heard of famous 1 inventors/ inventions like Thomas Edison and Alexander Graham Bell. But what would you like to invent?

TomG51: I'd like to 2 make/come up with a solution to the problem of plastic waste. It would be great to 3 research/design a device for recycling plastic that everyone can use at home.

Libby\_Lu: I'd love to 4 invent/do a new kind of plane that uses solar power!

BigMax: I love studying plants, so I'd like to become a famous 5 engineer/biologist and 6 do/make an important discovery of a new medicine from a plant in the rainforest.

Describing products

2 In each review, the underlined adjectives are in the wrong place. Write the correct words.

This battery pack can charge anyone's phone wherever they are and is 1 reliable - you don't need to be a technology expert. It's really 2 cheap when you're on vacation and worried your phone might run out of power. We tested it 50 times and it worked every time, so it's definitely 3 handy. At \$39, it isn't 4 easy to use, but it's well worth the money!

- 1 easy to use                      3 \_\_\_\_\_
- 2 \_\_\_\_\_                              4 \_\_\_\_\_

This 5 wireless device is great if you like the latest technology! To check information, you can either ask questions directly, or use the touch screen to find what you're looking for. It's 6 high quality, of course, so you can put it anywhere you like in your room. The sound is really 7 useful, so it's great for listening to music. And the built-in camera is also very 8 innovative for making video calls.

- 5 \_\_\_\_\_                              7 \_\_\_\_\_
- 6 \_\_\_\_\_                              8 \_\_\_\_\_

Grammar review

Past perfect

1 Complete the sentences with the correct simple past or past perfect form of the verbs.

- 1 The professor \_\_\_\_\_ was (be) delighted to find out that his invention \_\_\_\_\_ had won (win) a prize.
- 2 By the time I \_\_\_\_\_ (arrive) at the laboratory, everyone else \_\_\_\_\_ (finish) their experiments.
- 3 She \_\_\_\_\_ (work) at the university for several years before she \_\_\_\_\_ (make) her first important discovery.
- 4 When he \_\_\_\_\_ (see) the results, he realized that he \_\_\_\_\_ (just/discover) a new kind of clean energy.

Relative pronouns

2 Circle the correct option.

Women Inventors

There are a lot of women 1 who/whose/that inventions have changed our lives.

When Margaret Knight worked in a factory in the US in the 1850s, factories were places 2 which/where/that there were a lot of accidents. Margaret designed a device 3 who/that/where made machines much safer to use.

Mary Anderson was an American woman 4 who/whose/that invention has made driving a lot safer. She invented a device 5 where/that/who helps drivers when it's raining - the windscreen wiper!



Essential adjective clauses

3 Join the sentences using an essential adjective clause.

- 1 Henry Ford was an entrepreneur. His cheap cars allowed more people to have their own car. Henry Ford was \_\_\_\_\_
- 2 Nicholas-Jacques Conté was a French scientist. He invented the pencil. Nicholas-Jacques Conté was \_\_\_\_\_
- 3 The year was 1825. The first passenger railway line opened. 1825 was \_\_\_\_\_

ROUND-UP

- 1 2 3 4 5 6 7 8

Read the article. Circle the correct option.

*Junior Dragons' Den* is a TV competition for young entrepreneurs. Young people 1 which/who/whose have ideas for new products present them to a team of business people. They try 2 persuade/in persuading/to persuade the business people to give them money so they 3 can/could/able to develop their ideas and start 4 sell/are selling/selling their products. The young people 5 had to/have to/could work hard because the business people, or 'dragons', are not easy 6 convincing/convince/to convince. It's important that they know their products well, and they 7 mustn't/don't have to/couldn't make any mistakes with their costs. Sometimes people fail because their ideas aren't very good, and sometimes they fail because they ask for 8 enough/too many/too much money. The competition has been on TV 9 since/for/already a few years now and it 10 has already helped/was already helping/had already helped to fund a lot of successful new products. Do you have 11 too many/enough/a lot of imagination to come up with an idea and face the dragons?

4 SELF-EVALUATION

Read the objectives for this unit. How well can you now do each one? Put a check (✓).

- 1 I can talk about science.
- 2 I can use adjectives to describe products.
- 3 I can use the past perfect.
- 4 I can use relative pronouns and essential adjective clauses.
- 5 I can understand the purpose of a text.
- 6 I can listen for information.
- 7 I can use question tags to check information.
- 8 I can write a formal letter.

If you choose ☹️, ask your teacher for extra help.



# Get INVOLVED!

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Building skills for the real world

## Empowers students to use English with confidence through collaborative projects

In each unit, the *WDYT?* (*What do you think?*) question encourages learners to reflect on the topic. The end-of-unit Project gives them a meaningful opportunity to use the new language, knowledge and skills in a personalized response to the question.

## Introduces social and emotional skills through real-life situations relevant to teens

Personalization activities give students an opportunity to reflect and apply social and emotional skills to their own lives. From simpler, more positive emotions in lower levels to more complex social and emotional situations in upper levels, these skills give students the tools to deal with challenges in and out of the classroom.

## Creates an inclusive classroom where everyone reaches their potential

Practical solutions for mixed-ability and mixed-level classes included in the course ensure that those who either need an extra challenge or to catch up get the best opportunities to do so.

## Builds super skills to help students thrive in education and in life

The thorough and systematic development of the four Super Skills – *Critical Thinking, Creativity, Communication and Collaboration* – complements the comprehensive language skills development in the course.

## For the student

- Student's Book
- Digital Student's Book
- Student's App
  - On-the-Go Practice
  - Student's Resource Center
- Workbook
- Digital Workbook

## For the teacher

- Teacher's Edition
- Teacher's eBook
- Teacher's App
  - Classroom Presentation Kit
  - Teacher's Resource Center
  - Progress Tracker
  - Test Generator

• **Kahoot!**



This course supports Education for Sustainable Development and Citizenship

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The Student's App with gamified activities motivates learners to spend more time practicing English to maximize opportunities for better learning outcomes.



The Teacher's App with Classroom Presentation Kit and integrated audio, video and interactive activities helps to deliver stimulating classes. All useful files and documents are available at the click of a button.

## COMMON EUROPEAN FRAMEWORK

A1

A2

**B1**

B2

C1

C2

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