

Let's Talk Science

Scientific Discoveries & Inventions



Welcome & Objectives

Welcome to **Let's Talk Science – Discoveries & Inventions**

Today, you will:

- Learn vocabulary related to science and technology
- Practise **present perfect** and **present perfect continuous**
- Explore famous inventions and scientific milestones
- Discuss how discoveries change our lives

This lesson encourages curiosity and speaking through practical examples.

Icebreaker – What's the Greatest Invention?

- What's one invention you couldn't live without?
- Who do you think invented it?
- What would the world be like without it?



Vocabulary – Science & Discovery

Discuss the following vocabulary with your tutor:

Word	Definition
experiment	a test done to discover or prove something
invention	something new that has been created
discovery	finding something that already existed
research	detailed study to learn more about a subject
hypothesis	an idea or theory that is tested
data	facts or information collected during research

Vocabulary – Famous Inventions

Discuss the following terms with your tutor:

Invention	Why It Matters
light bulb	allowed people to work and live at night
telephone	made communication faster
printing press	spread books and knowledge
antibiotics	saved lives by fighting infection
internet	changed the way people learn, shop and connect

Question: Which invention do you use in your daily life?

Grammar – Present Perfect Simple vs Continuous

Understanding the grammar rule:

Focus: “have/has + past participle” vs “have/has been + verb-ing”

Form	Use	Example
Present Perfect Simple	Completed action with present result	“Scientists have discovered a new species.”
Present Perfect Continuous	Action continuing into now or just finished	“She has been studying marine biology for years.”

Grammar Practice – Fill in the Blanks

Use present perfect simple or continuous to fill in the gaps:

- Scientists _____ (find) a new cure.
- He _____ (work) on that project all year.
- They _____ (build) a telescope for several months.
- She _____ (publish) a paper on climate change.



Activity – Categorise These Inventions

Group the following into:

Communication – Health – Daily Life – Education

- vaccine
- radio
- mobile phone
- calculator
- microscope
- toothbrush

Example:

- Communication: radio



Reading – How the Printing Press Changed the World

Read the passage below with your tutor:

Before the printing press, books were copied by hand, which made them slow and expensive to produce. Only the rich or powerful had access to written knowledge. In 1440, Johannes Gutenberg invented the printing press. This machine made it possible to produce books quickly and in large numbers. As a result, information spread more widely, more people learned to read, and education began to grow across Europe.

Discussion Questions:

- **What was life like before the printing press?**
(Think about books, learning, and who had access to knowledge.)
- **What other inventions helped education?**
(You could mention things like the internet, the computer, the radio, or online learning apps.)

Bonus: Do you think the printing press is still important today? Why or why not?



Grammar – “For” and “Since” with Present Perfect

Understanding the grammar rule:

Structure:

“for” → duration (e.g. for 10 years)

- “since” → point in time (e.g. since 1990)

Example:

“She has been researching for 5 years.”

“They have worked in the lab since January.”

Grammar Practice – Choose For or Since

Fill the gaps using For or Since:

- He has studied engineering _____ 2020.
- We have been testing samples _____ two weeks.
- I've worked in a lab _____ 5 years.



Vocabulary – The Scientific Method

Define and discuss the following terms with your tutor:

- Question
- Research
- Hypothesis
- Experiment
- Data
- Conclusion
- Report

Discussion: Have you ever done an experiment before? Which step is most difficult?

Activity – Order the Process

Put these in the correct order:

- collect data
- form a hypothesis
- ask a question
- do the experiment
- draw a conclusion

Answers on the next slide:

Answers:

Correct Order:

- ask a question
- form a hypothesis
- do the experiment
- collect data
- draw a conclusion



Speaking – Speculative Inventions

- What invention would you like to see in the future?
- What might life be like in 100 years?

Try to use the terms: **might** / **could** / **may** in your answers.



Grammar – Passive Voice for Inventions

Understanding the grammar rule:

Use passive to describe inventions when the inventor isn't the focus.

Example:

“The telephone **was invented** in 1876.”

“Vaccines **have been used** for centuries.”

Structure:

Passive: be + past participle



Vocabulary – Lab Equipment

Define and discuss the following terms with your tutor:

- microscope
- beaker
- test tube
- Bunsen burner
- scale
- thermometer

Discussion: Which of these have you used in school and what was it used for?

Activity – Fact or Myth?

Discuss whether you believe the following are true or false (and explain why you think that way):

1. Humans only use 10% of their brain.
2. Lightning never strikes the same place twice.
3. Vaccines prevent disease.
4. Plants need sunlight to grow.

Answers on the next slide:

Answers:

1. Humans only use 10% of their brain. - False
2. Lightning never strikes the same place twice. - False
3. Vaccines prevent disease. - True
4. Plants need sunlight to grow. - True

