ProTalk

Discussion Files



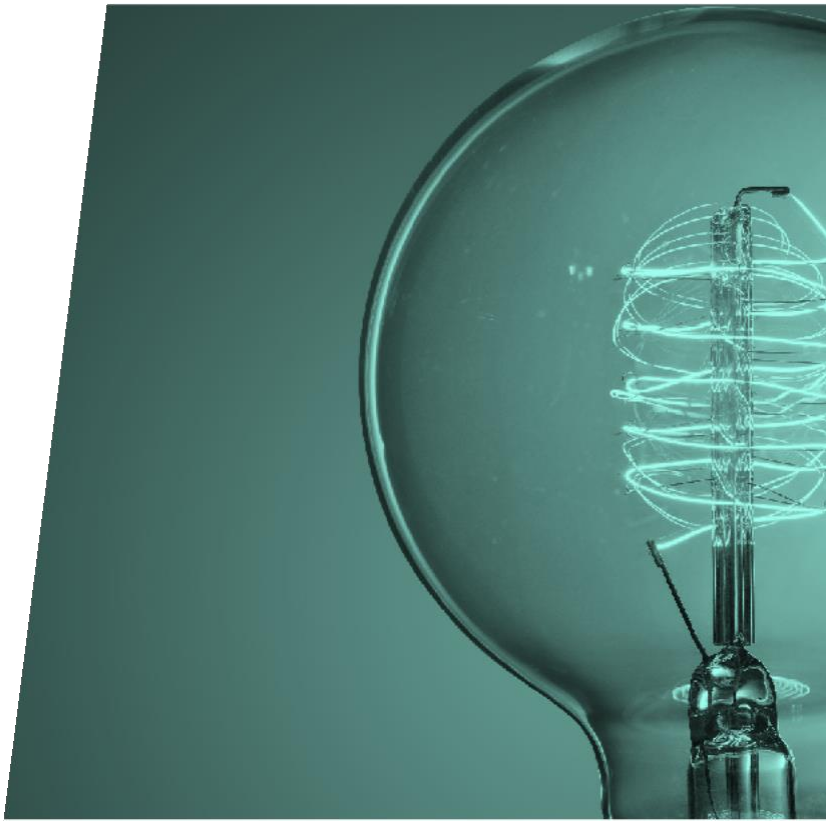
C2. The discovery of electricity

Afaq Language Center

Language Center

Goals

- Can read and understand a complex text about the discovery of electricity.
- Can discuss past inventions in depth and convincingly make speculations about the future.



How many times a day do you use something electrical without even realising it? Even though we **take it for granted**, electricity is all around us. Let's take a moment to find out about its history.

The world around you



How many items can you see around you that use electricity?

Make a list with your teacher or the other students.

What would life be like without these items?

What would you use instead?

Check your knowledge

List 5 things you already know about the discovery of electricity. Are you able to answer any of the questions who, what, when, where and why?



Read the text and summarize it.

Electricity



Electricity is a form of energy that occurs in nature. Many people say that the 18th century scientist Ben Franklin invented electricity by flying a kite in a lightning storm and collecting the electrical charge in a special jar. Franklin did invent several words we still use today, including **battery**, **conductor** and **electrician**. However, electricity has always existed. Franklin should be given credit for discovering certain things about electricity, not inventing it.

Read the text and summarize it.

Electricity

There is historical evidence that ancient **civilisations** knew about, and used electricity. Egyptian texts from 2750 BCE write about getting shocks from electric fish. They thought that these electric fish were protectors of all other fish. In 600 BCE, ancient Greeks rubbed fur on amber, creating what we now know as static electricity (exactly the same as rubbing a balloon on your hair and letting it stick to the wall). Copper-lined pots, believed to have been batteries used to produce light, have been discovered at ancient Roman and Persian **archaeological** sites.

Read the text and summarize it.

Electricity



Many well-known scientists besides Franklin contributed to the **body of knowledge** about electricity. For example, Italian physicist Alessandro Volta built a device called a voltaic pile in 1800. This was an early form of the electric batteries we use today. His work was so influential that the standard unit for measurement of electric potential, a volt, is named after him.

Read the text and summarize it.

Electricity

Other scientists who contributed to our knowledge of electricity include Nikola Tesla, Thomas Edison and Andre Ampere. This knowledge eventually combined in the late 19th century to make electricity available for **residential** and **industrial** use. The widespread use of electricity quickly changed society, allowing huge changes to take place in the way people lived and the way industry worked.

Vocabulary: Do you know these words from the text? Discuss the meanings with your teacher and use each in a sentence.

to take something for granted

industrial

residential



battery

body of knowledge

conductor

archaeological

electrician

civilisation

Discussion

Discuss these questions with your group or teacher.



1 If you could study (or are studying) any branch of science, what would it be? Why?

Discussion

Discuss these questions with your group or teacher.



1 If you could study (or are studying) any branch of science, what would it be and why?



2 What changes have taken place as a result of widespread use of electricity? How has society developed?

Discussion

Discuss these questions with your group or teacher.



1 If you could study (or are studying) any branch of science, what would it be and why?



2 What changes have taken place as a result of widespread use of electricity?



3 In which situations do people have to live without electricity?

Improvise

Imagine that the electricity in your home has been suddenly cut off. Imagine a dialogue with your friend. You are calling her with the last 2% of your phone's battery life. Read the lines below and then role play the rest of the conversation!



Sarah! Are you there?

Oh, hey John! What's up?





Listen, I need your help – it's an emergency!

Oh?



Debate

Do you agree or disagree with the sentence below? Why or why not? Discuss with your teacher or group.

> The world would be better off without such widespread reliance on electricity.

Reflect and discuss

Many popular hobbies nowadays are reliant upon electricity. Imagine humankind had never discovered electricity. What kind of pastimes do you think would be popular instead?



Activity p. 11

1f, 2t, 3f, 4f, 5f, 6t.

Activity p. 12

1 Ben Franklin lived and worked. 2 Egyptians wrote about electricity. 3 Greeks discovered static electricity. 4 Volta built the volatic pile. 5 Electriciy was made available for widespread use.

Presentation

Prepare a two-minute story about science. Tell your story to the class. Answer questions and get feedback.

