ENIAC: the first computer

SPEAKING

LEVEL	NUMBER	LANGUAGE
Advanced	C1_4036S_EN	English

Goals

- Can read, listen to and understand a complex text about the first computer.
- Can make comparisons between the first computer and the computers we use today and speculate about the computers of the future.

The **computer** has had a lifespan of almost 90 years. During this time much has changed. The first computer would be **unrecognisable** to many nowadays.

Computer literate?

Would you say that you are computer literate? How long did it take you to master your current computer?

Using a computer

How often do you use a computer? Which tasks do you perform?

Other machines

Describe the machines in your home which rely on computers to make them work.

The history of the computer

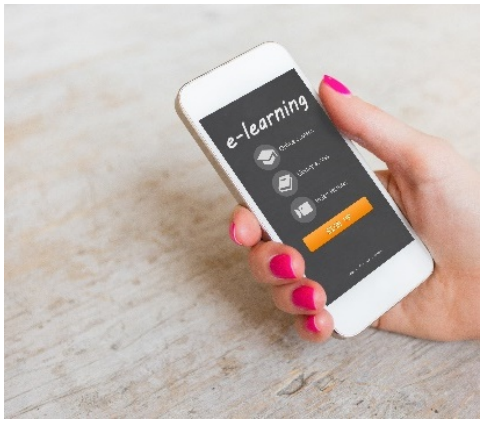
Do you know anything about the history of the computer?

ENIAC: the first computer

The computer that is sitting on your desk, or your **lap**, is far removed from the first computer ever invented. A computer in its true sense is any device which can carry out **sequences** of **logical operations**. Some computers may be less obvious than others. For instance, microwaves and remote controls in your home are computers, as is the touchscreen smartphone in your pocket.

ENIAC: the first computer

What constitutes the first computer is **debatable**, as no inventions are formed out of thin air, and multiple versions of earlier inventions always lead to improved versions. What can be agreed upon is that World War Two provided the **impetus** for quickening of the pace of **honing** a machine which could make advanced calculations. Early machines, which could be recognisable as computers, were built to help **decode encrypted** German messages in the early 1940s.



ENIAC: the first computer

However, the first machine to meet all of the criteria for being called a computer was **ENIAC**, or the Electronic Numerical Integrator and Computer. This huge machine weighed almost 30,000kg and occupied 167m^{2}.; hardly a laptop by today's standards!

Work began on ENIAC in 1943 and was completed in 1946. The computer's construction was financed by the United States Army, **to the tune of** almost half a million dollars, or over $6 million dollars in today's money. It was developed with the idea that it would be beneficial to the army in the Second World War, but it was actually finished too late.

The first computer

Have you heard anything about the first computer? Did you hear about ENIAC or a different machine?

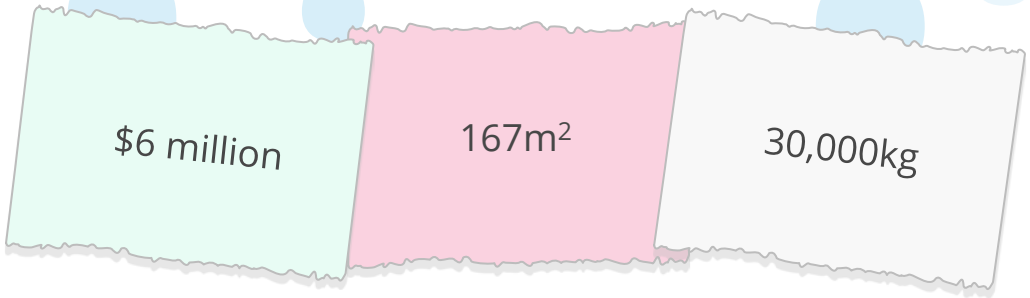
If not, what is the earliest computer you can remember?

The impact of the Second World War

Do you think that computer technology would have developed in the same way if the Second World War had not happened? What might have been different?

The numbers

The numbers involved in the first computer are hard to comprehend. If present day computers were still so large and expensive, how would this change the way we live and work?



Other tech

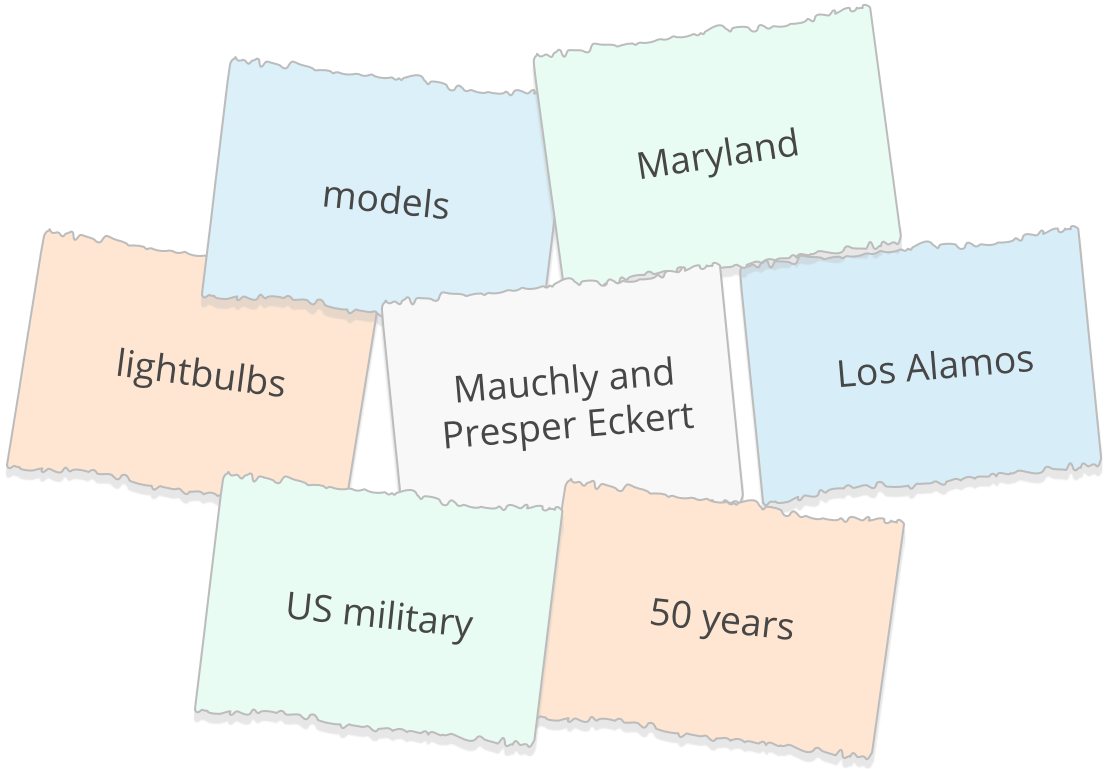
What other inventions in technology can you think of which have developed over time and have had a huge impact on our lives?

Get ready to listen

The next few slides will focus on training your listening comprehension

While you listen

Why are these things mentioned in the listening?



Women in tech

Answer these questions about women in tech.

1. Did you know that women were mainly responsible for programming ENIAC?

2. Why do you think they were unrecognised for so many years?

3. Do you know any other developments in tech that women are unrecognised for?

Grasping ENIAC

Do you think you would have grasped the concept of ENIAC in the 1940s? What do you think of the scientists' presentation of it to the public?

Your first computer

Describe your first computer. How have computers changed in your lifetime?

The future

Can you imagine what the future of computers might look like?

Discuss what would you think they should include.

Life without a computer

Which tasks can you not imagine doing without a computer? How much more difficult would your life be without one?

A world without computers

How would the world be different if the computer had never been invented? What events might not have happened?

Roleplay

Using your ideas from the previous two slides, have a debate with your classmates about your thoughts on technology and computer advances.

Without the computer, we would spend more time on valuable leisure activities.

We wouldn't have travelled into space if it weren't for computers!

Group 1: You believe that computers should never have been invented.

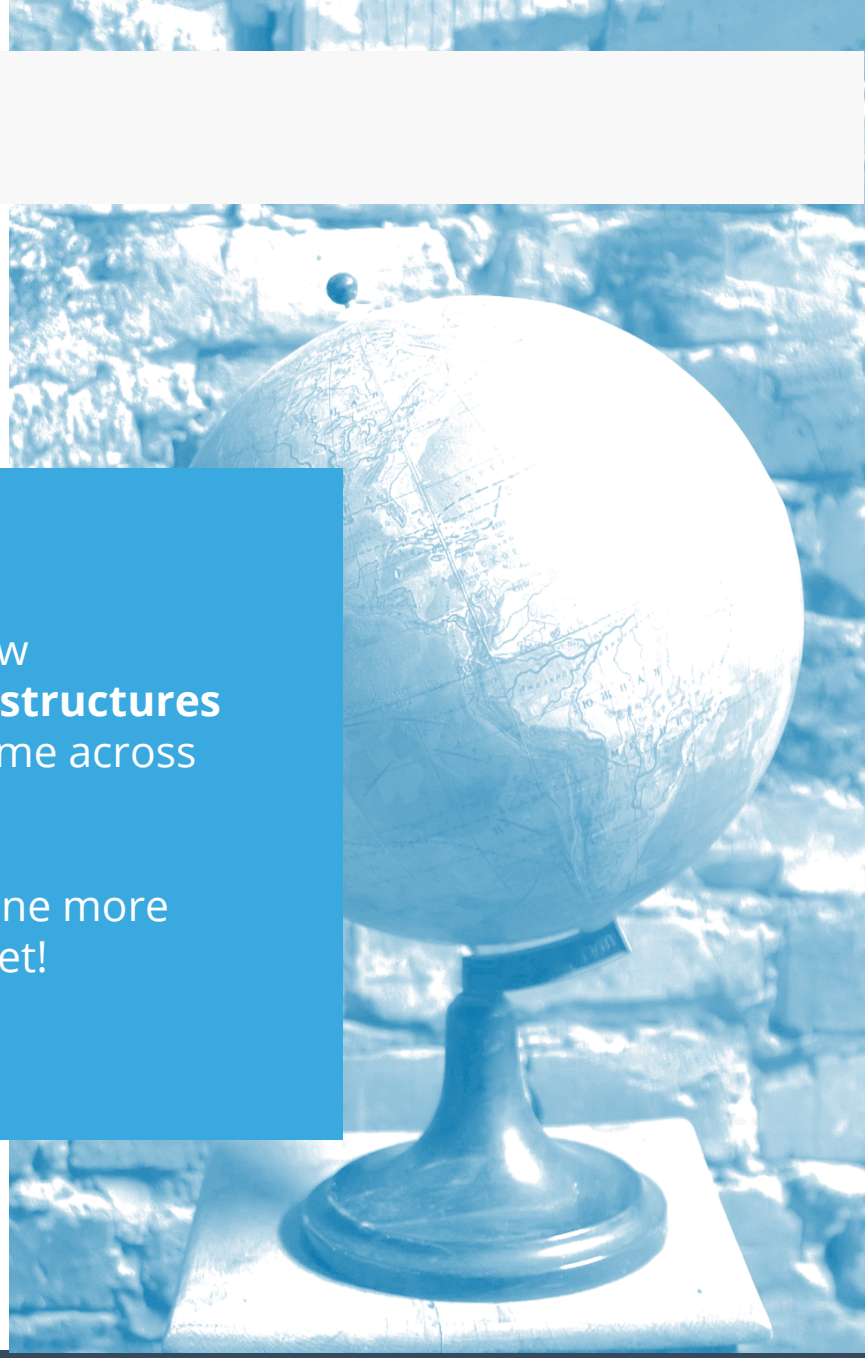
Group 2: You believe that computers have made the world a better place.

To sum up...

Overall, would you want to go back in time to a world without computers? Do you think we have become reliant on them?

Discuss the pros and cons of the technology development you have explored in this lesson.

Reflect on this lesson



Take a moment to review any new **vocabulary**, **phrases**, **language structures** or **grammar points** you have come across for the first time in this lesson.

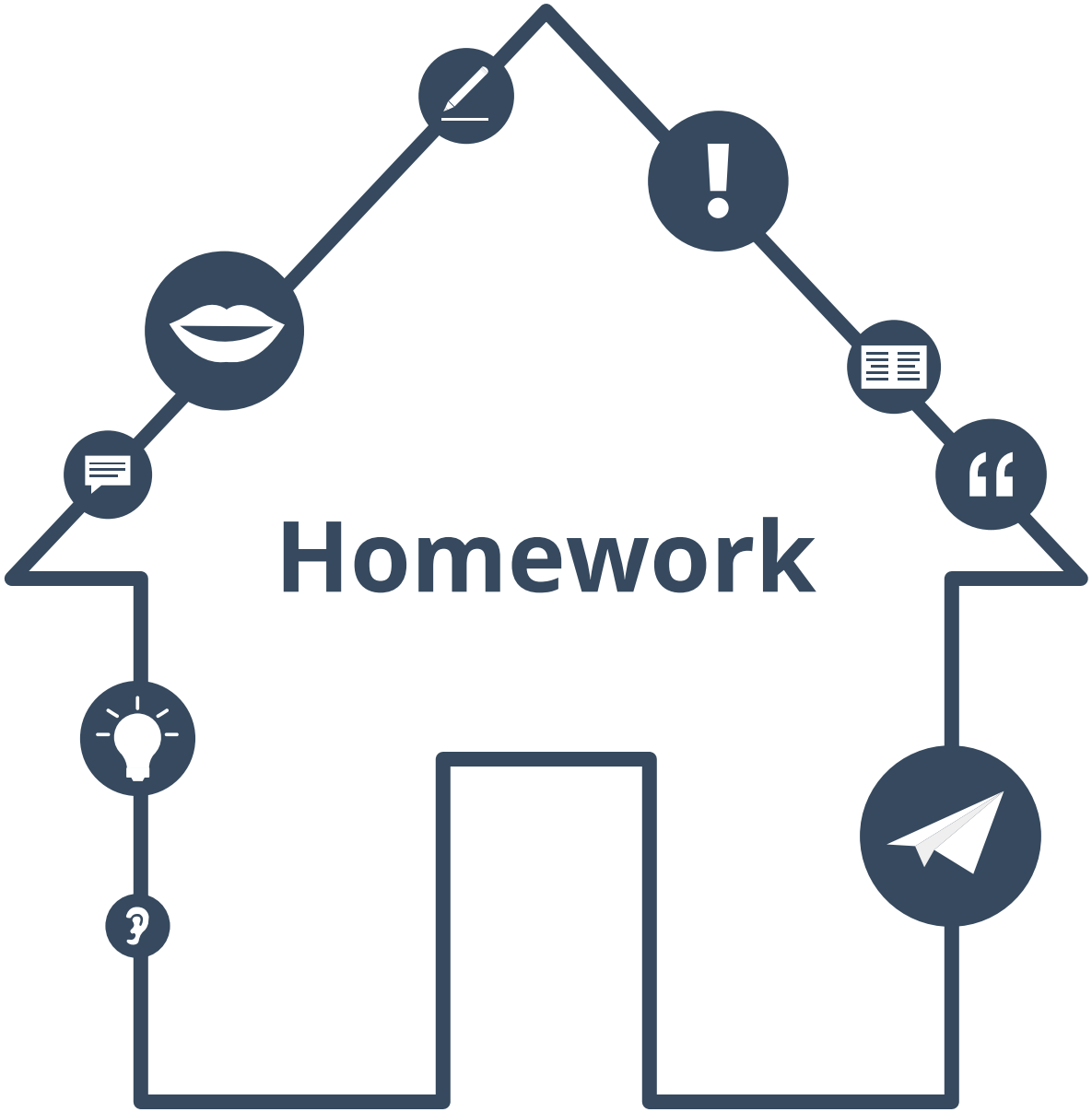
Review them with your teacher one more time to make sure you don't forget!

Transcription

The design credit for the computer must go to two men, John Mauchly and J. Presper Eckert, but the credit for programming the computer should be given in the main to six women. Initially, the women were first mistaken for models posing with the computer for promotional pictures, and recognition for their work was only given 50 years later.

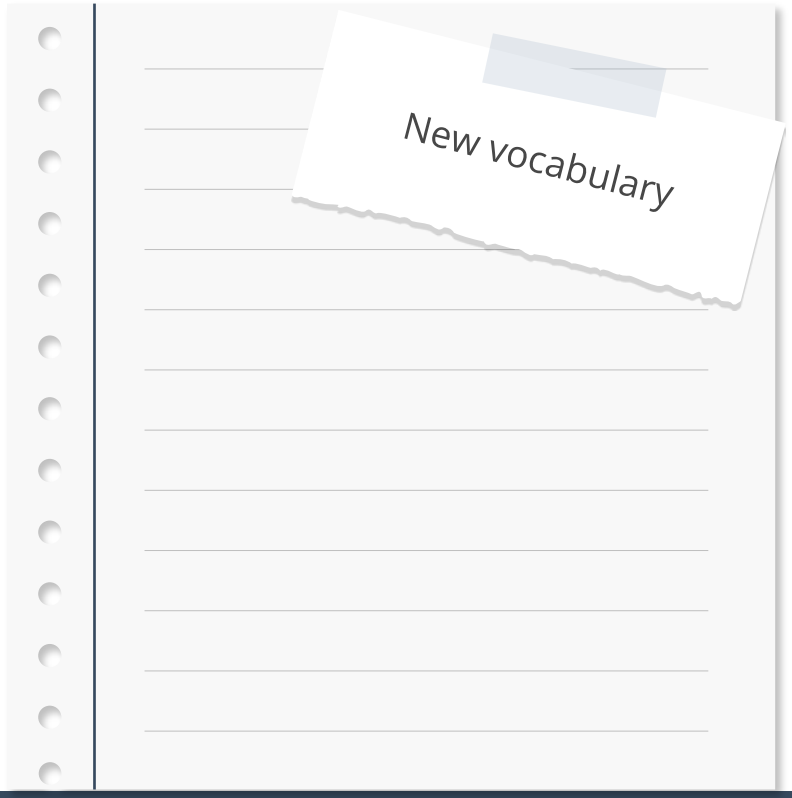
The scientists knew that they had created something that would change history, but they did not know how to present this invention to the general public. In the end, they painted numbers on some lightbulbs and screwed them into ENIAC's panels. These flashy lights would be etched into the minds of the public as the image of the first computer.

ENIAC was based for most of its lifetime in Maryland in the USA, and was in continuous operation until 1955. It was initially designed to calculate artillery firing tables for the US military, and could perform this function one thousand times faster than other electro-mechanical machines. However, it was hardly used in that capacity and its first test run problem was in the calculations for the hydrogen bomb at Los Alamos.


Homework

Vocabulary

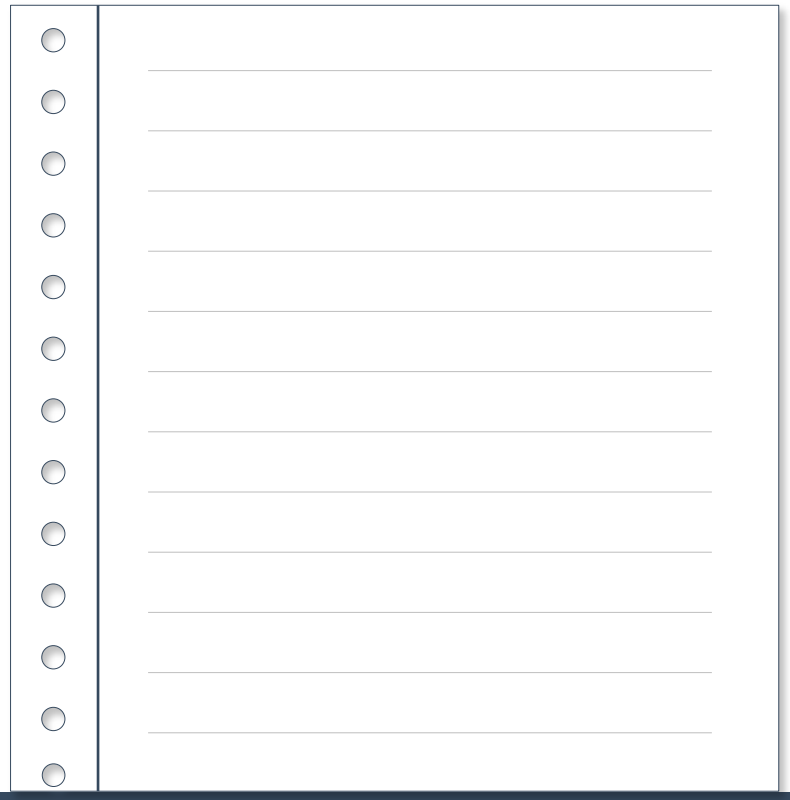
Record any new vocabulary from the lesson here.



Writing

Write a short 100 word text about whether you think the world would be a better place without computers.

war	ENIAC
simple	high technology
work	miltary



About this material

Find out more at www.lingoda.com

This material is provided by lingoda