

Alan Turing



Alan Turing was an English scientist, mathematician and codebreaker. He is best known for his important role in cracking German codes during the Second World War and is often considered to be one of the fathers of modern computing.

Early Life

Alan was born on 23rd June 1912 in London. His father, Julius, worked as a member of the Indian Civil Service and his mother, Ethel, was the daughter of the chief engineer of the Madras Railway in Southern India.

Julius and Ethel spent lots of time travelling to India. As they wanted their children to be raised in Britain, they decided that Alan and his older brother, John, would not travel with them. Instead, the boys would stay with friends of the family.

Childhood Genius

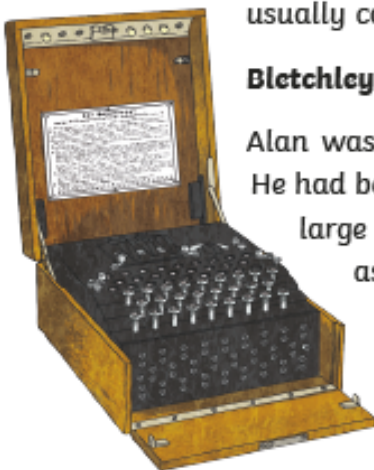
Stories about Alan's childhood tell of a boy who enjoyed puzzles and challenges. One story recounts the day that Alan tracked the path of flying bees so that he could find their hive and get honey for his family.



Alan's teachers also knew that he was very clever for his age. At the age of 13, Alan joined Sherborne School in the town of Dorset. While he was at Sherborne School, Alan's excellence in mathematics and science became clear. He was able to solve problems and understand ideas far harder than a child of his age usually could.

Bletchley Park

Alan was 27 years old when the Second World War started. He had been working part-time at Bletchley Park which was a large house where codebreakers worked. Alan worked there as part of the Government Code and Cypher School.



During the war, the German army believed that changing their messages into code would stop their enemies from reading them. They used a clever

system which involved replacing one letter with another lots of times. By writing down what changes had been made, German soldiers could still read the original message even though what they had received did not appear to make any sense.

However, a machine called the Enigma had been invented by Polish codebreakers during the First World War. In 1939, the Polish cryptanalysts shared their machine with British and French codebreakers so that they could learn the German army's secrets and outsmart them in the war.

Alan and a team of codebreakers tried to use the Enigma machine to break the German code. Within weeks of starting work at Bletchley Park, Alan had created a new machine called 'the bombe'. Alan's machine was far better at cracking codes than the Enigma machine had been. His new machine became one of the most important tools used to read German messages and it played a huge part in ending the Second World War.



For his services during the war, Alan was awarded with an OBE (Officer of the Order of the British Empire) by King George VI in 1946.



"Those who can imagine anything, can create the impossible." – Alan Turing

Guided Reading Homework - Alan Turing - Monday 15th June 2020

Please read the text and answer the following questions in full sentences:

- 1) In which year did Polish cryptanalysts introduce British and French codebreakers to the Enigma?
- 2) In which subjects did Alan excel at school?
- 3) What was Alan's father's job?
- 4) Find and copy the name of the large house where Alan worked during the Second World War.
- 5) According to the text, what is Alan best known for?
- 6) **"Those who can imagine anything, can create the impossible."**
Why do you think that Alan said this?
- 7) Why do you think that Alan's new machine was named 'the bombe'?
- 8) Alan Turing has been chosen to feature on the British £50 note.
Why do you think this is? Use evidence from the text to support your answer.