

Reading
Mission:
30
minutes

Children to read or support them to read the following text.

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.

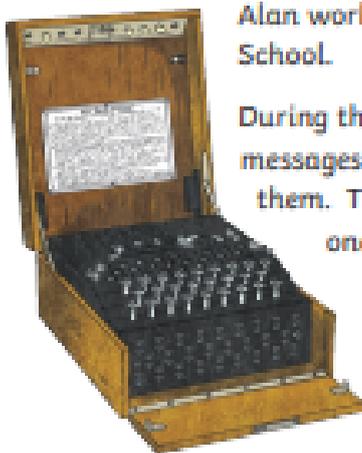
Stories about Alan's childhood tell of a boy who enjoyed puzzles and challenges. One story recounts the day that Alan tracked the path of flying bees so that he could find their hive and get honey for his family.

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.



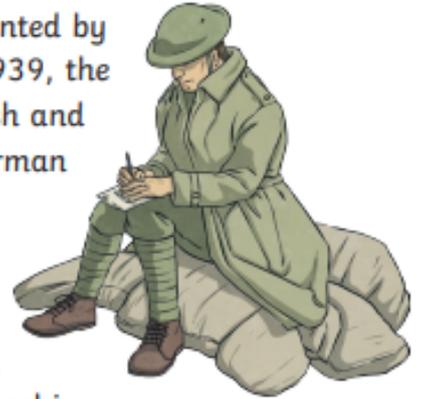
Alan worked there as part of the Government Code and Cypher School.

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.

Alan Turing

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.



A Sad End

Despite everything that Turing did to help end the war, he was treated terribly by the British government in later years. In 1952, Turing was found guilty of being a gay man. This was a crime in Britain at the time and as a result, Turing was mistreated and harmed by doctors who thought they could change him. Life became too awful for Turing and on 7th June 1954, he was found dead at his home after eating a poisoned apple.

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

After they can answer these questions. These can be verbal answers or they could be written down or typed. Children could even draw their responses. Suggested answers are in italics.

In which year did Polish cryptanalysts introduce the Enigma machine to British and French codebreakers?

In which subjects did Alan excel in school?

Find and copy the name of the large house where Alan worked during the Second World War.

According to the text, what is Alan best known for?

“Those who imagine anything, can create the impossible.” Why do you think Alan said this?

Alan Turing has been chosen to be on the English £50 note. Using evidence from the text, why do you think this is?

Look at the section “Early Life”. Find and copy a word which means the same as “followed”.

In your own words, explain why Alan Turing might be inspirational to people today.

Do you think how he was treated near the end of his life was fair? Why or why not?

Answers are at the end of the timetable.

Writing Mission:
30 minutes

Today you are going to plan how to convince a member of your family that the invention you chose yesterday is the most important invention in the house. You will need to come up with a number of arguments to explain why this invention is better than any other.

Example

Toilets are the greatest invention ever.

- 1) Without toilets, people would have to go outside every time
- 2) Every now and then people would have to dig a new hole in the ground to go to the toilet in
- 3) Some people do not have gardens, and without gardens houses would get very smelly very quickly...
- 4) On the toilet, you can sit and think about how to solve other problems
- 5) You know people will leave you alone when you are going to the toilet (you hope!)

If you really want to convince someone, you also need to try and guess what they will say to argue back, and then argue against their arguing.

Example

People might argue that

- 1) Public toilets are awful. I could say...

Maths Mission:
30 minutes

We have decided it would be a good idea to explicitly set some times tables practice every day to help keep us sharp! You could have your own mini-test at the end of week, and send me the results if you like! As a reminder, there are plenty of online games to help practise these as well (e.g. <https://www.topmarks.co.uk/maths-games/hit-the-button>).

Today’s times table is the **11 times table**.

When comparing decimals, you are using the same skills in knowing that $1 < 2$ or $4 > 3$. The only difference is that you are now applying them to tenths instead of ones, e.g.

1.4 and 1.8. Which is larger?

1.4 < 1.8 because 8 tenths is more than 4 tenths.

BBC Bitesize has some lessons and activities here: <https://www.bbc.co.uk/bitesize/articles/z86x8hv>

Alternatively, you can complete the following activity:

Ordering decimals

Write < or > between each pair.



1. 1.25 1.35

2. 1.41 1.37

3. 1.46 1.57

4. 1.2 1.4

5. 1.5 1.3

6. 1.3 1.42

7. 1.3 1.24

8. 1.59 1.5

9. 1.25 1.3

10. 1.3 1.29

11. 1.4 1.61

12. 1.41 1.3

13. 1.21 1.5

14. 1.54 1.35

15. $1 \frac{31}{100}$ $1 \frac{3}{10}$

16. 1.5 $1 \frac{47}{100}$

17. 1.32 $1 \frac{4}{10}$

18. $1 \frac{41}{100}$ 1.45

19. 1.5 $1 \frac{33}{100}$

20. $1 \frac{3}{10}$ $1 \frac{29}{100}$

Topic Mission: Day 2	<p>Can you invent something that would help in the following situations?</p> <ol style="list-style-type: none"> 1) Cars are causing lots of pollution and damaging the environment. What could you invent to stop this happening? 2) The oceans are full of plastic waste that has been thrown away. How could you clear it up? 3) There is not enough space to feed all of the humans on the planet anymore and some food needs to be farmed on the moon. Could you invent something to help this?

Reading Mission

In which year did Polish cryptanalysts introduce the Engima machine to British and French codebreakers?

1939

In which subjects did Alan excel in school?

Maths and science

Find and copy the name of the large house where Alan worked during the Second World War.

Bletchley Park

According to the text, what is Alan best known for?

Cracking the German codes in the Second World War.

“Those who imagine anything, can create the impossible.” Why do you think Alan said this?

Your child’s answer/ to inspire others.

Alan Turing has been chosen to be on the English £50 note. Using evidence from the text, why do you think this is?

Your child’s answer, referencing his achievements such as helping win the Second World War.

Look at the section “Early Life”. Find and copy a word which means the same as “followed”.

tracked

In your own words, explain why Alan Turing might be inspirational to people today.

He used his intelligence to help his country, he was good at solving problems, he saved a lot of lives/your child’s answer.

Do you think how he was treated near the end of his life was fair? Why or why not?

Your child’s answer – No, it was not fair that he was treated badly because he was gay/didn’t do anything wrong.