

## Why is Alan Turing on the £50 note?

### Skills

- Know key dates, characters and events of time studied
- Confidently use the library and internet for research
- Suggest omissions and the means of finding out
- Use relevant dates and terms
- Sequence up to 10 events on a timeline
- Find out about beliefs, behaviour and characteristics of people, recognizing that not everyone shares the same views and feelings

### Knowledge

Alan Turing was a British **mathematician**.

Born 23rd June 1912 – 7th June 1954

He made major contributions to the fields of mathematics, computer science, and **artificial intelligence**.

He worked for the British government during **World War II**, when he succeeded in breaking the secret code Germany used to communicate.

Turing played a pivotal role in cracking intercepted coded messages that enabled the Allies to defeat the Nazis in many crucial engagements, including the Battle of the Atlantic, and in so doing helped win the war.

After the war, Turing worked at the National Physical Laboratory, where he designed the Automatic Computing Engine, which was one of the first designs for a stored-program computer.



In 1948, Turing joined Max Newman's Computing Machine Laboratory at the Victoria University of Manchester, where he helped develop the Manchester computers<sup>[14]</sup> and became interested in mathematical biology

He was never fully recognised in his home country during his lifetime, due to his homosexuality, which was then a crime in the UK, and because his work was covered by the Official Secrets Act.

In 2019 the Bank of England announced that Turing would be featured on the new 50-pound banknote. The note was expected to enter circulation in 2021.

*Essential vocabulary*

<b>code/cipher</b>	Words/letters replaced by symbols and numbers to keep information secret
<b>encrypt</b>	To turn messages into code
<b>Enigma machine</b>	A German machine used to encrypt messages
<b>Bletchley Park</b>	The headquarters of British codebreaking during WW2
<b>cryptanalysis</b>	deciphering/cracking codes
<b>algorithm</b>	A set of instructions written to solve a problem for a computer
<b>artificial intelligence</b>	The ability of computers and machines to think and learn
<b>Turing machine</b>	An early computer
<b>discriminate</b>	To treat someone differently based on their religion, ethnicity, skin colour, sexuality etc.

Question	Essential Knowledge
Who was Alan Turing?	Born 23 <sup>rd</sup> June 1912 in Maida Vale, London. Attended boarding school as parents worked abroad. Talented and sporty but struggled in school. Attended Kings College, Cambridge University.
Why do we remember Alan Turing?	Alan and his team developed The Turing Machine (The Bombe) to crack the German code. While working at University of Manchester, he developed one of the first modern computers.
What was the importance of Bletchley Park?	It was here that Alan worked as part of a team of code-breakers that deciphered the secret German code and helped bring an end to WWII.
Why wasn't he celebrated during his lifetime?	Alan was the victim of discrimination, which led to him receiving a criminal record.
<b>Bridging backwards:</b>  Computer coding Y6 Aut 1 Blitz and Pieces PSHE (Jigsaw): Celebrating Differences	<b>Bridging forwards:</b>  KS3 Computing KS3 History

Question	Activity
Who was Alan Turing?	<p><i>Fake-book (when, where etc) with peer support for SEN/INA</i></p> <p><i>+ Guided Reading text</i></p>
What was the importance of Bletchley Park?	<p><a href="https://www.bbc.co.uk/teach/class-clips-video/history-ks2-codebreaking-in-world-war-two/zdq2jhr">https://www.bbc.co.uk/teach/class-clips-video/history-ks2-codebreaking-in-world-war-two/zdq2jhr</a></p> <p><i>Make a decoding device</i></p> <p><b>Artificial intelligence – USA vs Russia</b></p> <p><b>Algorithm encrypt code/cipher cryptanalysis</b></p> <p><b>Turing machine Bletchley Park</b></p> <p><i>While working at University of Manchester, he developed one of the first modern computers.</i></p>
Why wasn't he celebrated during his lifetime?	<p><i>Bridge back: While working at University of Manchester, he developed one of the first modern computers.</i></p> <p><i>Write an obituary with a modern twist (INA/SEN tweet, others: vlogs, podcast, green screen news bulletin etc) (Class blog post - tweets go live as they are made?)</i></p> <p><i>Alan was the victim of discrimination, which led to him receiving a criminal record.</i></p> <p><b>discriminate</b></p>
Why do we remember Alan Turing?	<p><i>Look at memorials that already exist for Alan Turing (last year pics planning) Use one of these pictures as a centerpiece for their own poster about Alan.</i></p>