

## The National Museum of Computing



A group of 45 Y8 students had the opportunity to visit the National Museum of Computing based in Bletchley Park. It is a museum of 'computing' not just 'computers'. The museum houses the world's largest collection of functional historic computers, including the rebuilt Colossus, the world's first electronic computer, and the WITCH, the world's oldest working digital computer.

Students were able to see 70 years of computing in progress. They had plenty of opportunities to explore and get hands on to learn about: software, what each computer was originally used for, and the people involved in its development and use.

The visit included:

- a visit to the Tunny and Colossus gallery
- a visit to the WITCH and Edsac gallery
- tours of the Museum, PC Gallery & Large System Gallery
- Acorn BBC computer room Activity
- Turning Test Hub Activity



Students were fully engaged, excited and involved throughout the day. They were able to link the real world scenarios of computing with the subject at Woodford County High. Here are some views from couple of students:



## The National Museum of Computing (cont'd)

### Part 1

On arrival, immediately the staff introduced everyone to the history of computing, using real life pieces of technology ranging from a brick phone to an Apple tablet, bring the history of computing alive.

There were many changes throughout the timeline of technology, but the main one taught is that storage gets smaller and bigger as the world of coding and software creations increase. In support of this they acquired, conserved, restored and reconstructed historic computing machinery for, display, demonstration and research.

At this museum, the importance of AI and its everyday use was highlighted when the girls were tested with a piece of code that could be changed to create different answers and to be more human like.



This then led on to the girls participating in the Turing test, courtesy of the well-known Alan Turing who saved potential lives with his invention of the 'enigma', and gave an insight into how codes could be used to help everyday lives.

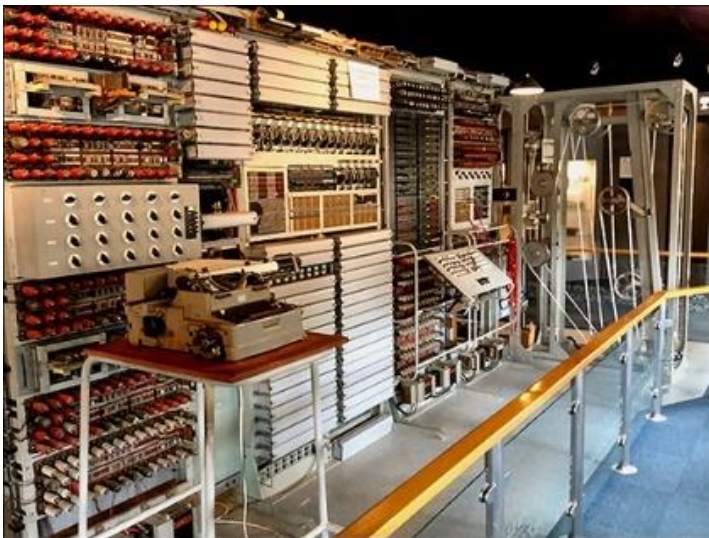
At the museum, they also taught how to code on a much older computer which was provided by BBC from the late 1900s, in order to achieve and activate a snake game – which was extremely engaging and competitive and well worth the lines of code written by the girls.

## The National Museum of Computing (cont'd)



Everyone stumbled in the code at least a few times, but that taught the importance of patience, time and care when working in the computing industry.

Amina, Year 8



### Part 2

Learning about the history of computers has got to have been one of the most interesting experiences in my life. From learning the origins of computing to seeing them work first hand, it was an unforgettable experience. The main areas we looked at were the Colossus and the WITCH Computer.



## The National Museum of Computing (cont'd)

We learnt that Tommy Flowers spent eleven months designing and building Colossus at the Post Office Research Station, Dollis Hill, in North West London. After a functional test, Colossus Mk 1 was delivered to Bletchley Park in late December 1943 / January 1944, was assembled there by Harry Fensom and Don Horwood, and was working in early February 1944.



We also learnt that the use to which the Colossi were put was of the highest secrecy, and Colossus itself was highly secret, and remained so for many years after the War. Colossus was not included in the history of computing hardware for decades, and Flowers and his associates were deprived of the recognition they were due for many years.

After this, we looked at the WITCH Computer which was the world's oldest original working digital computer. We learnt that in 1949 plans were drawn up for a machine to automate the tedious work performed by teams of bright young graduates using mechanical calculators. Simplicity, reliability and unattended operation were the design priorities. Speed was of a lower priority.

I really recommend going to the National History of Computing because you can see how computers developed from extremely large machines to hand held devices!

Miriam, Year 8