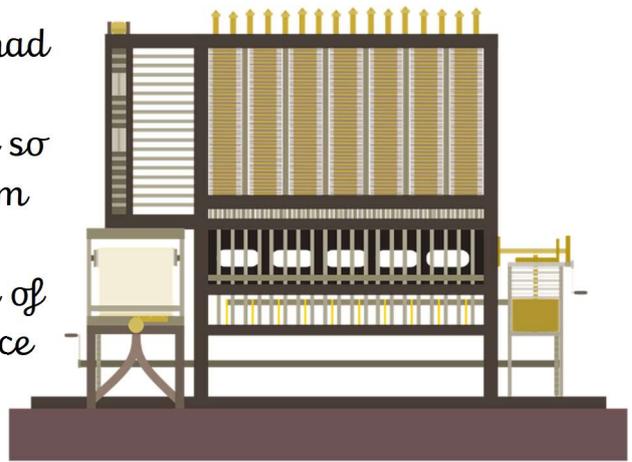


The First Computer

What was the first computer? What did it look like? What could it do? These are challenging questions to answer because like all other technologies the computer that we know today is the product of a long line of evolution. The first computer ever built did not look at all like the one we know today and could not do anywhere near as much as modern day computers, but they sure could do a lot for the time they were invented.

This takes us back to 1822 when Charles Babbage developed the 'Difference Engine'. It was capable of computing several set of numbers and could create tables of 'common logarithms'. These were tables that had answers to more complicated but common Maths problems or functions so you wouldn't have to solve the problem yourself, it was much faster than a person solving it and took out the risk of 'human error'. Effectively the 'Difference Engine' was a very large calculator.



This is a 'Difference Engine' built from Babbage's design and currently sits in the London Science Museum.

After over 100 years, and small advance in computing technology were made. However, the concept or idea by Alan Turing was conceptualized in 1936. His idea was to create a computer that was able to print out symbols on to tape to show it following a series of



The concept of the Turing Machine

instructions. He called the idea the 'Turing Machine' The computer would need a simple CPU (central processing unit) which is what allows it to store data as memory. This idea was so important because this was the bases that our modern computers evolve from.

The next step was to get the computer to be able to run a 'programme' or to follow a set of instructions to solve a problem or create a result. This came in 1943 during WW2. The computer was called the 'Colossus'. It was developed by Tommy Flower and was able to decrypt German messages to give the British information about what the Germans were planning. **This is not to be confused with the computer called 'Bombe' which cracked the German Enigma codes which also occurred during WW2.** One of the most prominent parts of Colossus is the input device, nicknamed 'the bedstead'. It is an optical reader for punched paper tapes, then can read data at very fast speeds of 5000 characters per second.

Of course there were a few more stages the 'computer' needed to go through to become closer to what it is today, but this was the beginning. The computer then became more compact and smaller. It was no longer the size of an entire room and could eventually be carried and transported from one location to another. It also developed screens and became more capable of more as it was developed and looks closer to computers you see today.