Charles Babbage

Charles Babbage (1791 – 1871)

Who was Charles Babbage?

- He was an English mathematician and inventor
- He designed the world's first computing machine

Important Figures in Computing History

Why is Charles Babbage Important?

- He believed that machines could be designed to do complicated calculations quickly
- His ideas led to the world's first programmable computing machines
- His designs contain may of the parts that modern computers use today

His early years

- Born 26th December 1 91
- The son of a London banker
- Charles was a sickly child, often too unwell to go to school
- He was often taught by private tutors
- One, from Oxford, helped his love of mathematics grow

What came next

- He went to Trinity College, Cambridge in 1810
- Elected Fellow of the Royal Society in 1816
- Helped found the Astronomical Society in 1820

- In 1814 he married Georgiana Whitmore
- They had eight children
- Only four survived to adulthood
- Charles' son, Henry Prevost Babbage, built some pieces to his father's design after his Charles' death
- One went to Harvard University and inspired the first ever electro-mechanical computer – The Harvard Mark
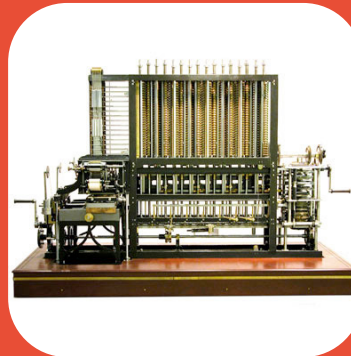

The Harvard Mark 1
Science Museum, London

© iCompute

Charles Babbage and Computers

- He invented the Difference Engine in 1822 which was a machine for calculating tables
- In 1834 he designed a steam powered engine called the Analytical Engine, a computing machine that could be programmed
- Ada Lovelace created an algorithm designed to be executed by it and is known as the world's first computer programmer

The Difference Engine
Science Museum, London

- The Difference Engine and Analytical Engine were never built when Babbage was alive but a working Difference Engine was built to his design in 2002 and is on display in The Science Museum, London
- His Analytical Engine had many of the parts a modern computer has today and it is for this reason that he is known as the 'father of computers'