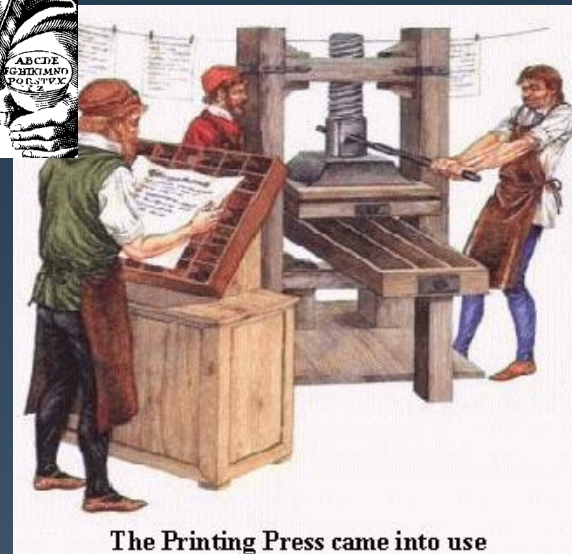
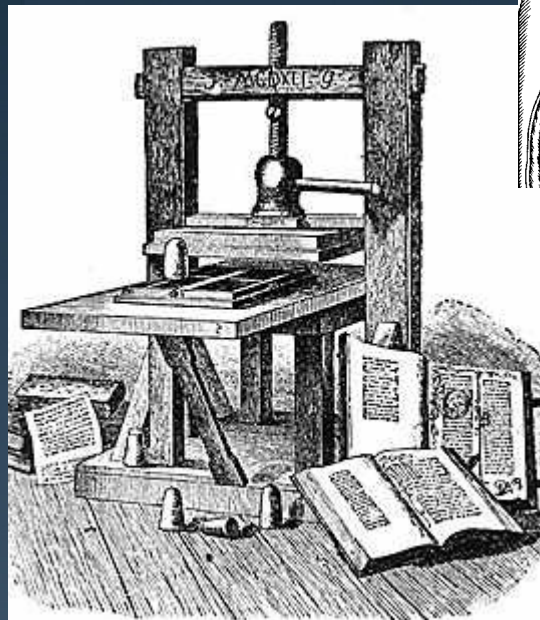




Johann Gutenberg

Moveable Type

Johann Gutenberg and The Press



The Printing Press came into use

Chronology



Gutenberg

- 1420 Moves from [Mainz](#), Germany to [Strasbourg](#) France
- 1450 Returns to Mainz and sets up his printing press using moveable type
- 1450 – 56 Prints a number of books, a calendar, and a letter of [Papal indulgence](#)
- 1456 Prints his famous [42-line Bible](#)
- 1465 Made courtier to the Archbishop of Mainz

Background

- Born and spent much of his life in the German town of Mainz
- Family was in [minting](#) and metal-working, an ideal foundation for his training as an engraver and goldsmith.
- These skills enabled him to craft the first individual metal letter moulds, matrices, which were the core of his achievements in printing

Moveable Type

- Mastered the idea of placing individual metal letters into temporary mounts
- Could then be dismantled or 'moved' once a page of text had been completed
- Reused to produce other pages
- In comparison to slow engraving and single use of wooden blocks, the theoretically infinite number of different sides which could be made, together with speed at which template could be created, revolutionized printing

Moveable Type

- Invention itself consisted of an adapted wine press with the plate of metal characters at bottom upon which a piece of paper was laid and the top of the press lowered from above to force the imprint
- The dye was an amalgamation of linseed oil and soot

The Forty-Two Line Bible

- No works survive bearing Gutenberg's name
- Most famous was the first Bible printed with moveable type
- Known as the forty-two line Bible because of the number of lines to a page
- Believed Gutenberg and his assistants made the copies between 1450 and 1456
- Later years of his life lived off the patronage of the Archbishop of Mainz





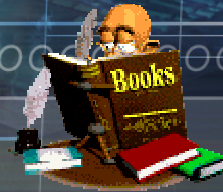
Legacy

- Although not specifically a scientific achievement, the emergence of the printing press provided one of the key tools in helping to begin the revolutionary progress of sharing scientific knowledge widely and cheaply

Before and After Moveable Type



Before Gutenberg



- No books
- Generally an illiterate population
- Oral culture – passing knowledge by word of mouth
- Priests announced news in Church
- Local priests did not own a Bible
- Villagers listened to traveling readers
- No schools except for the elite
- Feudal society
- Information (and thus power) was controlled by the Church and the aristocracy
- Scribes paid to copy books

After Gutenberg

- Press allowed books to be printed in large numbers
- Church first ignored such printed books for aesthetic reasons
- Books were initially printed in Latin and then expanded to the use of local languages
- This led to standards in language and grammar structure
- Allowed for the expansion of scientific knowledge

