

How a coin is made:

When a coin is made it is called '**minting**'. 'Minting' stamps a design onto a piece of metal, by pressing it between two hard metal tools. These tools are called '**dies**'.



This way of making coins was invented over 2,600 years ago with an anvil and punch as the 'dies' (think of how you see a blacksmith hammering onto an anvil).

Today these 'dies' are part of a very large machine. The pieces of metal are also made by powered machines. In the UK it is all done at the British Royal Mint and is all run by computers.

How a banknote is made:

This is a very secretive thing! Banknote printers have to make it impossible for 'forgers' to copy easily (that means making false or fake money which is a very serious crime).

When a banknote is made there are four stages involved:

1. The design

Nowadays an artist does this on computer. Very detailed, complicated designs are used. Different printouts separate different layers of the design.

2. Papermaking

Special paper is made only from cotton fibres and most have a 'watermark' moulded into the paper (it shows up best when you hold up the note to the light). There is also a security thread with 'micro text' in it running down the note.



3. Ink mixing

Special inks are mixed (which include invisible security things). New inks have been developed that show up only in ultra violet light (this helps to be able to check for forgeries), other new inks cannot be photocopied.

4. Printing

An engraver uses traditional tools to hand engrave details from the computer design onto a steel plate over a period of many weeks.

Intaglio printing: this prints the main design (e.g. the head and shoulders of the person) under high pressure.

Lithographs: the background design is printed by a system called offset lithography in three groups of colours.

Letterpress: the last part is when official signatures and different serial numbers are printed onto each banknote.