Collective**inspiration**

Electricity
A Timeline to 1900

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600 BC

As early as 600 BC it was known that a piece of amber would attract light objects when rubbed with fur. We now know that the cause is static electricity.

Amber is fossilised tree resin

1200-1500

1296

Peter Peregrinus wrote about his experiments with lodestone, a natural magnet and he was the first to use the term 'magnetic pole'.

1600

William Gilbert

1600

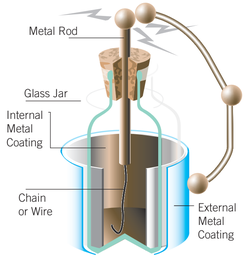
The word 'electricity' comes from the Greek word 'elektron', meaning amber, and it was first used by William Gilbert, physician to Queen Elizabeth 1, in his book De Magnete.

1663

Otto Von Guericke built a friction machine for producing static electricity.

Otto Von Guericke

1700



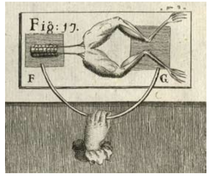
Leyden Jar

1745

It was discovered that a glass jar could be adapted to store the electric charge produced by a friction machine. These 'Leyden Jars', named after the place where the discovery was made, were the first capacitors.

1786

Luigi Galvani accidentally discovered that electricity could make a dissected frog's leg twitch, but he wrongly concluded that the electricity was coming from the frog.



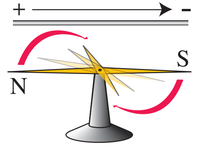
1800

1800

Alessandro Volta built the first battery. This 'Voltaic Pile' consisted of alternate pieces of silver and zinc separated by card or leather soaked in brine. A current flowed when the ends of the pile were connected by a conductor.

1820

Oersted discovered that an electric current can deflect a compass needle, showing the link between electricity and magnetism.



A compass needle normally points North and South. An electric current in a parallel wire either above or below the needle will deflect it.

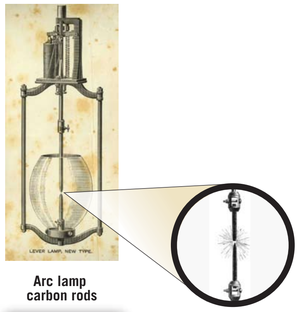
Michael Faraday

1821-1831

Michael Faraday made two huge steps forward. He established the principle of the electric motor; simply a wire which rotated around a magnet when a current flowed. Secondly, he discovered that a changing magnetic field will generate an electric current in a coil of wire. This is the principle behind modern electricity generators.

1832

William Sturgeon built the first practical electric motor based on Faraday's discoveries.



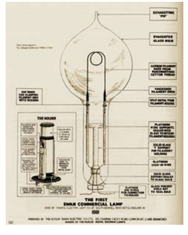
Arc lamp carbon rods

1846-1878

The first practical arc lamps were developed. A bright, white light was emitted when electric sparks jumped across a small gap between the ends of two carbon rods, making the rods white hot. London's Victoria embankment was lit by these lamps in 1878.

1878

Light bulbs, in which an electric current makes a filament glow, began to appear. Joseph Swan (UK) and Thomas Edison (US) experimented with various designs.



Early filament light bulb

1881

The first public electricity supply for both street lighting and domestic use was installed in Godalming. Initially the power came from a water wheel on the River Wey.

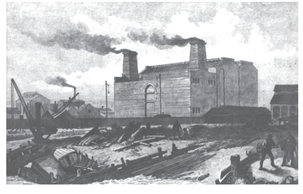
Early electric kettle and iron

1890s

Electrical appliances such as electric irons, kettles, fans, water heaters and cookers began to appear, improving the lives of many by making jobs easier and quicker.

1887-1889

Sebastian de Ferranti designed the first large-scale, out-of-town power station at Deptford. High voltage power lines enabled the electricity to be distributed efficiently over a larger area.



Deptford power station

1900s

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