

Knowledge Organiser

Inventors & Inventions

Year 6 Summer 2

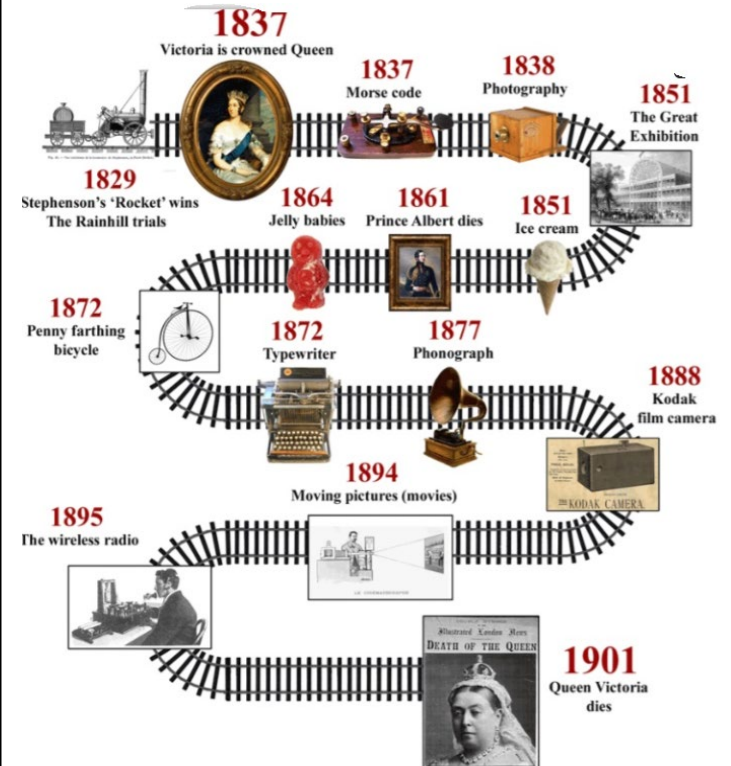
Sequence of Learning and Key Questions

Session 1	Inventions in the Victorian Era How technology from the Victorian era drove the power and wealth of the UK
Session 2	Key dates and names for the inventions of the railway, telephone, car, airplane and computer
Session 2	Brunel, Darwin and Stevenson An insight into the lives and inventions of these Victorian inventors
Session 3	Turing, Baird and Hawking An insight into the lives and inventions of these modern day inventors
Session 4	Modern day inventions Considering the historical perspective of modern inventions
Session 5	Significant innovators from around the world and what their inventions were

Key Vocabulary

Innovation	a new method, idea, product, etc.
Ergonomics	the study of people's efficiency in their working environment.
Technological	relating to or using technology.
Evolution	the gradual development of something.
Invention	something, typically a process or device, that has been invented.
Inspiration	the process of being mentally stimulated to do or feel something, especially to do something creative.
Product	an article or substance that is manufactured or refined for sale.
Patent	a government authority or licence conferring a right or title for a set period, to exclude others from making, using, or selling an invention.
Sources	a place, person, or thing from which something originates or can be obtained.
Feasible	possible to do easily or conveniently.
Phenomenon	a fact or situation that is observed to exist or happen, especially one whose cause or explanation is in question.
Function	work or operate in a proper or particular way.
Programmable	able to be provided with coded instructions for the automatic performance of a task.
Hybrid	a thing made by combining two different elements.
Integrated	with various parts or aspects linked or coordinated.
Contraption	a machine or device that appears strange or unnecessarily complicated, and often badly made or unsafe.
Entrepreneur	a person who sets up a business or businesses
Ingenuity	the quality of being clever, original, and inventive.

Timeline of Victorian inventions



10 household inventions that transformed Victorian life

The light bulb (1870s)	The flushing toilet (1845)	The computer (1833-1871)	The gramophone (1887)	The lawnmower (1830)	The electric kettle (1891)	The vacuum cleaner (1901)	The telephone (1876)	The camera (1838)	The sewing machine (1845)	The London underground (1863)	Moving pictures (1895)
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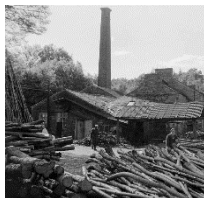
Key Facts

A very early hot water central heating system was installed at Audley End house in 1846



Osborne House, Queen Victoria and Prince Albert's seaside home, was one of the first houses in England to have electricity installed, with the first chandeliers wired for electric light in 1893

Stott Park Bobbin Mill, built in 1835, is a preserved example of a bobbin mill that played a vital role in the Lancashire textile industry, supplying wooden bobbins for spinning and weaving during the Industrial Revolution.



The first electronic message to cross the Atlantic was sent from Queen Victoria at Osborne to the American President James Buchanan on 16 August 1858.

Key People

- Isambard Brunel was one of the most versatile and audacious engineers of the 19th century, responsible for the design of tunnels, bridges, railway lines and ships.
- Charles Darwin, a British naturalist, is famous for his theory of evolution by natural selection, which explains how living things change and adapt over time.
- Stephenson was a pioneering railway engineer and inventor of the 'Rocket', the most famous early railway locomotive.
- Alan Turing was a brilliant British mathematician and computer scientist who played a crucial role in World War II by helping to decode secret German messages, and is considered a pioneer of modern computer science and artificial intelligence.
- John Logie Baird, a Scottish inventor, is famous for pioneering television, demonstrating the first working television system in 1926 and later developing color television.
- Stephen Hawking was a brilliant British scientist and author who made important discoveries about the universe, especially black holes.



Charles Darwin's theory of evolution explains how and why living things change and develop differently over time and in different circumstances.

Many of the men and women who pioneered reforms and philanthropic causes are commemorated with blue plaques in London.



*Hawking was one of the world's greatest **scientists**. He was an expert in **space** and **cosmology** (the science of the universe).*