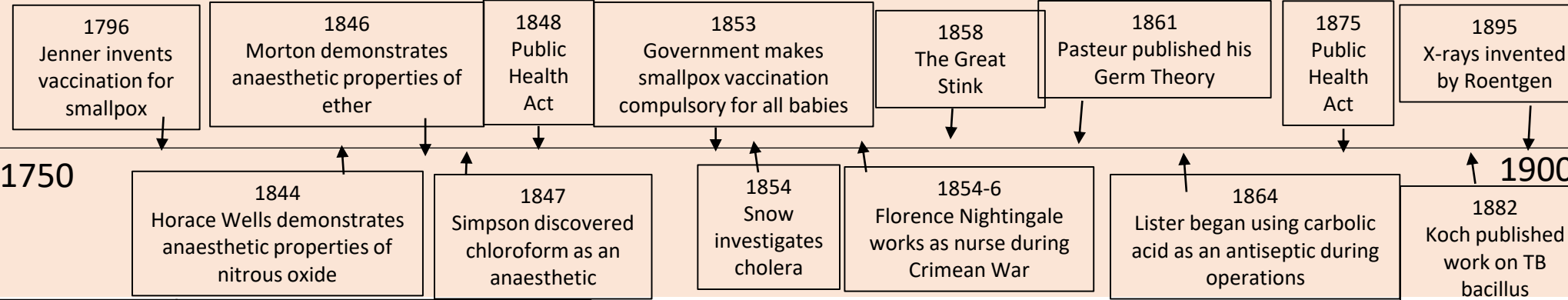




History

GCSE

Industrial Medicine



Germ Theory	Louis Pasteur's discovery and proof that micro-organisms cause disease and decay
Spontaneous Generation	The theory that micro-organisms are created by decaying matter, eg maggots appearing on dead animals
Miasma theory	The theory that bad air causes and spreads disease
Anaesthetic	A substance which reduces or stops pain
Antiseptic	A substance which prevents the growth of disease causing micro-organisms
Aseptic	Free from micro-organisms, surgically sterile
Laissez faire	The policy of leaving things alone, not interfering.
Cholera	A disease which had several outbreaks in the 19 th century, severe diarrhoea
Carbolic acid	The first antiseptic used by Lister. Also known as phenol.
Pasteurisation	The process of heating liquids to kill micro-organisms and then cooling them. Named after Louis Pasteur who invented it.

1. This period witnesses a 'revolution' in medicine, alongside the industrial revolution.
2. The nineteenth century saw massive population growth – from 16.3 million in 1801 to 41.6 million in 1901.
3. Three people made major scientific discoveries for medicine: Louis Pasteur, Robert Koch and Paul Ehrlich. They paved the way for further developments.
4. Pasteur discovered germ theory – the idea that disease is caused by germs. Koch invented a way to stain bacteria so you could see them and identify which bacteria caused different diseases. Ehrlich invented 'magic bullets', drugs which could target specific organisms in the body.
5. The discovery of germs led to improvements in cleanliness in hospitals. Lister began to use carbolic spray during operations as an antiseptic.
6. Anaesthetics such as chloroform were also developed to make surgery and childbirth less painful.
7. Once surgery was pain free and patients were likely to survive, new techniques could be developed.
8. Rapid growth in towns led to initial public health problems, including diseases such as cholera.
9. Reform and improvements came, including the development of a sewage system and clean water supply.
10. The government slowly moved away from their 'laissez faire' approach and worked to improve public health, with Public Health Acts in 1848 and 1875.