

Knowledge Organiser: Knowledge Organiser: 18th and 19th century Medicine (c1700-c1900)

In 1700, many people no longer believed that God was responsible for causing disease. Instead they focused on developing scientific explanations. By 1900, germs had been discovered, and there was ongoing work to create vaccines for diseases caused by them. The cleanliness of hospitals improved and surgery became less dangerous through the development of anaesthetics and antiseptics.

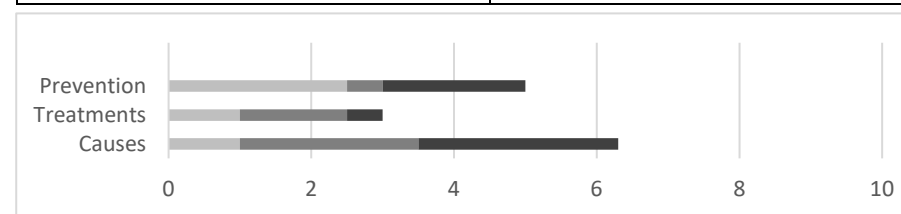
Summarise your learning

Causes	<ul style="list-style-type: none"> Spontaneous generation was replaced by the Germ Theory The development of work on identifying microbes – Koch identified germs like TB and cholera using industrial dyes
Diagnosis	<ul style="list-style-type: none"> Observations and examinations of patients
Prevention	<ul style="list-style-type: none"> Government action to improve the sanitary conditions of towns <ul style="list-style-type: none"> The First Public Health Act, 1848 The Second Public Health Act, 1875 Compulsory vaccinations Antiseptics – e.g. carbolic acid Anaesthetics – e.g. chloroform Blood loss was still a problem in surgery Cleanliness – Nightingale lowered the death rate from 40% to 2%
Treatments	<ul style="list-style-type: none"> Better hospitals and nursing Improvements in surgical treatment because of anaesthetics and antiseptic surgery Very little change except in surgery.

Chronology: what happened on these dates?	
1796	Jenner discovered the vaccination for smallpox.
1847	James Simpson discovered chloroform.
1861	Pasteur identified that microbe's cause disease (Germ Theory).
1865	Joseph Lister discovered carbolic acid.
1875	The Second Public Health Act. City authorities had to provide clean water, dispose of sewage and employ a public office of health to monitor outbreaks of disease.

Who were these people?	
Edward Jenner	Developed the vaccination to prevent smallpox, which became compulsory in 1802.
Louis Pasteur	Pasteur's Germ Theory claimed that microbes that spread through the air caused decay. This disproved the idea of spontaneous generation.
Robert Koch	Koch used industrial dyes to stain and grow bacteria in a Petri dish. He was able to find which bacteria caused Anthrax (1876), septicaemia (1878), TB (1882) and cholera (1883).
Florence Nightingale	Following Nightingale's experience in the Crimean War she improved hospital care in Britain in two different ways: the way hospitals were designed and the training for nurses.
Joseph Lister	Discovered the antiseptic carbolic acid, which surgeons used to spray the operating theatre, wash their hands and clean their instruments.
James Simpson	Discovered chloroform, the first effective anaesthetic. Queen Victoria used chloroform during the birth of her eighth child.
Edwin Chadwick	In 1842, Chadwick published his <i>Report on the Sanitary Conditions of the Labouring Classes</i> , which argued that disease was the main reason for poverty, and that preventing disease would reduce the poor rates.
John Snow	Snow discovered that cholera was transmitted by dirty drinking water.

Change and Continuity	
Change	Continuity
<ul style="list-style-type: none"> New technology - microscope Germ Theory Anaesthetics and Antiseptics Greater government action – compulsory vaccinations and Public Health Acts 	<ul style="list-style-type: none"> Miasma (but was becoming less popular) Spontaneous generation (early 18th century)



Vocabulary: define these words	
The Enlightenment	A movement in Europe during the 18 th century that promoted the idea that people could think for themselves and that traditional authorities, like the nobility and the Church, should not be able to control everyday life.
Microbes	Any living organism that is too small to see without a microscope, e.g. bacteria.
Decaying matter	Material, such as vegetables or animals, that has died and is rotting.
Organic	Something that is living or that has once been alive.
Culture	Bacteria grown under controlled conditions.
Bacteriology	The study of bacteria.
Spontaneous generation	Rotting material, e.g. meat, created microbes. These microbes spread throughout the air through miasma.
Anaesthetic	A substance that makes you unable to feel pain.
Chloroform	A colourless, sweet-smelling liquid used as an anaesthetic.
Aseptic surgery	Surgery where microbes are prevented from getting into a wound in the first place, as opposed to being killed off with an antiseptic.
Inoculate	Deliberately infecting oneself with a disease, in order to avoid a more severe case of it later on.
Cowpox	A disease causing red blisters on the skin, similar to smallpox. It can be transmitted from cows to humans.
Vaccinators	Doctors paid by the government to vaccinate people against smallpox.
Antibodies	Particles inside the body that identify and help to remove germs. The body creates them when it first encounters the germ, so that it can fight off the same disease more easily if it comes back.
Laissez-faire	This French term means 'leave be'. It is used to describe governments who do not get involved in the day-to-day lives of their population.
Dehydrated	When the body does not have enough water to keep the organs working properly.
Cesspit	A pit for storing sewage or waste.

