

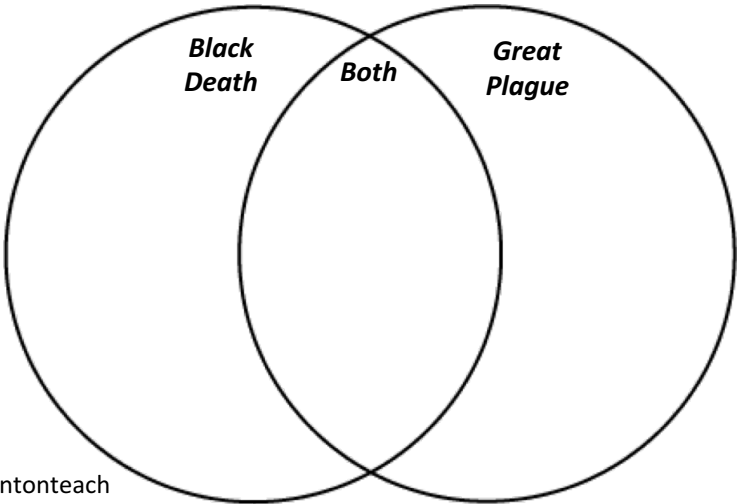
Ideas on the cause of disease	
Give two things people thought caused the 1348 Black Death	
What are the four humours?	
Give 3 modern ways to diagnose disease	
What did Thomas Sydenham say about the cause of disease?	
What factors pushed ideas on cause to improve?	

Ideas on the cause of disease: Misconceptions	
Misconception	Correct, or challenge?
1. People stopped believing God causes disease once the power of the church declined	
2. Galen created the four humours theory	
3. They only believed that Miasma causes disease in the medieval period	
4. Louis Pasteur created the Germ Theory which proved that Germs caused disease	
5. Spontaneous Generation said that germs caused decay and disease	

4 Mark Comparison Questions

Sort out the ideas on the cause, do the unique for each and also similar

1. Explain one way in which ideas about the cause of the plague were **different** in the 14th and 17th centuries
2. Explain one way in which ideas about the cause of the plague were **similar** in the 14th and 17th centuries



16 Mark Question: I/You

Lets reintroduce the judgement question, which is the biggest question medicine, you have two of them to choose from!

Can you remember about answering these questions?

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“There was rapid progress in in the ideas during the 18th and 19th centuries”

How far do you agree? (16 Marks + 4 SPaG)

- *Spontaneous Generation*
- *Louis Pasteur*

Model AGREE paragraph. Read through with your teacher and annotate

Some historians may argue there was considerable progress, due to the groundbreaking Germ Theory. In 1861, French scientist Louis Pasteur proved spontaneous generation wrong and created the Germ Theory. He achieved this by proving that germs were in the air and cause decay through his experiments using a swan neck flask. However, his short term impact was limited as he could not prove germs cause disease and his ideas were initially rejected by doctors like Henry Bastion. In the 1870s, Robert Koch developed the Germ Theory by growing and staining bacteria to prove specific bacteria's caused disease, like TB in 1883 and Cholera in 1884. This was a huge breakthrough and scientists could now work on vaccines to help prevent this disease, for example Cholera. However, it still took up to 30 years for the Germ Theory to be accepted. Overall, the Germ Theory supports the statement, as for the first time in history, the true cause of bacterial disease had been found, which we still use to this day.

Plan a paragraph to DISAGREE with the statement

Signpost Sentence: Write your sentence out here, that you 'disagree' with the statement

Supporting Detail – Use examples to explain your point, focus on WHY there was not rapid progress

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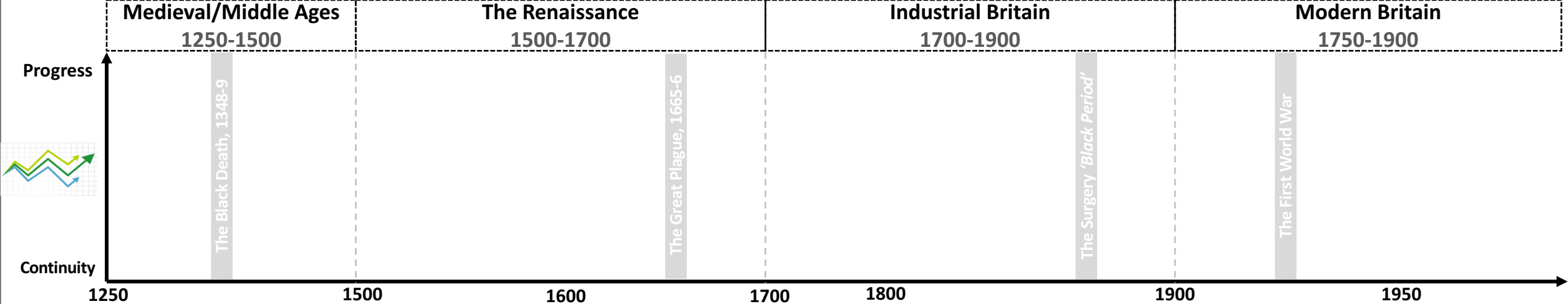
Link Sentence: Write your sentence out here

Conclusion: Do you agree with the statement?

Recipe for a top one

- Gives overall view
- Supported with evidence

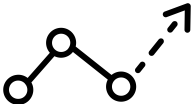




1. What were the ideas on the cause of disease over time?
- Read through these ideas below & sort them onto the timeline above.
 - Remember, many of these were believed across *many* time periods.



2. Tracking progress over time.
- Using a highlighter, draw a line to represent progress on the ideas on the cause of disease over time



God The Church taught that disease was either a punishment from God for sins, or a test of faith. It was used to explain the 1348/9 Black Death, which was blamed as a punishment from God		Genetics/DNA In 1953,Crick/Watson identified DNA which led to the Human Genome Project which allowed doctors to identify genetic (hereditary) diseases like Parkinson's and Alzheimer's. This mapping of DNA allows scientists to look for possibly future illness, like spotting genes that may cause breast cancer. However, no treatment available for genetic illness yet but can test/prevent Downs Syndrome in embryo	Astrology It was believed that the movements of the stars and planets caused disease. Physicians were taught to use astronomy in their diagnoses. The movement of Mars/Saturn and Saturn Jupiter were blamed for the Black Death and Great Plague.	Lifestyle Doctors and scientists have linked impact of lifestyle on health For example studies found that diet, exercise and lifestyle choices all impacted on health and life expectancy. For example, <ul style="list-style-type: none">• Smoking: Link to Lung Cancer found in the 1950s, alongside high blood pressure and asthma• Diet: High sugar causing Type 2 diabetes
Spontaneous Generation Doctors using microscopes came up the theory of Spontaneous Generation in the early 1700s . This was Idea that bacteria was <i>caused</i> by decaying food/waste/dead and this spread, causing disease. This was popular, with doctors like Henry Bastion still believing it, despite the Germ Theory proving it wrong.		Four Humours This idea, created by Greek Doctor Hippocrates, was based on the idea that the body contained 4 humours (blood, black bile, yellow bile, phlegm). When humours are imbalanced, it made you ill, for example nosebleed = too much blood. To many people, the four humours made sense (rational) and as a result was respected. Idea also supported by the church, who taught it to physicians at university, so never challenged. . Challenged by Thomas Sydenham in <i>Observationes Medicae</i>	Miasma Bad air called Miasma causes disease, caused by dirt/waste. People believed the Great Plague was caused by miasma that came from the movement of planets of volcanic eruptions. Miasma was even linked to the Great Stink of 1858	Technological Diagnosis Diagnosis is based on medical testing, using science/technology This means that diagnosis is incredibly accurate, and means treatment can be improve/be tailored to the specific illness. There are a number of examples: <ul style="list-style-type: none">• Blood Tests - Used to test for conditions anaemia or deficiencies• Biopsy - A sample of human tissue takne to identify disease e.g. cancer• Ultrasound - Using sound waves to look for kidney stones• X Ray - to spot broken bones• CT Scans: Advanced X-Rays used to diagnose tumours and cancer
Supernatural People believed that witchcraft, bad luck or even Jews caused disease	The Germ Theory In 1861 , Louis Pasteur came up with the Germ Theory and proved that bacteria in the air caused decay (rotting), which proved Spontaneous Generation wrong. Pasteur did not prove that germs causes disease. At first Germ Theory not believed and many like Henry Bastion rejected the theory, believing Spontaneous Generation In the late 1870s, the Germ Theory was developed by Robert Koch, who’s experiments (growing and dying bacteria) proved that specific bacteria caused disease , for example he discovered TB (1882) and Cholera (1883). This was a huge breakthrough, and became the basis for identifying bacterial disease we use today.			Contagious The use of ‘Bills of Mortality’ during the Great Plague alllowed people to identify that the Plague could spread between people. Similar to work of John Snow

3. How much progress in ideas on the cause?



Many of the 16 Mark Questions ask you to judge progress within a time period, or across time periods. Lets do this now.

Between Medieval and Renaissance?		During the Industrial Period?		Between the Industrial and Modern Ages?		During the Modern Age?	
<i>Between these periods there was.....progress on the ideas that cause disease.</i> <div><input type="checkbox"/> Little <input type="checkbox"/> Inconsistent <input type="checkbox"/> Rapid <input type="checkbox"/> Slow</div> <div><input type="checkbox"/> Moderate <input type="checkbox"/> Considerable <input type="checkbox"/> Steady <input type="checkbox"/> Significant</div> <div>This is because.....</div> <div>.....</div> <div>.....</div> <div>.....</div>		<i>In this period there was.....progress on the ideas that cause disease.</i> <div><input type="checkbox"/> Little <input type="checkbox"/> Inconsistent <input type="checkbox"/> Rapid <input type="checkbox"/> Slow</div> <div><input type="checkbox"/> Moderate <input type="checkbox"/> Considerable <input type="checkbox"/> Steady <input type="checkbox"/> Significant</div> <div>This is because.....</div> <div>.....</div> <div>.....</div> <div>.....</div>		<i>Between these periods there was.....progress on the ideas that cause disease.</i> <div><input type="checkbox"/> Little <input type="checkbox"/> Inconsistent <input type="checkbox"/> Rapid <input type="checkbox"/> Slow</div> <div><input type="checkbox"/> Moderate <input type="checkbox"/> Considerable <input type="checkbox"/> Steady <input type="checkbox"/> Significant</div> <div>This is because.....</div> <div>.....</div> <div>.....</div> <div>.....</div>		<i>In this period there was.....progress on the ideas that cause disease.</i> <div><input type="checkbox"/> Little <input type="checkbox"/> Inconsistent <input type="checkbox"/> Rapid <input type="checkbox"/> Slow</div> <div><input type="checkbox"/> Moderate <input type="checkbox"/> Considerable <input type="checkbox"/> Steady <input type="checkbox"/> Significant</div> <div>This is because.....</div> <div>.....</div> <div>.....</div> <div>.....</div>	