

St. Benet Biscop Catholic Academy – Humanities Faculty
 Knowledge Organiser- Year 11

Topic: Paper one Breadth study. Medicine through time 1250-present

Key event timeline-Medieval medicine	
Medieval Britain is the period between 1250-1500 also known as the 13 th -16th century. It is also known as the Middle Ages	
1123	Britain's first hospital, St. Bartholomew's was set up in London. It would not treat people who were contagious.
1348-49	The Black Death affects England, kills 40% of population. People often believed the lack death was a punishment from God or spread through Miasma. Treatments included prayer, flagellation and sweet smelling herbs.
1350	Average life expectancy is 35 years of age.
1388	Parliament passes the first law requiring streets and rivers to be kept clean by the people. Failure to follow the rules could lead to fines.
1400	There were 500 hospitals in Britain. They were either run by Charities and offered care, rest and relaxation prescribed by doctors who had been trained in Galen and Hippocrates methods or Monastery hospitals where you would receive prayer, rest, relaxation and food.

Key Concepts
<p>The Medieval Church- The official religion of Britain was Roman Catholic and the church was led by the Archbishop of Canterbury, who was answerable to the Pope in Rome. Ideas and power was dominated by the Church, they controlled education and the church played a central part in daily life.</p> <p>The Four Humours- First suggested by Greek doctor Hippocrates. He believed the body was made up of Four Humours, Black Bile, Yellow Bile, Blood and Phlegm. These humours linked to the four elements and seasons. Hippocrates believed if these humours became unbalanced you would get ill, so you would need to rebalance the four.</p> <p>Galen, a Greek doctor working in Rome, continued the Four Humours Theory and added his own ideas. His 'Theory of Opposites' to heal illness suggested using opposites to cure the humours, e.g. using hot to cure cold.</p> <p>Medieval power- The emphasis in Medieval Britain was on authority, the King had absolute power but the Church has considerable control. People followed authority and would not question the views of King/Church at risk to their own lives.</p>



Enquiry questions
<ul style="list-style-type: none"> • Who was more significant; Hippocrates or Galen? • How much impact did the Medieval Church have on Medieval medicine? <ul style="list-style-type: none"> • What was treatment and care of the sick like? • How significant was the Black death?

Useful websites
<p>http://www.bbc.co.uk/schools/gcsebiteize/history/shp/middleages/</p>

Exam question stems
<p>Explain one way in which Were similar/different in... (4)</p> <p>Explain why..... (12)</p> <p>'Hypothesis/statement' How far do you agree? (16)</p>

Selected key words and definitions	
Superstition	A belief, not based on knowledge, but in the supernatural like God, witchcraft or astrology.
Monastery	A building where monks live, eat and prayer. Sometimes offered care for the sick.
Miasma	'Bad smells' that were thought to cause illness.
Astrology	Study of the planets. Thought to cause illness
Urine Chart	Used to diagnose illness
Amulet	A charm thought to 'prevent' illness.
Purging	To rid the body of a 'excess' like blood or vomit
Leeching	The use of leeches to draw blood from a patient to prevent or treat illness.
Cupping	Placing a cup over a cut to draw blood from a patient to prevent or treat illness.
Apothecary	Medieval chemist or pharmacist
Wise woman	A female healer, who used magic or herbal remedies to treat illnesses.
Barber surgeon	Untrained surgeon who practiced basic surgery.
Vademecum	Book carried by university trained physicians (doctors)
Epidemic	Widespread outbreak of disease
Rakers	Men employed to clean the streets
Pestilence	A fatal epidemic disease. E.g Black Death

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Key event timeline-Renaissance medicine	
Renaissance- a period of rebirth where ancient learning is revisited and science is explored. From 1500-1700 or 16 th -17 th century.	
1500	The printing press has spread across Europe. 200, 000000 books published.
1518	The College of Physicians was set up
1536-1540	Dissolution of the monasteries. Henry VII closes all monasteries across England including Church hospitals.
1543	Vesalius releases the book ‘fabric of the human body.’
1628	William Harvey scientifically proves the circulation of blood through the body, his book marks the end of Galen’s influence on the anatomy.
1662	The Royal Society set up by Charles II to discuss scientific ideas.
1665-66	The Great Plague in London. It killed 25% of London's population.
1676	Thomas Sydenham publishes ‘Observations Medicae.’
1683	Van Leeuwenhoek discovers bacteria but does not link it to disease.

Key Concepts
<p>Science and technology- New technology such as the printing press helped spread ideas quicker, whilst microscopes and pumps helped medical knowledge advance. It was an age of exploration and discovery</p> <p>The church- The Reformation led to change in religion, especially a decline in the Church’s authority after Henry replaced it with the Church of England. As a result, the church had less control, there was freedom of education and challenging of God’s teaching. Most people did remain strongly religious though</p>

Key individuals	
William Harvey	English doctor. Theory on circulatory system explained that blood circulates from the heart to the lungs, and from the heart to the rest of the body.
Thomas Sydenham	English physician. Believed doctors should visit patients and observe them, monitoring symptoms and treatments given.
Andreas Vesalius	Belgian physician. Proved Galen wrong by discovering spermatic vessels. Advocate for medical students performing dissections on humans.



Enquiry questions
<ul style="list-style-type: none"> • How did the role of the church impact medicine? • How much impact did the work of individuals have on the understanding of cause, treatment and prevention of disease? • How did new technology such as the printing press affect medicine? • How did the approach to epidemics like plague change between 1348 and 1665?

Useful websites
http://www.bbc.co.uk/schools/gcsebitesize/history/shp/middleages/

Exam question stems
<p>Explain one way in which Were similar/different in... (4)</p> <p>Explain why..... (12)</p> <p>‘Hypothesis/statement’ How far do you agree? (16)</p>

Selected key words and definitions	
Dissection	The cutting open of a human body to study its anatomy for medical training and research. It was allowed during the Renaissance.
Anatomy	The science of understanding the human body.
The Great Plague	Combination of Pneumonic and bubonic plague.
Printing press	Used to print books from 1500. It helped spread ideas.
Plague pits	Mass graves where victims of the plague were buried.
Direct observation	The observation of the human body through dissection to improve knowledge and understanding.
Circulation	The movement of blood around the body.
Quack doctor	A doctor who pretends to have medical knowledge or skills but does not have any. They sold medicine which supposedly cured all illnesses.
Quarantine	To separate people from others if they have an illness.
Scientific Method	A new process of conducting an experiment, collecting observation, then coming to a conclusion.
Miasma	Bad smells thought to cause disease.
Gong Farmers	People employed to clean the streets of waste

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Key event timeline-Industrial medicine	
The Industrial Revolution was the period between 1750-1900, also known as the 18 th and 19 th centuries. It was an age of breakthroughs.	
1796	Jenner develops the smallpox vaccination
1847	James Simpson discovers the anaesthetic Chloroform.
1854	John Snow discovers the link between the outbreak of the '54 epidemic and the Broad Street pump.
1854	Florence Nightingale treats wounded soldiers in the Crimean war.
1859	Florence Nightingale published 'Notes on Nursing'.
1861	Pasteur discovers the Germ theory; Germs are present in the air and cause decay.
1866	Joseph Lister begins to use the fist anti septic (Carbolic acid spray) in surgery.
1875	Second Public health Act passed- it is compulsory to improve conditions.
1879	Pasteur proves that a weakened strain of disease works as a vaccination and produced his first vaccine- against chicken cholera
1881	Koch grows germs on potatoes and stains them purple. He identifies the specific germs that cause each disease. Others can now quickly produce vaccines against a range of illnesses.
1895	William Rontgen discovers the x-ray

Key Concepts

Enlightenment- The 18th century was a period of experiment and investigation. It was believed that institutions like the government and church should not control thinking..
Science and technology- Scientists such as Pasteur and Koch were employed by industry and eventually funded by governments. They were to experiment to try and solve problems within industry. However, their work also helped to advance medicine.
Government- in the second half of the 19th century the government started to get more involved in the health of the people and Public Health improved. This was because the government made a link between poor sanitation, disease and loss of money to industry. In 1867 the vote was increased and the government also became more accountable.
Treatments- Although many new discoveries were made, the treatment of disease, but surgery did not really move on during the 19th century.



- Enquiry questions**
- How significant was the discovery of the Germ Theory?
 - Who was the most significant individual?
 - How did the role of government change?
 - How did surgery develop?
 - Was the small pox vaccination really important?
 - How significant was John Snow's work on Cholera?

Useful websites

<http://www.bbc.co.uk/schools/gcsebitesize/history/shp/modern/>

Exam question stems

Explain one way in which Were similar/different in... (4)
 Explain why..... (12)
 'Hypothesis/statement' How far do you agree? (16)

Selected key words and definitions	
Antiseptic	Chemicals used to destroy bacteria.
Bacteria	Tiny living organisms which can only be seen using microscopes. Cause disease.
Aseptic	Surgery where microbes are kept out of the wound rather than being killed by antiseptic.
Anaesthetic	Used to make a patient unconscious.
Black period of surgery	Period when anaesthetics were used but antiseptic had not been introduced. The death rate went up as doctors tried more complex surgery.
Chloroform	A liquid whose vapour is used as an anaesthetic.
Germ Theory	The theory that germs cause disease (usually through air).
Infection	The formation of germs or bacteria.
Inoculation	Infecting the body with the disease in order to help fight a more serious attack in future.
Vaccination	Injecting the body with weakened organisms to give it resistance.
Smallpox	A dangerous disease which was often deadly.
Patent medicine	Medicine sold for profit. During the 19 th Century most did not have a medical benefit.
Dispensary	Where medicines are given out.
Public Health	The well being of the whole population
Poor Law association	Local organisations set up to care for poor.
Privy	Outside toilets.
Cess Pit	A pit for storage of human waste

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Key event timeline-Modern medicine	
From 1900 the government has taken a more active role in medicine.	
1901	Karl Landsteiner discovers blood groups.
1906	1st magic bullet created by Paul Ehrlich (Salvarsan 606)
1906-1914	Liberal Government pass series of laws focused on individual health
1929	Alexander Fleming accidentally discovered penicillin bacteria.
1936	2nd magic bullet created by Gerhard Domagk (prontosil).
1938	Florey and Chain develop penicillin research into a working drug.
1942	US companies mass produce penicillin.
1942	Beveridge Report is written producing blueprint for welfare state.
1948	The National Health Service (NHS) is founded.
1953	DNA discovered by Crick and Watson.
1954	The Salk vaccine created to combat the disease, Polio.
1967	The first heart transplant is carried out.
1983	The Human Genome Project to map DNA begins.
2000	The human genome is mapped.
2007	Smoking ban introduced in public places in UK.

Key Concepts	
Government- The government linked wealth with disease. It started to intervene, passing laws and providing funding to help prevent and treat disease. It has also funded the investigation of causes of disease such as DNA.	
Technology- New technologies have made treatments such as surgery much less invasive and the survival rate has increased. New treatments have been developed.	
Science- Scientists across the world work together and share finding to try and improve health.	
Attitudes- We now realise that prevention of disease is cheaper and better than treatment.	

Key individuals	
Paul Ehrlich	Created first magic bullet SALVASEN 606 to combat syphilis
Alexander Fleming	Discovered germ called Penicillin that could kill other germs.
Florey and Chain	Oxford University scientists who turned penicillin into workable drug.
William Beveridge	Wrote a report in WWII outlining need for 'welfare state.'
Aneurin Bevan	Labour Minister who developed and launched NHS.
Watson and Crick	Discovered DNA following X-Ray technology advancements.

Enquiry questions	
<ul style="list-style-type: none"> How did new treatments develop and improve health? <ul style="list-style-type: none"> What role did the government take in Health? How significant was the development of penicillin? How has the campaign against lung cancer evolved? 	

Useful websites	
http://www.bbc.co.uk/schools/gcsebitesize/history/shp/modern/	

Exam question stems	
Explain one way in which Were similar/different in... (4)	
Explain why..... (12)	
'Hypothesis/statement' How far do you agree? (16)	

Selected key words and definitions	
Magic bullets	These are chemical compounds designed to target specific germs in the body to treat illnesses – see Salvarsan 606.
Penicillin	The first antibiotic. It was from a bacteria and used to fight infections that chemical compounds could not beat.
DNA	This is what makes your genes It is like a long list of instructions about what each gene in your body does. It has led to conditions such as Downs Syndrome and Cystic Fibrosis.
Welfare state	This is the concept of government supporting the individual to provide a basic level of care and support through intervention. For example, Family Allowance and the NHS.
Liberal reforms	These were reforms that focused on the poorest in society and supporting them through National Insurance and Pensions.
Superbugs	These are the names given to germs that are resistant to normally used anti-biotics. For example, MRSA, which needed stronger anti-biotics.
Genetic medicine.	This means medicine like the use of stem cells to repair genes or in some cases try to avoid the passing down of genetic diseases.
Nuclear medicine	This means treatment such as Radiotherapy and Chemotherapy which has been used to treat cancers.
Preventative	More modern medicine has been about trying to change people's lifestyles to avoid conditions such as heart disease, type-2 diabetes and some cancers.

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Oct-Nov 1914	First Battle of Ypres – the British stopped the Germans from capturing the port of Calais.
Apr-May 1915	Second Battle of Ypres – A German attack using Chlorine gas for the first time.
July-Nov 1916	Battle of the Somme – Major attack led French and British to move German troops from Verdun.
Apr-May 1917	Battle of Arras – large scale Allied attack. Very high casualties.
Jul-Nov 1917	Third Battle of Ypres – Aim to capture Passchendaele ridge near Ypres. The ground turned to mud.
Nov-Dec 1917	Battle of Cambrai – first use of a large number of tanks by the British. 40,000 British casualties.
Spring 1918	The German Spring Offensive – Large scale German attack to bring the war to an end before the Americans arrived
Summer-Autumn 1918	The final months – the Allied army, reinforced by the fresh US troops broke through German lines.
11 Nov 1918	Germany surrendered and the war ended

Types of sources
National Army records for individual soldiers
National newspaper reports
Government reports on aspects of war
Medical articles by doctors or nurses who worked in the war
Personal accounts of medical treatments by soldiers, doctors, nurses or others involved. (diaries)
Photographs
Army statistics
Hospital records

Enquiry questions

- How was blood loss tackled during WW1?
- How did new weapons and technology influence wounds and treatments?
- What treatments developed as a consequence of War?

Useful websites

<http://www.bbc.co.uk/schools/gcsebitesize/history/shp/middleages/>

Exam question stems

Describe two key features of... (4)
 How useful are sources A and B for an enquiry into..... (8)
 How would you follow up Source .. For an enquiry into... (4)

Selected key words and definitions	
Terrain	The type of ground – was it hilly, muddy, flat, easy to walk and run on?
Front line	The firing line –the trench nearest the enemy.
Communication trench	Linked the firing line with the command support and reserve trench.
No mans land	Area between the enemy front line trenches where the fighting took place.
Trench fever	Spread by lice and caused headaches, shivering and pain in joints. Lasted 5 days.
Trench foot	From standing in waterlogged trenches, feet became numb and swollen. Some cases became gangrenous and needed amputation.
Shrapnel	Fragments of metal or lead designed to cause maximum injuries.
Artillery	Heavy fire causing half of all casualties.
Gas	Weapon causing blindness, loss of taste and smell and coughing. Often led to death.
Evacuation chain	How injured soldiers accessed medical treatment from front line fighting. Stretcher bearers, Regimental Aid Post (RAP), Field Ambulance and Dressing Station, Casualty Clearing Station (CCS) and Base Hospital.
Thomas splint	A splint o help fractured bones heal in the leg - 1916
Plastic surgery	Improved during WW1, led by Harold Gillies, who opened a specialist hospital in Kent in 1917.