Edexcel GCSE 9-1 History Medicine in Britain, c1250 to present workbook



Key Topic 1 c1250–c1500: Medicine in Medieval England



version 2

Edexce	xcel 9-1 GCSE History Medicine in Britain, c1250 – present PLC			Quiz score	Date revised
	Key topic 1.1 Ideas about the cause of	A. Supernatural and religious explanations of the cause of disease.			
	disease and illness in the Middle Ages	B. Rational explanations: the Theory of the Four Humours and the miasma theory; the continuing influence of Hippocrates and Galen.			
Key topic 1: c1250– c1500: Medicine in	1250– L500: dicine in dieval Key topic 1.2 Approaches to	A. Approaches to prevention and treatment and their connection with ideas about disease and illness: religious actions, bloodletting and purging, purifying the air, and the use of remedies.			
Medieval England		B. New and traditional approaches to hospital care in the thirteenth century. The role of the physician, apothecary and barber surgeon in treatment and care provided within the community and in hospitals, c1250–1500.			
	Key topic 1.3 Case study - The Black Death	A. Dealing with the Black Death, 1348–49; approaches to treatment and attempts to prevent its spread.			

Contents Page

p.2

<u>Topic</u>	Page
Key Topic 1 Key Words	3-5
Life In Medieval England	6-8
KT1.1A Supernatural and religious causes of disease	9-11
KT1.1B Rational explanations: the Theory of the Four Humours and the miasma theory; the continuing influence of Hippocrates and Galen.	12-19
KT 1.1 Quiz	20
KT 1.1 Exam Question 12 Marker + Tips.	21-25
KT1.2A. Approaches to Treatment.	26-31
KT1.2 A. Approaches to Prevention.	32-34
KT1.2 B. Hospital care and the role of Physicians + Apothecaries and Barber Surgeons.	35-39
KT 1.2 Exam Question 16 Marker + Tips.	40-41
KT1.3 A. Case Study - Dealing with the Black Death, 1348–49; approaches to treatment and attempts to prevent its spread.	42-46
KT1.4 Review	47-54
Student Notes	55-58

Medicine Key Topic 1 Key Words - Part 1

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	p		3	•

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1	amulet	Charm worn in the Middle Ages to ward off (give protection) from disease (MA)	
2	apothecary	Affordable chemists from Middle Ages through the Renaissance who made herbal remedies and medicines. Often a cheap alternative to a doctor the did not have university training but were trained through apprenticeship. (MA, RE)	
3	astrology	Superstitious study of how the position of planets influence people's lives and health. Used the form of 'Zodiac Man' charts to decide when and how to treat people. The Black Death was blamed on the positioning of the planets which caused the earth to discharge miasmic odors. (MA)	
4	barber surgeons	Uneducated but skilled medical practitioners who would provide amputation, broken bone setting, bloodletting and urine examination to help balance the humours. Identified by the red and white striped barber pole they could also cut hair. (MA, RE)	
5	Black Death (1348)	Bubonic and pneumonic plague. Killed 30% of England's population and blamed by many on supernatural causes such as God or the position of the planets. Treatments ranged from the natural herbal cures and bloodletting to the supernatural with prayer and flagellation. Some preventative measures were taken with the local authorities (government) enacting quarantine laws for the sick, banning large gathering and setting up quarantine houses. (MA	
6	blanc mangier	Medieval dish recommended to the sick made of chicken and almonds. (MA)	
7	bloodletting	Treatment of removing blood by cutting, cupping or leeches in order to balance out the humours. Also known as phlebotomy or simply bleeding. (MA, RE)	
8	Catholic Church	Also known simply as 'The Church'. Controlled medical training in Middle Ages universities and promoted Galen's teaching and superstition in medicine. Also funded hospitals in monasteries that would give the sick a clean place to recover and encouraged hospitality for the poor. The Church lost influence in the 16th century due to the Reformation and the Renaissance. (MA, RE)	
9	cesspit	A large pit for collecting and storing sewage that often overflowed creating unhygienic conditions and spreading disease. (MA, RE, IR)	
10	change	An act or process through which something becomes different / the opposite of continuity where things essentially stay the same.	
11	clyster	Middle Ages hollow enema tube to relieve constipation, feed people and deliver medicine to the ill through the anus. (MA)	
12	contagious	A disease that can be spread from person to person such as the pneumonic plague or cholera.	
13	continuity	When something basically stays the same or similar / <u>opposite of change</u>	
14	diagnosis	Identification of the nature of an illness or other problem by examination of the symptoms.	
15	dissection	Cutting up and examination of a body. Generally forbidden in the Middle Ages and Renaissance which led to ignorance about the human body until the 1832 Anatomy Act made bodies of criminals available to doctors to practice on. (MA, RE)	
16	endowment	A gift from a wealthy individual. Some Medieval and Renaissance era hospitals for paid for by endowments. (MA, RE)	
17	epidemic	Widespread occurrence of an infectious disease in a community or nation.	
18	flagellants	Religious extremists who publicly whipped themselves during the Black Death to beg for God's forgiveness for their sins in hopes of being spared from the epidemic. (MA)	
19	Four Humours	Theory founded by Hippocrates (Greek) and promoted by Galen (Roman) which stated that a balance of blood, yellow bile, black bile, and phlegm promoted good health. Continued to be taught and applied to medicine well into the 17th century as no other theory was found to explain why peoplegot ill. (MA)	



Medicine Key Topic 1 Key Words - Part 2

20	Galen, Claudius	Roman doctor from Greece who developed the Theory of Four Humours by adding his Theory of Opposites which prescribed balancing out the humours by giving the opposite of their wrote over 350 medical texts and eventually adopted by the Church as the leading medical authority during the Middle Ages. (MA)		
21	germ	Microorganism that causes disease. No idea about Germ Theory in Middle Ages.		
22	herbal manuals	<i>Materia Medica</i> and <i>Circa Instans</i> were often referred to in the Middle Ages as textbooks for classic herbal remedies. (MA)		
23	herbal remedy	Medicines made from a mixture of plants often containing beneficial ingredients such as honey, cinnamon, mint, rose oils and chamomile.		
24	Hippocrates	Greek doctor who popularised the Theory of the Four Humours but also recommended "clinical observation" in which the doctor would observe the patient and recommend rest, exercise, and small changes in diet before heal them. The Four Humours theory lasted over 1,700 years and only began to die out in the 17th century. (MA)		
25	hospitals (Middle Ages)	Monks and nuns ran many religious hospitals for the poor and invalid but would only pro- comfort, food, a clean environment and hospitality instead of a range of medical care. Church hospitals would not take people with contagious diseases. Other cities had endowments from th		
26	infection	Formation of disease-causing germs or microorganisms in a person's body.		
27	king's touch (royal touch)	A form of laying on of hands, whereby English monarchs touched their subjects, regardless of social classes, with the intent to cure them of various diseases and conditions. Most commonly used to treat scrofula (tuberculosis) (MA, RE)		
28	laxatives	Medicines which would causes bowel movements (pooping)		
29	lazar houses	Middle Ages hospital for persons with infectious diseases such as leprosy. (MA)		
30	leeches	Blood sucking worms used to bleed patient during bloodletting. (MA, RE)		
31	Materia Medica	A book with the collected knowledge about the therapeutic properties of any substance used for medicine. The term materia medica was used from the period of the Roman Empire until the 20t century, but has now been generally replaced in medical education contexts by the term pharmacology. (MA, RE)		
32	miasma / miasmata	Theory that disease is produced from bad smells or pollution. Caused many to try and clean up the streets during epidemics like the Black Death, bathe, and generally avoid pungent odors. (MA, RE, IR)		
33	natural vs. supernatural treatments	Natural involves the use of medicine, bloodletting and four humours treatments while supernatural involves Christian practices, charms and astrology to fight disease. (MA)		
34	observation	The act of watching the patient's symptoms develop before attempting any major treatment. Also known as clinical observation.		
34	pandemic	A disease prevalent over a whole country or the world. (eg - Black Death)		
36	pathogen	A bacterium, virus, or other microorganism that can cause disease.		
37	penance	Punishment inflicted on oneself as an outward expression of religious repentance for wrongdoing. Flagellants were known to publically whip themselves during the Black Death outbreak in 1348 and public prayers were offered up during the Great Plague of 1665-66. (MA, RE)		
38	pest houses	A hospital for people suffering from severe infectious diseases, especially the plague. Also known as plague houses or poxhouses, these new locations would attempt to treat those rejected by typical Medieval hospitals. (MA, RE)		

p.4

Medicine Key Topic 1 Key Words - Part 3

39	phlebotomy	The process of making an incision in a vein. The procedure itself is known as a venipuncture or bloodletting. (MA, Renaissance)		
40	physician	A doctor formally trained at university. Before the 17th century training would be little more that learning from Galenic and other ancient texts with little practical experience or dissection. From the 17th century onwards doctors were inspired by anatomical drawings of Vesalius and Harvey to reject Galen and learn how human physiology actually worked. Human bodies were not wide available for dissection in medical universities in England until the 1832 Anatomy Act.		
41	pilgrimage	A journey to a spiritual location used by some Christians as a way to prevent or treat diseases. (MA)		
42	prevention	Steps taken to avoid catching a disease such as regular bloodletting or prayer. <u>Do not confuse</u> with treatment which is performed after catching a disease.		
43	purging	Making someone sick (throw up) through the use of herbal remedies using mixtures of mustard, aniseed and parsley. Also refers to the practice of using enemas and laxatives to cause people to make them poop. (MA)		
44	quack doctors	Fake doctors who would sell 'cure-all' remedies preying on people's superstitions and ignorance (MA, RE)		
45	quarantine	The act of isolating a person in their home or closing off a town to fight the spread of an epidemic. Used during both the Black Death (1348) and the Great Plague (1665-66) as people who contracted the disease were locked in their homes to die and a red cross was put above their door to warn others. (MA, RE)		
46	Regimen Sanitatis	A prescription for daily healthy living which included hygiene recommendations given to a patient by a physician. (MA)		
47	remedy	A drug or treatment that cures or controls the symptoms of a disease		
48	scrofula	A form of tuberculosis common in the Middle Ages and Renaissance. Many believed it could be cured by touching a King. (MA, RE)		
49	stewes	Medieval bathhouses common in cities like London where middle class and wealthy individuals would bathe to stay clean and free of miasmas (MA)		
50	supernatural	Something spiritual or not natural. Disease in the Middle Ages were often believed to have supernatural causes and cures. (MA)		
51	superstition	An unreasonable belief based on ignorance.		
52	symptoms	a physical or mental feature which is regarded as indicating a condition of disease,		
53	Theory of Opposites	Proposed by Galen to balance out the Four Humours by providing the opposite of the symptom. For an excess of blood something cold was prescribed like a cucumber. For a cold, a chili was thought to balance out the phlegm. (MA, RE)		
54	theriaca	Common herbal remedy that could contain up to 70 ingredients such as ginger, cardamom and pepper that was believed to treat many different illnesses. (MA)		
55	treatment	Methods used to try and stop an illness or disease once a person has it. (Not prevention)		
56	trend	A general direction in which something is developing or changing. For example, the trend towards teaching Galen in the Middle Ages vs. the trend of questioning Galen in the late Renaissance period.		
57	turning point	A radical moment or breakthrough where a great deal of change happens. Usually in the form of a new invention, technology, method, inquiry or type of thinking. Examples include Vesalius' <i>Fabrica</i> , the printing press in 1440 and the introduction of Salvarsan 606 as the first magic bullet (antibiotic).		
58	urine chart	Used by physicians in the Middle Ages to balance a patient's humours. Physicians or barber surgeons would check the colour, thickness, smell and taste before making a diagnosis. (MA)		
59	Wise women	Women in the Middle Ages who would give a range of services in a local town or village such as bone setting, herbal remedies, childbirth support and medical advice. (MA)		
60	witchcraft	The practice of dealing with magic and/or evil spirits. Sometimes used in the Middle Ages as treatment for diseases. (MA)		
	1	4		

p.5

To understand medieval medicine you need to understand medieval life and thinking. These questions will diagnose any misunderstandings you have.

1. True or false?

- a. People did not wash or try to keep clean.
- b. People threw rubbish into the street.
- c. There were underground sewers in every town and city.
- d. People believed God sent diseases.

2. Who controlled education?

- a. The king and his council
- b. The Catholic Church
- c. The schools

3. What were the king's two main duties?

- a. Defending the country.
- b. Improving people's health.
- c. Keeping law and order.

4. Which of these statements best fits people's attitudes?

- a. We must respect traditional ideas, especially what is written in the Bible.
- b. We must seek out new ideas. It is important to challenge old ideas.

Target 6-9 - Read the source below.

An extract from the Book of Customs (1321) - a book of court-cases brought against people in London in the Middle Ages.

Next case heard by the wardmen of the city of London: the lane called Ebbegate was a right of way for all men until it was blocked by Thomas at Wytte and William de Hockele, who got together and built latrines which stuck out from the walls of the houses. From these latrines human filth falls on the heads of the passers-by.

Is the source primary or secondary? _____

Looking at who wrote it and when it was written (origin) why is this source useful to a historian studying life in

the Middle Ages?

What can you learn from the source itself (content) about peoples attitudes towards health and medicine? (use a quote)



Look at the drawing of a Middle Ages town in England. Annotate the picture to explain aspects would be dangerous to health or reduce life expectancy?



Summarise: What are the reasons that life expectancy in the Middle Ages was between 30-40 years old?





Religious Explanations of the Causes of Disease



The period of 1250-1500 is known as the Middle Ages or the medieval period and the majority of the people living at this time were extremely religious. Most of the people in England followed the teachings of the Catholic Church. They would attend services regularly and would be expected to give sums of money to the Church each month, this was called a **tithe**. The Church also owned large amounts of land in England where it built churches, **monasteries** and convents. These became important centres of the community: as well as praying, monks and nuns of the Church provided basic medical care, looking after people who were not able to care for themselves. The Church used the tithes to pay for the care of the community.

Illness was not uncommon. **Malnutrition**, particularly in times of famine, made people more likely to fall ill. A lack of scientific knowledge at this time meant that the causes of disease and illness were a mystery. The Church used religion to answer the questions people had about illness and disease.

Ordinary people received most of their teaching from the Church, as they didn't receive any formal education. The majority of people at this time could not read or write, instead, they learned from the stories they heard, or the paintings they saw on the wall of their church. One thing they learned was that sin was very dangerous. The Church taught that those who committed a sin could be punished by God. They also taught that the devil could send disease to test someone's faith.

The Church often explained **famine** by saying that God had sent it as a punishment for sin. Therefore, it was logical also to blame people's sins for their illnesses. Blaming sickness on God acted as 'proof of the divine': it provided evidence of God's existence.

Keywords

Malnutrition - An illness caused by lack of food.

Famine - food shortage, usually due to bad harvests.

Supernatural -Something spiritual or not natural. Disease in the Middle Ages were often believed to have supernatural causes and cures.

Monasteries -Buildings run by monks. People could get treatment here.

Paralysis - Being unable to move either all or part of your body as a result of illness, poison or injury.

TASK - Read the through the information above and think about whether the Church helped or hindered the
understanding and treatment of disease? Summerise your ideas in the table and explain your overall verdict

Ways the Church helped the understanding and treatment of illness	Ways the Church hinder the understanding and treatment of illness	
Overall, I think that the Church <u>helped/hindered</u> the understanding and treatment of illness because		

TASK: Carefully read the following account of leprosy in the Middle Ages. Can you see any evidence that, even in the Middle Ages, people also looked for rational (scientific/logical observations made from the real world rather than supernatural/otherworldly) causes of disease?

<u>Leprosy</u>

The Bible tells stories about how God sent disease as a punishment, leprosy in particular was included in the Bible. It was a painful skin disease that led to paralysis and eventually death. There was no cure, so lepers were banished from communities. If they were allowed to stay they had to wear a cloak and ring a bell to announce their presence. They were also banned from going down narrow alleys, where it was impossible to avoid them. This was because it was believed that their breath was contagious. Although this was not true, it does show that medieval people had some correct ideas about how some diseases were transmitted. Although there was no formal care for lepers, a few lazar houses did help people suffering from leprosy. Lazar houses were more commonly known as leper colonies.



Evidence that people in the Middle Ages had rational ideas about and treatment of disease:



Explain how the illustration on the left is connected to medicine and supernatural ideas.

Key Topic 1.1A. Supernatural and Religious Causes of Disease

<u>TASK</u> - Read the following passage on astrology. Was astrology a rational or supernatural explanation of disease?







The alignment of the planets and stars was also considered very important when diagnosing illness. A physician would consult star charts, looking at when the patient was born and when they fell ill, to help identify what was wrong. Traditionally, the Church frowned upon the idea of using astrology in diagnosing illness, as it seemed only one step away from predicting the future or fortune telling. However, after the Black Death arrived, astrology became more popular and the Church became more accepting of it. Many people believed the Black Death was caused by a bad alignment of the planets.

Astrology is a rational/supernatural explanation of disease because...

<u>HOT -</u> Write 2 sentences using all the keywords on page 12 and 1 sentence using all the keywords on page 13. Highlight the keywords after you have completed.



p.11

Diagnosing -Deciding what is wrong with a patient by considering different symptoms. In medieval England, physicians could also consider star chats to diagnose an illness.

Physician - Someone who practices medicine. A medieval physician did not have to have the same level of training as a modern physician.





p.12

The theory stated that as the universe was made up of the four basic elements - fire, water, earth and air - the body must also be made up of four humours, which were all created by digesting different foods. The four humours were:



<u>Blood</u> People may cough blood.



Phlegm The watery substance coughed up or sneezed out.



<u>Black Bile</u> -Probably referred to clotted blood, visible in excrement or vomit.



Yellow Bile Appeared in pus or vomit.

There was a belief that all the humours must be balanced and equal. If the mix became unbalanced, you became

ill.	<u>Humour</u>	<u>Season</u>	<u>Element</u>	<u>Qualities</u>
HOT Yellow bile Fire	Blood	Spring	Air	Hot and Wet
Blood Air Black Bile Earth	Yellow Bile	Summer	Fire	Hot and Dry
Water COLD	Black Bile	Autumn	Earth	Cold and Dry
	Phlegm	Winter	Water	Cold and Wet

According to the theory, each humour was linked to certain characteristics that physicians would look for when carrying out their diagnosis. For example, a person suffering from a fever had a temperature, causing the skin to go hot and red, physicians believed, they had too much blood. This was a hot and wet element. Meanwhile, a person suffering from a cold had too much phlegm, which was cold and wet. They would shiver and the excess phlegm would run out their nose. The humours were linked with the seasons as seen in the table above. Along with this, the star signs for each season were associated with its humour. Astrology was considered an important part of the Theory of the Four Humours, as the humours were connected with star signs and seasons, and each one had its own ruling planet.

The Origins of the Theory.

The Theory of the Four Humours was created by the Ancient Greek physician named Hippocrates in the 5th century BC. The word "humour" comes from the Greek word for fluid- humon. Hippocrates was very careful to observe all the symptoms of his patients and record them. The Theory of the Four Humours fitted what he saw.



1. Hippocrates created the theory of the Four Humours in Ancient Greece. 400 BC



2. Galen developed the theory by adding the theory of opposites (treatment) to balance the humours. 200 AD



3. The Catholic Church respected both and demanded their ideas be taught in medical universities in the Middle Ages

Key Topic 1.1B - Rational Explanation: Theory of the Four Humours

Galen, a physician in Ancient Rome during the 2nd century AD, liked the ideas of Hippocrates and developed them further. He had been a physician in a gladiator school and later became the personal physician of the Roman Emperor. This meant that he had lots of time to experiment, ponder philosophy and write. By the time he died, he left behind a very large body of work- more than 350 books.

Galen developed the Theory of the Four Humours to include the idea of balancing the humours by using the **Theory of Opposites**. For example, he suggested that too much phlegm, which was linked to water and the cold, could be cured by eating hot peppers. Galen also theorised that the circulatory system circulated blood generated in the liver, and the blood was distributed around the body.

The Theory of the Four Humours was very popular because it was very detailed and could be used to explain almost any kind of illness – physical or mental. It was important that the theory covered almost every type of illness that occurred, because there was no other scientific explanation for the cause of disease. Often physicians twisted what they saw to fit in with the logic of the theory.



<u>Keywords</u>

Vivisection - Criminals sent to death had their bodies cut open by physicians to examine.

Barber Surgeon - Barbers worked with knives, so as well as giving haircuts, they would carry out medical procedures and later on, smaller surgeries.

Galen's Influence

Classical texts like those of Galen continued to be very influential in the Middle Ages for three reasons: the influence of the Church, the importance of book learning and the lack of alternative theories.

The influence of the Church

Galen wrote that the body was clearly designed for a purpose and that the different parts of the body were meant to work together in balance, as first proposed by Hippocrates. Galen also believed in the idea of the soul. This theory fitted in very well with the ideas of the Church, who believed that God created man in his image, and so they promoted Galen's teaching and, by extension, those of Hippocrates. Since books were produced in monasteries, and libraries were maintained by the Church, their choice of texts were the ones that were widely read, preached and believed. In the early Middle Ages, the church controlled medical learning in universities, too.

The importance of book learning



Many people could not read in the Middle Ages. This meant that being widely read was a sign of intelligence. A good physician was considered to be one who had read many books, rather than one who had treated a lot of patients. Having read the works of Hippocrates and Galen was proof that a physician was worth the money he was being paid. The authority of these classical texts was so strong that people believed them even when there was actual, physical evidence that suggested they were wrong.

The lack of alternatives



There was a lack of scientific evidence to support any other kind of theories of the causes of disease. Dissections were mostly illegal, because the church taught that the body needed to be buried whole in order for the soul to go to heaven. Very occasionally, physicians were able to dissect executed criminals, or criminals who had been sentenced to death by vivisection. When this happened, the physician would sit far away from the body, reading from the works of Galen, while the actual cutting and examining was done by a barber surgeon. This meant that Galen's ideas were preserved: anything in the body that didn't agree with Galen's writings could be explained away, since the body was that of a criminal and therefore imperfect, and the physician himself never did any examinations.

p.13

Key Topic 1.1B - Rational Explanation: Theory of the Four Humours

p.14

- 1. Who was Hippocrates?
- 2. What was the name of his theory?
- 3. How did Galen adapt this theory?

4. What element was each of the humours linked to?

5. Summerise the three reasons why Galen's ideas had such a great influence on medicine.

Hot - Explain why and how the Church had an impact on medieval medicine.

Key Topic 1.1B - Rational Explanation: Miasma and other Causes

p.15

Miasma				
A miasma (plural= miasmata)	was bad	that was belie	ved to be filled with harmfu	I fumes. Hippocrates and
both wrote abour	t miasmata ar	nd suggested that sw	vamps, corpses and other	matter could
transmit disease. Smells and va	apours like mi	asmata were also, ι	insurprisingly, associated with	n God. A clean and sweet-
smelling home was a sign of spin	ritual	, and ince	nse was burned in churches to	o purify the air. Homes that
smelled badly suggested		and corruption a	and, if a person was unwas	hed, other people would
them, in case they	vbreathed in t	he bad miasma and o	contracted a disease.	
<u>Urine charts</u>				
Although medieval physicians di	dn't	_ people's urine for	making them ill, they did car	efully examine the urine in
order to make their It was thought to be one of the best ways to check on the balance of the				eck on the balance of the
inside the body. Samples of a patient's urine could be sent to a physician, where it would be examined and				
compared with a urine	The	physician would c	arefully check the colour, t	hickness, smell and even
of the urine before	making his dia	agnosis.		
sinfulness Galen	taste	diagnosis	blame cleanliness	avoid
	chart	humours	rotting	air

Influence on ideas about the causes of disease

The Middle Ages was a time when there was **continuity** in ideas about the causes of disease. There were only a few small changes. For example, the use of astrology became more widespread, which meant it was adopted by many people, but did not expand upon Galen's original theories. On the whole, ideas remained the same.

Individuals and the Church $\,$ $\,$

The Church was very important in maintaining the status quo at this time. This means that they did not like change, and wanted to keep things the way they were. The Church controlled medical learning. It chose which books were copied and distributed. The Church liked the Theory of the Four Humours because it fitted with their teachings, so it promoted this theory. The Church strongly discouraged anybody from criticising the theory.

HIppocrates and Galen were important individuals in the Middle Ages, Even though they lived many years before this time. Their books had been preserved by Arabic scholars and Latin translations were available in Europe by the Middle Ages. Galen in particular was popular with the Church, which meant that his work was widely promoted.

Science and Technology



During the Middle Ages, a lack of scientific understanding meant that new knowledge was limited. Physicians and medical students tried to make new discoveries fit into the old theories, rather than experimenting to explain the discoveries.

One important piece of technology invented near the end of the Middle Ages was the **printing press.** It was invented around 1440 by Johannes Gutenberg in what is now Germany. Although this was not directly related to advancing medieval medicine, it eventually led to much faster and easier sharing of medical texts. However, it did not have a huge impact during the medieval period.

p.16

Attitudes in Society



Medieval people had a strong belief in God and did not want to risk going to hell by being critical of the Church. Physicians who did not follow the old ideas found it hard to get work, because everybody knew a 'good' physician would follow Theory of the Four Humours. A famous 13th-century military surgeon, Henri de Mondeville, was among those who questioned the old ways of practising medicine. Mondeville is even quoted as stating that classical figures like Hippocrates and Galen were like an old dog that need to be put down, but whose owners could not face replacing it with a younger, healthier dog. However, even he continued to practise medicine in the same way as everybody else - he probably wouldn't have found employment otherwise. Many people believed that , since medicine had always been done this way, there was no need to change it.

TASK - 3-2-1 quiz

You need to create/write 6 questions from page 12-13. 3 true of false statements, 2 multiple choice and one factual recall e.g. what is miasma. Once you have written your questions, hand your workbook to your partner and get them to answer them!

3 True or false

1.		 	 	 	
2.		 	 	 	
3.		 	 	 	
2 Multi	ple Choice				

Question	Option 1	Option 2	Option 3	Option 4

1 Factual recall

<u>Medieval – Religious and Supernatural</u> <u>causes of disease and illness</u>

Religious Explanation - God's punishment of sinners:

- Church controlled what was taught and taught people that God made them ill either because:
- 1. **God was displeased** with them e.g. in the Bible disease like leprosy were used to punish sins.
- 2. God was testing their faith
- People believed that there was no need to search for other rational explanations for disease – which held back medical research and meant few new ideas about the causes of disease.

Supernatural Explanation: Astrology

- The alignment of planets and stars was thought to cause some diseases.
- A physician would use astrology by consulting star charts, when the patient was born, fell ill to help **diagnose** what was wrong with a patient.
- Use of astrology was not new in 1250 but it increased through this period, especially after the Black Death and the Church became more accepting.

Medieval – Rational and natural causes of disease and illness

Rational Explanation: The Theory of the Four Humours

- Hippocrates (Ancient Greek) created the Theory of Four Humours
- the universe was made up of the 4 elements

(fire, water, earth and air) so the body was too, created by eating foods.

If one was out of **balance** it made people ill:

- 1. Blood
- 2. Phlegm (coughed, sneezed, tears)
- 3. Black bile (e.g. clotted blood, excrement, vomit)
- 4. Choler or yellow bile (pus, vomit)

To get better the balance had to be put right.

Galen (Ancient Rome) developed Hippocrates work further by developing the Theory of Opposites. Besides bleeding and purging to get rid of excess humours the treatment of opposites aimed to treat and balance the humours with an 'opposite' of their symptoms e.g. too much phlegm, linked to water and the cold = eat hot peppers.

Rational Explanation: Miasma (bad air) carried disease

- Miasma was bad air that was believed to be filled with harmful fumes.
- > This was related to God because bad smells indicated sin.
- Hippocrates and Galen had even suggested that swamps, corpses and rotting matter could transmit disease – so the idea came from the ancient world.







Medieval Urine Chart

How accurate would diagnosis be using a urine chart? Explain.



Eliminate irrelevance

Here is an exam-style question:

Explain why there was continuity in ideas about the cause of disease during the period c.1250-c.1500. (12 marks)

You may use the followin	g in your answer:
The Church	= Galen
You must also use inform	nation of your own.

Below is a paragraph which is part of an answer to the question above. Some parts of the answer are not relevant to the question. Identify these and draw a line through the information that is irrelevant, justifying your deletions in the margin.

In medieval England there were religious and supernatural explanations for the cause of illness. The Church was very powerful and controlled education throughout the period, which led to the continuity of ideas. The Church taught that God was responsible for illness and disease. The Church taught that God sent disease as a punishment for sin or to cleanse the soul. As a result of this, many people would also turn to the Church for treatments and preventions. Religious believers would attend church and pray, pay for a special mass to be said to remove their sin and also fast. Some believers would go on a pilgrimage and during the Black Death in 1348 flagellants across Europe would whip themselves to show God how sorry they were for their sins and to show that they did not need to be punished with the disease. These beliefs continued throughout the period c.1250–c.1500 because the Church remained in control of education and continued to teach these ideas. Due to the power that the Church held in society, there was no challenge of the religious explanations, treatments and preventions for disease and illness.

Key Topic 1.1 Recap Mind Map



Quiz - KT1.1 - Causes of Disease

1. What dates were the Middle Ages (according to our exam spec)

2. What period of time comes after the Middle Ages?

3. Three adjectives to describe the Middle Ages? Why was life expectancy so low?

4. What MA institution (organisation) had immense power of people's lives?

5. Name of Greek doctor who came up with the Theory of the Four Humours?

6. What did the Roman Doctor Galen add to this?

7. About how many years did the 4 humours theory remain accepted?

8. Three supernatural causes of disease in MA?

9. Three natural causes of disease?

10. Two large reasons why there was so little progress in the medical understanding during the period.

Red	Amber	Green	
Fails to adequately explain the ideas of the causes of disease in the Middle Ages with accuracy or detail and does not understand the role of factors of religion and context of the period.	Can explain the ideas behind the causes of disease in the Middle Ages with sufficient detail and understanding but struggles to explain the role of Hippocrates, Galen, the Church and Medieval context.	Fully understands and can explain the rational and supernatural ideas behind the causes of disease in the Middle in the Middle Ages including the role of Hippocrates and Galen and the influence of the Church and ignorance of the period.	

Below are the three main factors to understanding change and continuity in early diagnosis of disease. You need to:

- 1. Annotate the mind map with factual information from the previous pages.
- 2. Draw a symbol that represents each of the factors
- 3. HOT Number the factors 1-3 with one being the most significant
- 4. Explain which one you think is the most significance influencing beliefs about the causes of disease.



I think the most significant factor for ignorance regarding the causes of disease in the Middle Ages is...

KT 1.1 - 12 mark exam question

p.22

Explain why there was continuity in the idea about the cause of disease during the period 1250 - 1500

The following statements are pieces of evidence that you can use to answer this question. You need to choose 3 colours and and place them in the correct factor. There are boxes for you to consider your own evidence from previous lessons





	Student friendly Mark scheme
L2 4-6	- Weak explanations - Some understanding but lacking
L3 7-9	 Points are explained with good development. Good focus on topic Understanding is demonstrated by clear use of facts, key words and details. Maximum 8 marks for Level 3 answers that do not go beyond aspects prompted by the stimulus points.
L4 10- 12	 Points are explained with analysis supported by strong development and linked to wider understanding of the topic. Excellent focus on topic and command word Understanding is demonstrated by clear use of wide ranging facts, key words and key details about the period. At least three different reasons given for the ineffectiveness of reactions.

For this question, you **don't need** an i**ntroduction** or a **conclusion** in this answer, you are just explaining why something happened.

TASK - Highlighter Marking

Below is a sample paragraph. It is a good paragraph but there are 5 factual inaccuracies. You need to highlight them and correct the mistake in the margin.

Start each paragraph with a point that rephrases the question.

One reason why there was continuity in the ideas about the causes of disease between 1250-1500 was because of the Church. Even though the majority of people at this time were not religious, the Protestant Church held a lot of power and influence. For example, they controlled the education, and with the king, decided which books were copied and distributed. This led to continuity in the ideas of the cause of disease because even though the Church liked change, they discouraged anybody from criticising their beliefs. Furthermore, they only taught ideas that fitted their ideas, like Galen's Theory of Four Humours, which led to continuity as all medical professionals learnt from the Church's teachings.

When referring back to the question, use the question to help you focus your explanation.





KT1.2A Approaches to Treatments

Religious and supernatural treatments

As the Church taught that disease was sent by God as a punishment for sin, it followed the that the cure should also involve the supernatural. As well as looking for medical treatment for disease, it was important to undergo a course of spiritual healing. Religious treatments included:

- Healing prayers and incantations (spells)
- Paying for a special mass to be said
- Fasting (going without food)

Pilgrimages to the tombs of people noted for their healing power also became extremely popular. Once the pilgrimage was complete, there were a few suggested actions with diseases could take. (see pictures below)



If prayers and offerings did not work, there were other supernatural remedies available, although the church did not approve of them. Chanting incantations and using charms or amulets to heal symptoms and ward off diseases were fairly common throughout this period.

Sometimes the sick were discouraged from seeking cures. After all, if God had sent the disease to purge the soul, it was important for the disease to run its course. Taking medicine to cure the disease might keep you alive, but it would mean that your soul would still be stained with sin. That meant risking not being admitted into heathen when you died.

Explain three reasons why religious treatments were so common in the Middle Ages	
1.	
2.	
3.	



<u>Keywords</u>

Mass - Roman Catholic service where bread and wine is given. Catholics believe that this involves a miracle: the bread and wine is turned into the body and blood of Christ.

Pilgrimage - A journey to an important religious monument, shrine or place.

KT1.2A. Approaches to Treatments

p.27

Astrology

Physicians consulted star charts when diagnosing illness. These were also important when prescribing treatment. Treatments varied according to the horoscope of the patient. The alignment of the planets was then checked at every stage of the treatment prescribed: herb gathering, bleeding, purging, operations and even cutting hair and nails all had to be done at the right time.

Task - How do these pictures relate to the treatments illness?















Today, when we fall ill, doctors assess the symptoms, make a diagnosis and treat the infection. For example, if a patient catches a chest infection, the treatment prescribed will be to attach the germ, rather than to stop the patient from coughing. This is because modern medicine recognises that treating the cause of the illness will eventually treat the symptom.

Medieval physicians did not work in the same way. Each symptom was broken down and treated separately, as they believed each symptom represented an imbalance in the humours. Therefore, conflicting remedies might be provided.

TASK - look at Source A below, underline/highlight the treatments that are suggested.

Source A

Advice from John of Gaddesden's medical book, the *Rosa Anglica*. John, a very well - respected English physician, wrote this very popular medical text in the 14th century. Here, he explains how to cure lethargy [extreme tiredness]

It is necessary for lethargics that people talk loudly in their presence. Tie their extremities lightly and rub their palms and soles hard; and let their feet be put in salt water up to the middle of the shins, and pull their hair and nose, and squeeze the toes and fingers tightly, and cause pigs to squeal in their ears; give them a sharp clyster [an enema] at the beginning... and open the vein of the head, or nose, or forehead, and draw blood from the nose with the bristles of a boar. Put a feather, or a straw, in his nose to compel him to sneeze, and do not ever deist from hindering him from sleeping and let human hair or other evilsmelling thing be burnt under his nose...

HOT - Explain why this sources is useful for a historian studying treatments in the Middle Ages?

KT1.2A. Approaches to Treatments

Phlebotomy, or bloodletting/bleeding, was the most common treatment for an imbalance in the humours. The idea behind it was that bad humours could be removed from the body by removing some of the blood. Phlebotomy was so common that most physicians didn't even bother to carry out the procedure themselves and monks were forbidden from bleeding their patients. Instead, it was usually done by barber surgeons and wise women. Demand was so high that even some people with no medical background offered the service.

Bleeding was carried out in several different ways.

Туре	Method	Uses	
Cutting a vein	This involved cutting open a vein with a lancet or other sharp instrument. Blood was usually let from a vein near the elbow, because it as easy to access.	The most straightforward method of bleeding. Phlebotomy charts like the vein man were used to show points in the body where bleeding was recommended for specific illnesses.	
Leeches	Freshwater leeches were collected washed and kept hungry for a day before being placed on the skin. Bleeding might continue for up to 10 hours after the leech was full.	Used for people whose age or condition made traditional bleeding too dangerous.	
Cupping	The skin was pierced with a knife or a pin or even scratched with fingernails until it was bleeding. A heated cup was placed over the cuts to create a vacuum. This drew blood out of the skin.	Used for women, children and the very old. People believed different illnesses. For example, people believed that cupping on the back of the neck was good for eye trouble, bad breath and facial acne.	

Sometimes patients were bled for too long and died as a result. Evidence suggests that this was quite common and it was probably seen as a necessary hazard.

Purging

Because it was believed that the humours were created from the foods eaten, a common treatment was purging the digestive system to remove any leftover food. This was done by giving the patient either something to make them vomit (an emetic), or a laxative or enema to clear out anything left over in the body. Emetics usually consisted of strong and bitter herbs like scammony, aniseed and parsley. Sometimes they contained poisons like black hellebore, so it was best to vomit them up quickly.

Explain three reasons why bloodletting was so commonly used as a treatment in the Middle Ages?
1.
2.
3.

p.29

KT1.2A. Approaches to Treatments

Laxatives were very common. Some well- known examples included mallow leaves stewed in ale, and linseeds fried in hot fat. Linseeds are still used today a s digestive aid. Sometimes people needed a bit more help to purge, and the physician would administer a **clyster** or enema.

Highlight the KEY information in each paragraph, be brief. Summarise Add a title for each each Remedies paragraphin paragraph 2-3 bullets. Sick people in the period c1250-c1500 were also treated with Remedies were remedies - usually herbal infusions to drink, sniff or bathe in. Some herbal. of these are still in use today. For example aloe vera was prescribed Drank, sniffed or Remedy bathed in. to improve digestion. Other ingredients featured regularly included Ingredients mint, camomile and rose oils, tamarind, almonds, saffron, butter, Mint, rose oils and almonds. absinth, turpentine and coral. Sometimes the ingredients were expensive and difficult to find. A common remedy mixed and sold at this time was theriaca. This was a spice-based mixture that could contain up to 70 ingredients, including quite common things like ginger, cardamom, pepper and saffron, but also some unusual ingredients like viper flesh and opium. Galen had written a book on tehiracas, looking particularly at their use in treating snake bites and poisons. Over time, they became widely popular and were used for many different illnesses. Different foods were prescribed to encourage the balance of the humours-remember that the humours were thought to be created from the digestion of food. A dish called blanc mangier, made from chicken and almonds, was regularly recommended for medieval invalids because the ingredients were warm and moist. Bathing Warm baths were regularly prescribed to help the body draw in heat to help dissolve blockages in the humours. This gave the body the opportunity to steam out impurtities and ease aching joints. Herbal remedies could also be given this way. Various plants and

> Some of the remedies were less pleasant and were based purely on superstition:those suffering from paralysis were advised to boil a fox in water and then bathe in it! This was because it was thought that the quick and nimble properties of the fox would be transferred to the patient through the bath water

herbs were added to the bath water to help. For example, people suffering from bladder stones were advised to stir in mallow violets.

p.30

<u>Medieval – treatments</u>

p.31

Religious:

- > Healing prayers and incantations
- Paying for a special mass (church service) to be said
- Fasting (going without food)
- Use of charms and amulets
- > Pilgrimages e.g. to tombs of people noted for healing powers and then take an action e.g.:
- Touching holy relics, presenting an offering to a shrine (usually an image of the body part to be healed), Lighting a candle proportionately as tall as you (or as long as the body part needing healing).
- Supernatural e.g. hanging a magpie's beak around your neck to cure toothache
- Sometimes the sick were discouraged from finding cures as the disease had been sent to purge the soul so the disease should run its course.

Humoral treatments:

- Bloodletting (phlebotomy) most common treatment for humoral imbalance usually done by barber surgeons or wise women. Methods: cutting a vein, leeches and cupping (skin pierced until bleeding and a heated cup placed over to create a vacuum and draw the blood out).
- Purging involved making someone remove food from the body by using mixtures from an apothecary to cause:
- **vomiting emetics** to make someone sick e.g. bitter and strong herbs like scammony, aniseed and parsley.
- go to the toilet –laxatives e.g. mallow leaves stewed in ale and linseeds. An enema (clyster) water and herbs were squirted into the anus to purge the body and clear blockages (water mixed with honey, oil and wheat bran, soap and herbs e.g. camomile – squirted using a greased pipe fixed to a pigs bladder)

<u>Traditional remedies: often made from herbs</u> – to drink, sniff of bathe in. Theriaca = a spice-based mixture (up to 70 ingredients e.g. ginger, cardamom, pepper and even viper flesh or opium) – used for a wide variety of illnesses. Warm baths were prescribed to help the body draw in heat. Herbs and plants were added. One treatment for paralysis = boil a fox in water and then bathe in it!

Research 3-5 ingredients used in Middle Ages herbal remedies and make an advertisement for YOUR herbal remedy below (HOT - explain which disease or ailment your remedy would help solve)

<u>The Church</u>

Most people believed that the best, and most important, way of preventing disease was to lead a life free from sin. Regular prayers, confessions and offering tithes to the Church worked together to ensure that any minor sins were quickly forgiven.



Hygiene

Once your spiritual health was taken care of, it was important to concentrate on your bodily health, too. Guidance on doing this was contained in a set of instructions known as the *regimen sanitatis*.



Purifying the Air

Medieval people attempted to keep the air free from miasmata by purifying it. They did this by spending sweet herbs, such as lavender. Sometimes this might be carried as a bunch of flowers, or placed inside a decorative piece of jewellery called a pomander (a large locket).

Local authorities put measures in place to keep towns clean. For example, they tried to make sure there were no rotting animals left lying around and pulled down or cleaned smelly public toilets. Preventing Disease

<u>Diet</u>

Since the humours were thought to be produced by digestion, what and when you ate were both considered very important in preventing an imbalance. Eating too much was strongly discouraged. Fear of digestive problems leading to death was so great that many people purged themselves, either by vomiting or using laxatives, as a way of preventing disease as well as treating it.

Regimen Sanitatis

The *regimen sanitatis* was a loose set of instructions provided by physicians to help a patient maintain good health. It first appeared in the work of Hippocrates, where it was later picked up by Galen and Arabic scholars like Avicenna. This meant that the advice was widespread and very common by 1250.

Ideally, a physician would provide a regimen sanitatis written especially for their patient. However, in practice, this service was only used by the very rich, because it took a long time to write such a detailed set of instructions for a every patient. Bathing was an important treatment for disease. It was also used as a preventative measure: bad smells indicated a miasma. The wealthy could afford a private bath of hot water. Public baths were available for a fee. Poorer people swam in rivers where possible. They believed that cleanliness was next to godliness, so it was important to stay clean. People also tried to make sure their homes smelled sweet and fresh, too. Floors were swept regularly and rushes were laid down to soak up any mess. Sometimes sweet smelling herbs, like lavender, were spread with the rushes to keep air free of miasmata.



KT1.2A. Approaches to Preventions

p.33



Medieval Diagnosis

- Theory of the Four Humours
- Astrology
- <u>Urine Charts:</u> Medieval doctors used people's urine to diagnose illness. They could check the colour, look at the thickness, smell and even taste the urine.

Medieval – prevention



Prevention and treatment of disease in the Middle Ages was based on rational and religious methods as well as traditional remedies.

Religious and supernatural:

Living a Christian life e.g. pray, go to church and obeying the 10

Commandments

- Chanting incantations
- Use of charms and amulets
- Self punishment (so God won't) such as flagellation.

Rational methods:

- Trying to keep the streets clean
- Purifying the air e.g. with sweet herbs like lavender
- Exercising
- Not over eating
- Bleeding and purging
- Regimen Sanitatis loose set of instructions provided by physicians to help a patient maintain good health:
- Bathing and washing
- Public baths were available for free, the poor swam in rivers, only the wealthy bathed regularly.
- Keeping your home clean

TASK: Record 5 statements about Middle Ages prevention but make 2 of them incorrect. Then swap with partner and correct each others mistakes.

KT1.2B Role of Middle Ages Medics

Wise Women

Most people in the Middle Ages would have been treated at home by a female family member. Women did most of the treatment at home, caring for the sick and mixing remedies themselves. Women also acted as midwives: evidence from medieval sources suggests that only women attend births. Asking for medical advice cost a lot of money. Since the treamtents weren't guaranteed, most people were not willing to spend this money even if they had it. However, there were other treatment options for people willing to pay.

Physicians

Medicine became more professional during the Middle Ages and a medical degree took between 7-10 years. Doctors were known as physicians - the word 'doctor' did not become common until the 17th century. The main role for of a physician was to diagnose illness and recommend treatment, they rarely got involved in treating the patients themselves.

He would: 1. look at samples of the patient's urine, faeces and blood. 2. Consult astrological charts under which the patient was born and at the time they fell sick. 3. Based on this, they would create a course of treatment.

Treatment would be carried out by less trained and lower paid professionals as many physicians were clergymen and were forbidden from carrying out procedures such as bleeding. During this time however, new universities were established without religious sponsorships so foreign physicians who had no connection to the Church were able to both diagnose and treat patients. Physicians were very expensive because there weren't many of them mainly due to the training being so long.

Apothecaries

Apothecaries mainly mixed herbal remedies. They had a good knowledge of the healing power of herbs and plants thanks to studying herbal manuals such as *Materia Medica*. They usually had a good amount of knowledge from their own experience, or passed down from family members.

Apothecaries were not considered as skilled or knowledgeable as physicians. Physicians prescribed the medication and apothecaries were just there to mix the remedy. However, since doctors were expensive and apothecaries were comparatively cheap, lots of people would see an apothecary as an alternative to a doctor. This meant that doctors saw them as a threat to their livelihood.

Apothecaries did not just create remedies, they also prescribed poison. This went against an idea fundamental to physicians - that they should do no har. This rule went all the way back to Hippocrates and still exists today. Apothecaries were not bound by this rule, so they could not be trusted to do the best for their patient. Nor did they need to attend universities.

Finally, many apothecaries also dabbled in alchemy and the supernatural, providing amulets and charms for patients who wanted something extra to cure a disease. This was frowned upon by the Church and, since many physicians were also priests, this meant that the gap between physicians and apothecaries became even wider.



KT1.2B. Role of Middle Ages Medics


Medieval 'Medics' Top Trumps



Caring for the sick: hospitals and the home

Hospitals



The number of hospitals in England was on the rise during the Middle Ages. By 1500, there were an estimated 1,100 hospitals, ranging in size from just a few beds to hundreds. Bury St Edmund's, for example, had at last six hospitals to cater for lepers, the infirm and the old. The city had a shrine famous for its healing powers and therefore attracted a lot of sick people. However many hospitals did not actually treat the sick. Instead they offered **hospitality** to travellers and pilgrims, which is how hospitals got their name.

About 30% of the hospitals in England were owned and run by the Church in the Middle Ages. These were run by the monks and nuns who lived in nearby monasteries. The rest were funded by an **endowment**, where a wealthy person had left money in their will for the setting up of a hospital. Since charity was a foundation of religion and the Church taught that charitable donations could help to heal disease, it is not surprising that there were so many. The Church was in charge of running many of the hospitals, too.

Medieval hospitals that did treat the sick were not the same as the hospitals we have today. Medieval hospitals were good places to rest and recover The space would have been kept very clean and the bed linens and clothing of the patients changed regularly. It was a large part of the nuns' duties to do the washing and make sure everywhere was kept clean. This is meant that, for people not suffering from terminal disease, hospitals were probably quite successful.

Naturally, this is what the Church wanted: a recovery was further proof of the existence of God and the importance of prayer. Many european hospitals employed physicians and surgeons, but there is not evidence to suggest that English hospitals did the same. Since religious men were forbidden from cutting into the body, treatment was very limited. Infectious or terminal patients were often rejected from hospitals, as prayer and penance could do nothing for these people. However, patients who had a chance of recovery were able to see the altar and even participate in Church services from their beds, to help with the healing of their souls.

The Home



Although many hospitals were established in medieval England, the vast majority of sick people were cared for at home. It was expected that women that women would care for their relatives and dependents when needed. This care would have involved making the patient comfortable preparing restorative foods and mixing herbal remedies. Women would also be responsible for the garden, in which they were expected to grow various plants known for their healing properties, such as marigolds and clover.Some historical sources hint that women in the home were well-respected for their healing skills.

HOT - Why would Henry VIII's Dissolution of the Monasteries in 1541 have a negative impact of medical care?

KT1.2B. Approaches to Hospital care

<u>TASKS</u>
1. Prioritise - Underline the three most important sentences from page 41 and copy them here. Rank them 1-3 and explain Number 1.
2. Annotate the illustration of a Middle Ages hospital:
<u>3. HOT</u> - Extend: Write down three questions you'd like to ask an expert in this subject.

KT 1.2 - 16 Mark exam question

'The main reason why medical care and treatment was ineffective during the medieval period, c1250-c1500, was because medical knowledge was based on Galen's ideas.'

How far do you agree? Explain your answer. **marks**

You may use the following in your answer:

- Theory of Opposites
- Hospitals

You **must** also use information of your own.



This question gives 16 marks for knowledge and 4 marks for use of correct terminology, spelling, punctuation and grammar. It is worth nearly 50% of the total marks available, so you may prefer to start the exam with this question to ensure you maximise your time available. You should <u>NOT</u> spend longer than <u>26 minutes</u> on it though, as you'll jeopardise losing the other available marks.

This type of question expects you to be able to identify the concept of the statement being given, for example, is it about significance; cause; consequence; change; continuity; similarity, or difference?

You will also be expected to look at both sides of the possible argument before reaching an overall judgement. It is essential to look at how to agree and how to disagree.

A good opening statement is 'I agree to a limited/partial extent...'. This allows you to **look at both sides** effectively before summing up your main verdict. Another good tip, for showing both sides of the argument, is to use phrases such as 'On one hand/On the other hand' – to indicate you are considering the whole picture.

You should consider at least three points of evidence (more if you can) and ensure you try to use both of the bullet points. It is ESSENTIAL to include at least two more points from your own wider relevant knowledge. The easiest way to decide if you agree or disagree overall is to see which side you have more evidence for.

If you spot points which link, make that link explicit in your writing. Ensure you refer back to the question regularly, to show the examiner you are fully focused on analysing the statement.

L2 5-8	 Partial explanation of points but not really developed. Moderate focus on topic but can wander. Understanding is demonstrated by some use of facts, key words and details. Weak judgement that doesn't take much of a stand.
L3 9- 12	 Points are explained with good development. Good focus on topic with both sides of argument explored. Understanding is demonstrated by clear use of facts, key words and details. Good and balanced judgement that acknowledges both sides but takes a stand.
L4 13-16	 Points are explained with analysis supported by strong development and linked to wider understanding. Excellent focus on topic with both sides of argument explored and weighed up. Understanding is demonstrated by clear use of wide ranging facts, key words and key details about the period Strong and balanced judgement that acknowledges both sides and is justified in its final decision.

KT 1.2 - 16 Mark exam question

Introduction

Here you need answer the question and make a judgement. How far do you agree? Strongly, somewhat or do you not agree? Make sure you explain why, whats the ultimate reason you agree or disagree with this statement?



Paragraph 1

List here factual information that will agree with the statement. You need to refer to why Galen's ideas were the main reason for ineffective medical care and treatment. Think about what treatments were related to Galen's ideas and how effective they were. Furthermore, think about the type of training doctors had.

• Remedies based on Galen's Theory of Opposites were unlikely to be effective in treating illness since they did not treat the actual cause of the disease, only its symptoms.

Paragraph 2

List here factual information that will disagree with the statement. You need to refer to other ideas about medical care and treatment and explain how they were not effective. Think about what they thought caused disease and what they used for treatments. Remember to explain how they are ineffective.

• Treatment in hospitals were ineffective because they were mainly run by religious institutions who provided care but often did not attempt to cure illness because they saw it as God's will.



Here you need to make a judgement on the question. Make sure you refer to the question and support it with the key factual information. Here, you are **not** expected to address any new ideas.



KT1.3 Case Study: The Black Death, 1348–49

In 1348, a new disease reached the shores of England. It had spread from the Far east along trade routes, arriving in Sicily in 1347, quickly spreading across the whole of Europe. The **Black Death**, as it eventually became known, was new plague that was unfamiliar to the ordinary people of England, as well as English physicians. Within months, it had spread the length and breadth of England, killing thousands of people. It was absolutely devastating: it didn't matter if you were rich, poor, a city dweller or a country farmer - the plague did not discriminate. Those who caught it could expect to die within a matter of days.

There were two types of the Black Death in 1348. **Bubonic plague** which is transferred from the blood of a rat to the humans via flea bites. This would cause large buboes (swellings) to appear on the victims bodies and a range of other ailments and usually result in death within 5 days. The other type, **pneumonic plague**, was spread by air and would normally kill between 24-48 hours. Death was almost assured with the **pneumonic plague**.

TASK - Match the symptom with the pictures below by putting a number below the picture.

- 1. Chest pains and breathing troubles
- 2. Fever
- 3. Sneezing and coughing up blood
- 4. Boils and black buboes appearing in the groin and armpits.



Ideas behind the causes of the Black Death

Religious and supernatural

Many believed that the Black Death was the result of God deserting mankind - that is, the Black Death was a punishment for the sin in the world. In 1345, there was an unusual positioning of the planets Mars, Jupiter and Saturn, which astrologers interpreted as a sign that something wonderful or terrible was about to happen.

Natural causes

The main natural cause attributed to the Black Death was impure air. Breathing in this miasma caused corruption to the body's humours. People believed that this impure air may have originated from poisonous fumes released by an earthquake or a volcano.

Common Beliefs

For the everyday people living in the cities and countryside, the spread of the black Death was terrifying and they would have heard many conflicting ideas about what cause it. In Europe, many people blamed the Jewish population, but the JEws had been expelled from England in the 13th century, so this was not the case in England.





<u>Keywords</u>

Scourge - A person or thing that causes great suffering.

KT1.3 Case Study: The Black Death, 1348–49

TASK - Reduce the information for each factor about what people thought caused the Black Death into 12 word	s.
Religious and supernatural -	
Natural causes	
Common beliefs	
<u>Treatments of the Black Death</u> Supernatural	

The main recommendation to treat the Black Death was to confess your sins, and ask God for forgiveness through prayer. However, there was an air of inevitability about the disease: once caught, people believed it was clearly God's will; if it was his will that the patient should die, there was no cure that would work.

Natural



To begin with, physicians tried bleeding and purging - the same things they would usually do to correct a humoral imbalance. Unfortunately, that didn't work and, in fact, seemed to make people die more quickly. As well as this, physicians recommended strong-smelling herbs like aloe and myrrh, which were believed to have cleansing properties. They often prescribed theriaca, as it was believed to work for lots of ailments. Lighting a fire and boiling vinegar could also drive off the bad air. Physicians or surgeons sometimes lanced the buboes - occasionally, people whose buboes burst survived.

Common Beliefs



Everyday people were willing to try anything to survive the Black Death. They held strong Christian beliefs, and so would have gone to confession and prayed, as well as seeking traditional cures like bleeding. However, it quickly became clear that neither priests nor physicians were capable of curing the disease. Apothecaries sold remedies and herbs were mixed in the home, based on old recipes, but they had uncertain and unpredictable results. Nobody came up with a cure that definitely worked in all cases.

The lack of medical knowledge about what **caused** the disease meant it was impossible to know how to **cure** it.

TASK - Highlight each specific treatment of the of the Black Death on page 41.

Preventing the Black Death

The main advice given by priests was for people to:

- Pray to God and fast.
- Go on a pilgrimage and make offerings to God.
- Show God how sorry you are by self-flagellation (whipping yourself). Large groups of flagellants wandered the streets of London, chanting whipping themselves.

Natural Means

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Escaping the plague was the best advice for prevention. Guy de Chauliac, who was the physician to the Pope, advised people to: 'Go quickly, go far, and return slowly'. It was essential to escape the foul air to stay healthy. If this kind of movement was impossible, people believed it was essential to carry a posy of flowers or fragrant herbs and hold it to your nose. This helped to avoid breathing in the miasma. Unlike the usual advice on preventing disease, people were advised to avoid bathing. It was believed that water would open the skin's pores to the corrupted air.

Common Beliefs

One physician in Italy recommended doing joyful things, listening to cheerful music and avoiding anything sad as a protection against the disease. This is a clue as to just how desperate most physicians felt - they were willing to suggest anything to prevent their patients from catching the disease. Much like the physicians, people did not know how to prevent the disease. However, they did stop visiting family members who had caught the plague - the common belief of the need to avoid those with the disease was so great that even their houses were avoided.

Government Action

Local authorities attempted to take action to prevent the plague from spreading. New quarantine laws were put in place to try to stop people from moving around too much. People new to an area had to stay away from everybody else for 40 days, to ensure they were not carrying the disease. Authorities also started to quarantine houses where the plague had broken out. They considered banning preaching and religious processions, to stop large crowds of people gathering.















KT1.3 Case Study: The Black Death, 1348–49

p.46

Black Death	Rational / Natural	Supernatural
Beliefs about cause		
\ <u>₹</u>		
Treatment		
₿ ∦		
Prevention		
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Factors

- Government
- Individuals
- Attitudes in society
- The Church / religion
- Science and technology

KT1.4 Middle Ages Medicine Review

TASK - You need to understand the role that factors had on the medieval ideas about the cause of disease and the treatments and preventions that they used. Look at the concentric circles, rank order the factors from page 49 in the box that explain the ideas that existed about cause, treatment and prevention, beginning with the most important in the middle to the least important on the outside. Explain your decisions by annotating the diagram.

For example, if you believe that the religious ideas about cause, treatment and prevention were the most influential, write 'The Church' in the centre circle. You can then annotate this with details of the religious ideas, such as it was believed that God sent the black Death as a punishment for sins.



<u>Odd</u> One Out – Middle Ages

	<u>Odd</u> One Out – Middle Ages			p.48	
A	Disease	Injury	Childbirth	Malnutrition	·'
В	Black bile	Yellow bile	Blood	Water	
с	Bloodletting	Purging	Changes in diet	Prayer	
D	Sin	Jews	Witches	Curses	
E	Роре	God	Pilgrimage	Priest	
F	Cats and Dogs	Quarantine	Flagellants	Plague Pits	
G	Enema	Clyster	Therica	Rest	

Word	Meaning	Timing (short, medium, long)
motivated		
precondition		
precented		
impeded		
catalyst		
developed		
accelerated		
led to		
enabled		
influenced		
allowed		
triggered		
exacerbated		
influenced		

Answer these quick fire questions to test your understanding

- 1. Who came up with the theory of the Four Humours?
- 1. What were the Four Humours?
- 1. How would you treat somebody that had a temperature because of too much blood?
- 1. Arguably, what was the most important institution in the medieval period?
- 1. How did MA people use religion to explain the causes of disease and illness?
- 1. How was astrology used to treat disease?
- 1. What was miasma?
- 1. What did physicians do with urine samples?
- 1. What common Middle Ages disease was often talked about in the Bible?
- 1. What were Medieval universities like?
- 1. Who controlled education during the Middle Ages and how did this impact medical training?
- 1. How else did the Church cause continuity in medicine c1250-c1500?
- 1. What would happen if you challenged the Church's teaching?
- 1. Why did the Church support Galen's ideas?

KT1.4 Middle Ages Medicine Quiz

15. How long did Doctors train for and what did they study?

16. What does it mean to have 'conservative' ideas and how did this impact the Middle Ages?

17. Why was there no medical breakthroughs during the Middle Ages?

18. Why were Galen's ideas followed more than Hippocrates during the Middle Ages? What did Galen say needed to happen in order to have an understanding of the body?

19. What year did the Black Death hit Britain and what was its impact?

20. Give three ideas of the causes of the Black Death in the Middle Ages.

21. Give two treatments of the Black Death

22. How did people try and prevent the Black Death?

23. What role did the government play in helping with the Black Death and why was it so limited?

Collect answers from the	class to complete the table cannot collect more than to	below. You cannot complete wo answers from one persor	
What does the word 'miasma' mean?	What was the difference between a physician and an apothecary?	What does purging mean and how could people do it?	How did hospitals help people?
Name:	Name:	Name:	Name:
Give 3 beliefs about the causes of the Black Death.	What were the 4 Humours and who came up with the idea?	Give 3 supernatural methods of preventing disease.	Give 2 ways physicians carried out bloodletting.
Name:	Name:	Name:	Name:
What did Medieval people believe about astrology?	What does quarantine mean, and when was it used?	Give two reasons why the Church was important.	Give 3 rational methods of preventing disease.
Name:	Name:	Name:	Name:
Give another name for Medieval period and what years was it?	How would wise women and barber surgeons help people?	What year did the Black Death arrive in England?	Describe the living conditions for people at this time.
Name:	Name:	Name:	Name:
Give 2 ways people dealt with miasma.	Who ran hospitals and why?	What is a pilgrimage and why would people do it?	Describe the theory of opposites and who came up with it.
Name:	Name:	Name:	Name:

Study online at quizlet.com/_6yho55

- How did people avoid catching or prevent the Black Death?: Praying and fasting, cleaning the streets, smelling their toilets and other bad smells, lighting a fire in the room or ringing bells or having birds flying around, carrying herbs and spices, not letting unknown people enter the town or village
- How did people think the Black Death was caused?: God, astrology, miasma, volcanoes, four humours, outsiders/foreigners
- 3. How many people did The Black Death kill?: One-third of the population
- 4 How was The Black Death spread?: Carried by fleas living on the back of rats, carried to countries on ships. It is passed to humans when an infected flea bites them and the disease enters their blood
- s. How were books made?: They were written and copied by hand by monks which meant they were often religiously based and changed/incorrect
- 6. What are the five types of healers?: Wise woman
 - Physician
 - Barber Surgeon
 - Apothecaries
 - Priests (religious)
- 7 What are the four humours?: Black bile, Yellow bile, Phlegm and Blood
- a What are the key features of medieval life?: -The Church
 - -Work and harvests
 - -Food supplies and transport
 - -Attitudes
 - -Education
 - -Communications
 - -The King and his Government
- What did Hippocrates and Galen say about the cause of disease?: That people became sick when their four humours were out of balance
- 10. What did Hippocrates and Galen say about the prevention of disease?: That exercise and good diet would keep the humours in the body well balanced
- IL What did Hippocrates and Galen say about the treatment of disease?: They tended to treat patients through bleeding or purging
- 12 What did physicians do?: Observed symptoms, pulse, skin colour and urine (both colour and taste), consulted urine and zodiac charts, then either treated themselves (rarely) or sent them to barber-surgeon or apothecary
- 13. What did the Church discourage?: Dissection and people challenging their ideas and authority by questioning Galen.
- What did the Church teach about disease?: God made them ill as he was either displeased with them or testing their faith. They also trained doctors to teach the Theory of the Four Humours and the Theory of Opposites.
- 15. What is the Hippocratic Oath?: Where doctors swore to respect life and prevent harm, written by Hippocrates

- 16. What percentage of people in large towns could read?: 5%
- 17. What percentage of people worked as farmers?: 90%
- 18. What was bloodletting?: The most common treatment for an imbalance of humours. It was either done by cutting a vein, using leeches or by cupping, different parts of the body were used for different illnesses
- What was Galen's Theory of Opposites?: You could balance the humours by giving the person the 'opposite' over the symptoms e.g. too much phlegm (linked to water and cold) you should eat hot peppers
- 20 What was Hippocrates method of clinical observation?: Studying symptoms, making notes, comparing with similar cases, then diagnosing and treating (it's the basis of the approach used today)
- 21. What was miasma?: The theory that disease was transmitted by bad air, related to God as bad air indicated sin
- 22 What was purging?: A treatment used to re-balance the humours. It either involved making a patient vomit or go the toilet to remove food from the bodies
- 23 What was the astrology explanation for the Black Death?: The position of Mars, Jupiter and Saturn was unusual at this time
- 24 What was the Black Death?: Most historians today believe it was the bubonic plague but there was also a pneumonic version.
- 25. What was the Four Humours explanation for the Black Death?: Most physicians believed that disease was caused by an imbalance in the Four Humours
- 26 What was the miasma explanation for the Black Death?: Bad air or smells caused by decaying rubbish
- 27 What was the outsiders explanation for the Black Death?: Believed strangers or witches had caused the disease
- 28. What was the religious explanation for the Black Death?: God sent the plague as punishment for people's sins
- 29 What was the volcanoes explanation for the Black Death?: Poisonous gases from European volcanoes and earthquakes carried in the air
- 30. What was the work of local councils in towns?: Keeping towns healthy and ensuing law and order
- 31. What were Middle Ages hospitals like?: Pilgrims stayed on their journeys. Infectious diseases or incurable conditions not admitted. Kept clean. Recuperation and rest rather than treatment. Fresh food and plenty of rest. Some built for specific infectious disease. Run by Church and focused on religious ideas not the use of actual treatment.
- 32 What were most of Hippocrates treatments based on?: Diet, exercise and rest Also bleeding and purging

- 33. What were the attitudes of people in the Middle Ages?: They were taught to respect what was written in the Bible and other ancient books and were not to challenge any traditional ideas. This attitude is known as conservatism and often causes a lack of change.
- 34. What were the ideas about the causes of disease?: -God -Miasma
 - -The Four Humours

-Astronomy (alignment of planets and stars)

- 35. What were the religious treatments for disease?: Praying, fasting, going on a pilgrimage and paying for a special Mass to be said
- 36. What were the supernatural treatments for disease?: There were specific ideas for certain illnesses, such as hanging a magpie's beak around your neck to cure toothache or carrying lucky charms
- 37. What were the symptoms of the Black Death?: Buboes, fever and chills, headache, vomiting, diarrhoea and abdominal pain
- 38. What were the traditional remedies?: Ones made with herbs which were drunk, sniffed or bathed in. Also different foods and ointments to apply to the skin. They were made at home or sold by an apothecary
- 39. What were the treatments for the Black Death?: Praying and holding lucky charms, cutting open buboes to drain the pus, holding bread against the buboes then burying it in the ground, eating cool things and taking cold baths
- 40. When did The Black Death come to England and leave?: 1348-1349
- 41. When were the Middle Ages?: 1250-1500
- 42. Where were the largest libraries?: In monasteries as monks could read because they translated books.
- 43. Who controlled education?: The Church, especially in universities where physicians were trained
- Who made the emetics and laxatives used in the treatment purging?: Apothecaries, wise women or at the patients home. Physicians prescribed these treatment and sometimes gave enemas themselves
- 45. Who was Galen?: A Greek doctor who worked in Ancient Rome who developed Hippocrates's ideas, he wrote many books and his ideas were the basis of medical training in the middle ages
- 46. Who was Hippocrates?: A Greek doctor and teacher of doctors who came up with the idea of the four humours, he dismissed the idea that gods caused disease and came up with a natural, but incorrect, theory.
- Who were apothecaries?: Received some training but no medical qualifications. Mixed medicines and ointments based on their own knowledge or directions from a physician. Cost less than a physician
- 48. Who were barber surgeons?: Had no training. Carried out bloodletting, pulling teeth and lancing boils. Did basic surgery e.g. amputating limbs (very low success rate). Costed less than a physician.

- 49 Who were the trained physicians?: Trained at university and passed exams. Diagnosed illnesses and have treatments, or sent patients to an apothecary or barber-surgeon. Expensive. Very few of them and incredibly rarely women
- 50 Who were the wise women who would provide care in the home?: Most ill people treated by a female family member. The village 'wise woman', often the Lady of the Manor, would also tend to people in their homes for free
- St. Why did animals make the streets dirty?: Horses were the main form of transport so left waste in the streets along with other animals. Butchers also left butchered waste in the street
- 52. Why did people practice praying and fasting to avoid the Black Death?: People believed that God had sent the disease, it made sense to show God they were sorry by punishing themselves
- 53. Why did some carry herbs and spices to avoid the Black Death?: To smell nice things and avoid breathing in miasma
- 54 Why did some light a fire, ring bells and have birds fly around the room to avoid the Black Death?: Believed it would keep air moving around and prevent them from breathing in miasma
- 55. Why did some resort to smelling their toilets or other bad smells to avoid the Black Death?: Believed it would be stronger and would overcome the plague as miasma
- 54. Why did the Church approve of Galen?: His theories fitted Christian beliefs that the body had a soul and that all parts had been created by God to work together



What's this an example of and why did they use it?

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	keligious: belief that you caused linesses.	Supernatural treatments: Praying, fasting +	Hippocrates: Four Humours Theory.
		Pilgrimages.	+ = Observed patients/recorded symptoms +
Paper 1:	Supernatural: Astrology also used to help diagnose	2	Hippocratic Oath.
	illnesses.	Rational treatments: Bloodletting, leeches +	 = Ideas on causes of disease were wrong.
Medicine in Britain:	<	purging.	2
c1250-nrecent	<		Galen: Theory of Opposites.
niisesid-oosto	No.	Herbal remedies also used to treat the sick. Medieval	+ = Wrote over 250 books on medicine.
Madian Fundand	Fire	naonla also ancouradad to taka cara of thair hodias -	Mada mistakas - Iau hona mada of 1
Iviedieval England	phileom black and Blood Black Bile	people also encouraged to take date of their boures -	Made IIIIstakes - Jaw Dorie IIIaue OI A
1750 1500	ance Ar		
0051-0571		Dhueician: Diamocad illuaccas and suggested	Case Study: Black Death (1248)
(Case Study, Diack Death (1340)
1		treatments. Studied patients blood and urine.	Causes: Sent by God as punishment, bad air that
E	disease. Hippocrates	Apothecary: Mixed herbal remedies.	corrupted the body's four humours.
		Barber Surgeon: Performed simple surgery.	Treatment: Prayer, charms, bleeding and purging,
T	Miasma: Belief that bad air was harmful and cause	Hospitals: Owned and run by the Church.	sniffing strong herbs, and fires lit to remove bad air.
	illnesses.	Home: Majority of sick cared for at home (women).	Prevention: Pray to God, Flagellants + streets cleaned.
	Kev Words	Kev Words	Kev Words
	Diagnosis: Identify illness based on symptoms	Bloodlettine: Drawing blood from the sick	Bubonic Plague: Disease suread by hacteria (sneezing)
	Misema, Bad air that hallanad to cauca dicascas	Harbel Damadur Madicina mada from nlante/harbe	Clanaliante: Daonia who whimed
1.1			
	Physician: Qualified person to practice medicine.	Pligrimage: Journey to sacred place.	themselves to ask for God s
	Rational: Idea based on logic.	Purging: Removing humours from the body.	forgiveness to avoid plague.
	Supernatural: Ideas not explained by	Purifying the air: Removing foul smells from the air.	Quarantine: Separating sick to stop
	science/nature.	Regimen sanitatis: Instructions to help treat the sick.	spread of disease.
	Causes of illnesses	Prevention and Treatment	Individuals
	Continuities: Miasma Theory, influence of Church	Continuities: Bloodletting, herbal	Thomas Sydenham: 'English Hippocrates'.
Bensissance England	during anidemics and that supernatural haliafs	remediae removal of had air use of	+ = Dlared importance on observing a patient
	numile chinemics and mar subciniatural peners.		
		apothecaries + surgeons for the poor and	 = Doctors/physicians still reliant on Galen's work.
1500-1700	Changes: Most accepted that illnesses were not sent	role of women caring for the sick who	Vesalius: 'On the Fabric of the Human Body'
	by God, decline of importance regarding the Four	could not go to hospitals.	+ = Corrected 300 mistakes by Galen on anatomy.
	Humours Theory and analysis of urine.		 E Caused controversy by challenging Galen's work.
		Changes: People looked for chemical cures	William Harvey: Circulation of the blood.
	There was a move away from old ideas about the	for diseases, Renaissance hospitals began to treat	+ = Proved that arteries and vein were linked together.
	causes of illness but they had not been replaced!	people with wounds and infectious diseases and Pest	 = Considered to be mad as challenged Galen's work.
		Houses.	o a construction de la construction de la construction a construction de la faire enfance en la construction man De la construction de la construction
	Key Words	Key Words	Case Study: Great Plague (1665)
	Epidemic: Disease that spreads	Pomander: Ball containing	Causes: Unusual alignment of the plants, sent by God
と知	quickly.	perfumed substances.	as punishment, imbalance of Four Humours + Miasma.
	Printing Press: Machine for	Transference: Belief that an illness	Treatment: Prayer, quarantine, fasting, smoking
	printing text/pictures.	can be transferred to something	tobacco to ward off miasma + Plague Doctors.
	Renaissance: Revival of ideas from	else.	Prevention: Local governments tried the following:
	1500-1700.	Pest House: Hospitals that	banning public meetings, closing theatres, sweeping
	Royal Society: Set up in 1660 to discuss new ideas in	specialised in one disease.	the streets, burning barrels of tar and sweet smelling
	medicine and science. Sponsored scientists.	5. LEPTRE AND PERSONAL	herbs to ward off miasma, killing cats and dogs.

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