



Middle Ages Revision

c. 1250-1500

Which civilisation collapsed in
AD500?

Roman

How was communication between doctors disrupted in the Middle Ages?

It was too dangerous to travel as wars took place between tribes

What replaced the Romans as the authority in the Middle Ages?

The Christian Church

Which doctor did the
Medieval church defend?

Galen

Where did the Black Death start?

South East Asia (China)

When did the Black Death
come to England?

1348

What did septicemic plague attack?

The blood

Anything that goes septic attacks the blood

How did the Jews supposedly cause the plague?

Poisoned the water/air

True or false: both men
and women could become
Physicians?

False – just men

Why did Medieval doctors study astrology?

To understand the position of the planets to decide how to treat their patient

What stayed the same in the Middle Ages after Greece & Rome and what changed?

Change

Continuity

Ideas about the cause of illness

As you read in the case study on the Black Death (pages 15–17), people believed that God sent diseases. This belief was linked to other ideas, most of which were logical – but wrong. Physicians, such as the one shown here (D), believed in the Theory of the Four Humours. This was another logical theory – but it too was wrong! Nobody knew what really caused diseases and so no major progress could be made in treatments or prevention.

- 3 Why were ideas about causes so important for all aspects of medicine?
- 4 What did a physician use a urine jar for?

A picture of a physician from c.1400. He is shown carrying a urine jar because examining a patient's urine was a crucial part of diagnosing an illness. The physician matched the patient's urine against the colours, smell and thickness shown on a urine chart and might taste the urine to check it was normal. This method of diagnosis fitted the Theory of the Four Humours. For example, very white urine was a sign of too much phlegm in the body.



What did people in the Middle Ages think caused illness?

Treatment

Herbal remedies

1 Take onions and garlic



The modern verdict:
Onion and garlic kill bacteria

2 Pound them together



3 Take wine and bull's gall



Bull's gall also attacks bacteria

4 Stand for nine nights in a brass vessel



Wine contains acetic acid which reacts with copper in the brass vessel to form copper salts which also kill bacteria

5 Strain mixture through a cloth



6 Apply to stye with a feather



The result:
a practical cure

A

The cure for a stye in the eye shown in diagram A above comes from Bald's Leechbook, a tenth-century collection of treatments. **It continued to be used throughout the Middle Ages.** Many remedies did help the sick. Honey and plantain were often used in treatments for cuts, wounds and dog bites and they do contain ingredients which fight infection.

The most common remedies were made from herbs, minerals and animal parts. Most women knew them by heart, but they were written down in books called 'herbals', with pictures of the ingredients and explanations of the exact quantities of each ingredient and how to mix the potion. They included prayers to say while collecting the herbs to increase the effectiveness of the remedy.

SCIENCE NEWS

In 2015 scientists tested the cure shown above and have proved that it can kill MRSA, the hospital 'superbug'. Don't underestimate medieval treatments!

Some cures combined prayer, magic and folklore, such as this cure for toothache recommended by John of Gaddesden, an English doctor in the 1300s.

Write these words on the jaw of the patient. 'In the name of the Father, Son and Holy Ghost, Amen. + Res + Pax + Nax + In Christo Filio.' The pain will cease at once. I have often seen it.

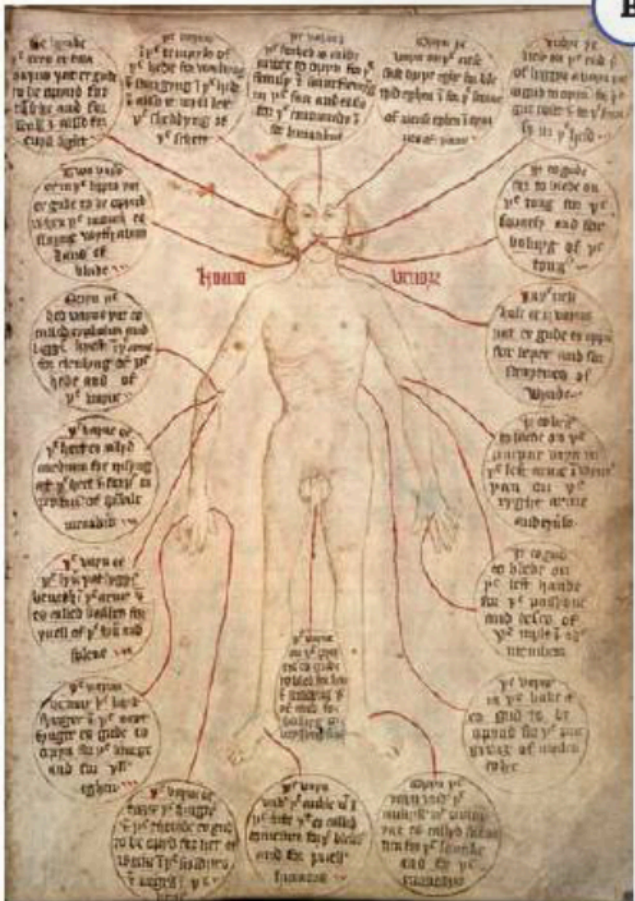
Another cure unlikely to work was for treating quinsy (an abscess in the throat):

Take a fat cat, flay it well and draw out the guts. Take the grease of a hedgehog, the fat of a bear, resins, fenugreek, sage, honeysuckle gum and virgin wax and crumble this and stuff the cat with it. Then roast the cat and gather the dripping and anoint the sufferer with it.

Bleeding to re-balance the humours

Bleeding, urine and zodiac charts were the three most common illustrations in medical books. This bleeding chart (B) showed the surgeon where to take blood from. Bleeding was usually done by a surgeon who warmed a bleeding cup, placed it over a cut and let the warmth draw out blood. Alternatively, leeches were used to sink their teeth into the patient and draw off blood, a method still used in the nineteenth century. Bleeding and purging the stomach were used to restore the balance of the humours. Purging meant swallowing herbs and animal fat to make the person sick or taking a laxative to empty their bowels.

Physicians used zodiac charts to decide the best time for treatment because they believed that parts of the body were linked to signs of the zodiac and the planets. The zodiac chart showed the doctor when to avoid treating each part of the body. When the moon was in Pisces, for example, the feet should not be treated.



- 1 Were herbal remedies helpful?
- 2 What were zodiac and bleeding charts used for?

Types of Healers

Women: wives, mothers and midwives

Women treated most illnesses and knew a wide range of remedies. Sometimes the local wise woman or lady of the manor was called to use her skills and knowledge. Women acted as midwives. In some towns midwives were apprenticed, had licences and were paid. Women could qualify as surgeons by working as apprentices, but were not allowed to become physicians.

Hospitals

The first wave of hospitals appeared in towns in the eleventh century. They mostly cared for older people who could no longer look after themselves. They were run by monks and nuns who provided food, warmth and prayers. Everyone could see the altar where priests said mass seven times each day. They rarely admitted the sick in case they spread infection. One of the most famous early hospitals was St Bartholomew's in London, founded in 1123. From the thirteenth century a second group of much smaller hospitals were founded, often by guilds, organisations of wealthier townspeople who worked in the same trade – shoemakers, silversmiths, etc. These hospitals cared for guild members and local citizens who could no longer look after themselves. By 1400 there were over 500 hospitals, many with only five or six beds. St. Leonard's in York was unusually large with over 200 beds. Occasionally, hospitals were set up to care for particular cases. In London, Richard Whittington, the Lord Mayor, paid for an eight-bed hospital for unmarried pregnant women. In Chester there was a hospital for the care of 'poor and silly persons'.

Physicians

Physicians trained at universities for seven years, reading books by Hippocrates, Galen and Arab medical writers such as Rhazes and Ibn Sina [Avicenna]. However there were fewer than 100 physicians in England in 1300 and only the rich could afford their fees.

Surgeons (also called barber surgeons)

Surgeons did not go to university but trained as apprentices through observing others. They improved their skills through practice and reading books on surgery. They did basic surgery such as bleeding, removing surface tumours, sewing up wounds and making splints for broken bones. There were no effective anaesthetics but occasionally they had to amputate a limb or remove painful bladder stones. Some surgeons used fine needles to remove cataracts from eyes to restore or improve sight.

Apothecaries

Apothecaries mixed ingredients to make ointments and medicines for physicians. They learned from other apothecaries. They also made their own medicines to sell to the sick.

- 1 Who treated:
 - a) the rich
 - b) pregnant women
 - c) those unable to look after themselves?
- 2 Who provided most medical care?

- 3 Who would usually not be let into a hospital?
- 4 How did surgeons and apothecaries learn their skills?



Preventing disease and illness

Physicians advised wealthy clients how to stay healthy, suggesting regular washing, cleaning teeth, combing hair, exercise in fresh air and bathing in hot water. The wealthy sent their urine to physicians to make sure that they were not falling ill. Simple, hand-copied guides to healthy living and how to avoid plague were sold in towns and around the country and so reached a wide audience. Many were written in rhyme so the details could be more easily remembered.

People also tried hard to keep their towns clean. Historians did not always believe this; 150 years ago Victorian historians described medieval towns as places of complete squalor, full of dirt. Nobody, they said, made any effort to keep towns clean. However, modern historians have done research which proves that Victorian writers were wrong. Many medieval towns, especially in the 1400s, were cleaner than industrial towns of the early 1800s. Town councils and individuals worked hard to keep streets clean, especially after outbreaks of plague. We should not be

surprised – medieval people were just as interested in staying healthy as we are today.

The diagram below shows that great efforts were made to keep towns clean. London was the first town in Europe to have a piped water supply. People were proud of their towns, wanting to be cleaner than neighbouring towns and attract visitors as pilgrims or for trade. Many individuals left money in their wills to pay for improvements such as building latrines or improving piping systems to bring fresh water. They expected this charity would help them reach Heaven sooner after they died. However, it was impossible to get rid of all the dirt created by animals, industries and people themselves. Cleaning cost more money than towns had when war or plague stopped trade. Therefore, despite all the efforts, medieval towns would have seemed to us dirty, smelly and very unhealthy places.

- 1 Why were towns so hard to keep clean?
- 2 What did people do to stay clean and healthy?

London Streets Video
London Bathing Video
HH Videos

Too many animals

Problem: Cattle, sheep and geese continually arrived to be butchered for food. Horses were the main form of transport. These animals left trails of dung in the streets.



Solution: A small number of rakers were employed to clean the streets. Newcastle was one town where streets were paved to make them drier and easier to clean.

Keeping towns clean: problems and solutions

Dirty water

Problem: Water supplies were dirty because of industrial and human waste.



Solution: Gloucester was one of many places where monasteries and townspeople collaborated to bring fresh water to public wells through lead pipes. In Exeter aqueducts were built to bring fresh water to the town.

Waste and litter

Problem: People dropped waste and litter of all kinds and sometimes used streets as **latrines**. Butchers threw bloody waste and animal parts in the street.



Solution: Laws were passed to punish throwing waste. Butchers had to get rid of waste outside city walls. Public latrines were built in Norwich and many other towns, including over a dozen in London.

Leaking latrines

Problem: Latrines and cesspits were sometimes built by house-owners near water supplies and their contents emptied into streams and rivers used for washing and drinking water.



Solution: Regulations were introduced about where to build private latrines. Cesspits were lined with brick or stone and so were less likely to leak into drinking water supplies. In Hull, Southampton and other towns, night carts went round collecting human waste from cesspits.

1 What is dissection?	2 What were the Four Humours?	3 Name four different kinds of medieval healers.	4 List three ideas people had about the cause of disease in the Middle Ages.
5 List three kinds of treatment used in the Middle Ages.	6 When did the Black Death arrive in England and what percentage of people did it kill?	7 Give two reasons why it was hard to keep medieval towns clean.	8 Give two ways people used to keep towns clean and healthy.

What do the following words mean?

Physician

Remedy

Herbal

Miasma

Flagellants

Epidemic

Church

Sewers

Public Health

Pestilence

Rakers

Factors

continuity

hindered

progress

The Church

pestilence

factors

this meant that ...

respect for tradition

Write a short story about the Middle Ages using all of the above words



Question Types Q3

5 Minutes

Exploring similarities between the key features of two different periods

Question 3 is the first question that tests your knowledge and understanding of the thematic study on Medicine in Britain, c.1250–present. Remember this is where de-coding questions comes in useful. Look at the question below.

This is an 'explain' question. However, as it is only worth 4 marks, you only have to explain one similarity.

This question has a very specific content focus. To save time make sure you stay relevant – only write about people's responses. There is no need to go into the background of each plague.

3. Explain **one** way in which people's responses to the 1665 Great Plague in London were similar to the way that people reacted to the Black Death in Britain. (4 marks)

The date boundaries are crucial. You must focus on the right case studies, from the specified centuries – the Black Death (fourteenth century) and the great plague that hit London in 1665 (seventeenth century).

The conceptual focus of this question is 'similarities' – the ability to be able to compare different periods of history and spot similarities.

The first thing to notice is that the question is only worth 4 marks. It is important that you are clear on the focus of the question so that you can keep your answer short and to the point.

Explaining similarities between time periods

As this is an 'explain' question you must do more than simply identify a similarity. You will need to support your answer with specific details – a good motto is 'prove' don't 'say'. Would your explanation convince the reader that there was a similarity between the ways that people reacted to plagues that were over 300 years apart?

For example you might 'say' that one similarity between reactions to the two plagues was that people's reactions were based on religion. However, this would not get you high marks. Instead you need to prove your big point about religion by providing supporting information **and** 'killer evidence'.

REMEMBER

You should only be spending around five minutes on this question. Keep your answer focused on explaining **one** way in which people behaved or reacted in a similar way. Do not list lots of similarities.

■ **BIG POINT** – With a question only worth 4 marks do not spend time on an introduction. Start your answer with your ‘big point’ – in this case that reactions were based on religion.

■ **SUPPORTING INFORMATION** – You need to develop your initial ‘big point’ or argument. You could explain how in both centuries people responded to the plague by praying and asking God for help.

■ **KILLER EVIDENCE** – You now need to prove that this was the case by providing specific examples from each time period. For the fourteenth century you could refer to the Flagellants while for the seventeenth century you could explain how people put red crosses on their doors and wrote ‘God have mercy on us’.

Question Types

Q4

15 minutes

Step 3: Organise your answer using paragraphs

Do not worry about a long introduction. One or two sentences are more than enough and you can use words from the question. Look at the example below. Note how the student has built a short introduction into the first paragraph which focuses on the role played by government.

The period 1750–1900 saw a real improvement in approaches to preventing the spread of disease. One important reason for this was that the government started to take responsibility for improving methods of prevention.

Aim to start a new paragraph each time you move onto a new factor that caused change. Signpost your argument at the start of the paragraph. For example, you could start your next paragraph like this:

Developments in science and technology also played a crucial role in improving methods of prevention.



Step 4: Do not 'say' that a factor was important – 'prove' it was

Remember that a list of reasons why treatment of illness improved will not get you a high-level mark. You need to **prove** your case for each factor. This means developing your explanation by adding supporting information and specific examples (killer evidence).

This is where your work on connectives will come in useful. Look again at the advice on page 25 and remember to tie what you know to the question by using connectives such as 'this meant that', 'this led to' and 'this resulted in'. For example, you may want to build on the opening to your first paragraph by using the example of the 1875 Public Health Act as a way that the government helped to improve methods of prevention. Look at how the student below starts to prove a point.

In 1875 the government introduced a new Public Health Act. This meant that local councils had to improve sewers and drainage, provide fresh water supplies and appoint Medical Officers to inspect facilities.



Step 5: End your answer with a thoughtful conclusion

Keep your conclusion short. A good conclusion makes the overall argument clear – it is not a detailed summary of everything you have already written! Make it clear which factor played the most important role. You may want to show how it links to other factors.

REMEMBER

Do not try to cover too many factors that led to change. Select which factors you can make the strongest argument for. Remember in the exam you would have approximately 15 minutes to answer this question.

Tackling 12-mark explain questions

Look at the question below.

4. Explain why there was rapid progress in approaches to preventing illness in Britain during the period c.1750–c.1900. (12 marks)

You may use the following in your answer:

- the 1875 Public Health Act
- the work of John Snow

You must also use information of your own.

This question is different in two ways from Question 3 on page 155. Firstly, the conceptual focus is different – in this case the key concept is causation (explaining **why** an event took place or explaining the pace of change). Secondly, this question is worth 12 marks. The examiner will expect you to give a range of reasons **why** there was rapid progress in approaches to preventing illness in Britain between 1750 and 1900. The question also supplies stimulus material (see page 150, Point 10).

It is important to spend time planning this question during your exam. Follow the steps below to help you plan effectively and produce a good answer.

Step 1: Get focused on the question

Make sure you de-code the question carefully. Note that the content focus is on 'approaches to preventing illness' so do not go into medical treatments or what people believed caused disease.



Step 2: Identify a range of factors

Try to cover more than one cause. If your mind goes blank always go back to the key factors that influence change in medicine (see page 8). The stimulus bullet points can also help you. For example, in the question above, the reference to 'the 1875 Public Health Act' shows how the government played a key role in improving methods of prevention.

