

Key idea: What changed in the Renaissance?

1	Exploration	1. Exploration meant people brought back new products from other countries.
2	Realism in art	1. Meant diagrams were more accurate, allowing people to learn more about anatomy
3	The Reformation	1. As many countries broke from the Catholic Church, people started to question traditional ideas and to experiment.

Key Individuals

1	Vesalius	1. Increased anatomical knowledge through dissections and proved Galen wrong
2	Paré	1. Developed new surgical techniques and treatments
3	Harvey	1. Discovered how the heart circulated blood around the body and proved Galen wrong
4	John Hunter	1. Set up surgical schools and raised public interest in science
5	Jenner	1. Developed the first vaccination against smallpox

Key factors in Renaissance

1	Communication	1. The printing press allowed books to be printed quickly and cheaply – more access to new knowledge
2	Science and technology	1. The development of scientific method led to new ideas and more accurate results 2. Some improvements in technology – the first microscopes and thermometers
3	Individuals	1. Individual scientists made huge contributions in this period. 2. Some gained government assistance or recognition

1. Understanding of Disease

1	What stayed the same?	1. People still believed strongly in the Four Humours theory 2. God was still believed by some to be the cause of illness 3. Miasma was still believed to cause illnesses
2	What changed?	1. The scientific method developed as people tested new ideas 2. Some progress in understanding of anatomy, however the church suppressed the writings that disagreed with Galen

2. Treatments

1	What were treatments like?	1. Treatments still focused on balancing the four humours 2. Many still relied on supernatural cures e.g. people believed the King's touch could cure scrofula
2	Where could people get treatments?	1. People stopped using the church, but still visited wise women, doctors and apothecaries 2. Quacks - Travelling salesmen who would sell homemade medicines. These usually had no medical basis. 3. Herbals - Books, printed cheaply which contained herbal remedies
3	Changes in doctors' training	1. In a few hospitals, doctors were trained on the wards 2. Training emphasised the importance of observation 3. More doctors did dissections 4. In 1645 the Royal Society was set up for physicians to experiment and share ideas
4	New treatments from abroad	1. Rhubarb from Asia was used to purge the bowels 2. The bark from a South American tree made quinine and helped to treat fever and malaria 3. Tobacco was used to treat toothache, joint pains and for plague protection

Key word	Definition
Barber Surgeon	Medieval barber who practiced surgery and dentistry
Blood letting	Removing some blood by opening a vein or using leeches
Emetic	Substance that makes a patient vomit
Humours	4 liquids in the body that must be in balance
Miasma	Bad air/smells – it was believed up until the 19 th Century that this was the cause of disease
Printing Press	An invention that allowed books to be printed rather than hand written
Purge	Making a patient be sick in order to balance their humours
Quack	A salesman who sold fake cures
Renaissance	The period after the Middle Ages when learning and science were encouraged

Key dates

1	1440	The printing press was invented
2	1495	Columbus discovered the New World
3	1537	Paré created new ointment
4	1543	Vesalius published his <i>Fabrica</i>
5	1632	Harvey published his work on the circulatory system
6	1665	The Great Plague hits London
7	1796	Jenner creates the first vaccine

3. Surgery

1	Why did surgery improve?	1. Gunpowder and cannons meant that soldiers got new wounds. 2. Field surgeons had to develop new techniques to treat them.
2	How did surgery improve?	1. Greater understanding of anatomy due to the work and books by Vesalius and Harvey 2. Better training for doctors and surgeons
3	Impact of Paré	1. Army surgeon Paré ran out of oil to cauterise gunshot wounds and created a new lotion that had soothing anesthetic properties 2. He designed over 50 kinds of false body parts and made them for wounded soldiers 3. Paré experimented with ligatures to stop bleeding as an alternative to cauterisation
4	Impact of Hunter	1. Hunter set up his own anatomy school and surgical practice 2. His various books were widely read and he experimented with new techniques in surgery e.g. treating aneurysms 3. Hunter raised public interest in science with his collection of plant and animal species

4. Public Health

1	What stayed the same?	1. Towns were still dirty and overcrowding 2. Little government involvement in people's health and living conditions
2	Hospitals and care	1. Church hospitals and monasteries stopped after Henry VIII dissolved the monasteries 2. Hospitals were set up by charities and local councils e.g. St Bartholomew's in London 3. Some hospitals were more specialist e.g. maternity hospitals 4. Hospitals would not admit people with infectious diseases 5. Most rich people still preferred to pay for home visits from doctors
3	Preventing disease	1. Inoculation against the deadly disease smallpox was dangerous and expensive 2. Through experimentation, doctor Edward Jenner proved that infecting someone with cowpox would protect them from smallpox. 3. Some rejected his work because he wasn't a well known doctor, it wasn't profitable for doctors and he couldn't explain how it worked 4. The government gave Jenner £30,000 to develop his idea and in 1852 made vaccination compulsory

Key word	Definition
Anatomy	The study of the human body
Bubo	Black swellings – a symptom of the black death
Cauterisation	Using a heated iron or hot oil to seal a wound
Cesspit	Pit for the disposal of liquid waste and sewage
Epidemic	Spread of a disease to a large number of people
Immunity	Protection from a disease
Inoculation	Using a weakened but live germ of a disease to help a person build up immunity
Ligatures	A thread used to tie blood vessels during surgery
Quarantine	Isolating a sick person or household to stop the spread of a disease
Smallpox	An infectious disease common until the 18 th Century
Vaccination	Using the dead germs of a disease or one like it to give a patient immunity

5. The Great Plague

1	What was the Great Plague?	1. An epidemic of plague that hit Britain in 1665
2	What caused it?	1. Similar causes to the Black Death – crowded and dirty conditions encouraging rats. 2. People still believed in the same causes –especially miasma
4	What cures did people try?	1. Bleeding with leeches 2. Blocking bad smells with vinegar or pomanders 3. Using animals to draw out the 'poison'. 4. Moving to the countryside (the rich).
5	What was the government reaction?	1. Public gatherings were banned. 2. Bodies were buried at night. 3. Searchers employed to find and quarantine plague victims and their households 4. Trade between towns was stopped. 5. Cats and dogs were killed.
6	Consequences	1. 70,000 people died in London 2. After the Great Fire of London, the city was re-built with spacious streets and stone buildings
7	Comparing the Black Death and the Plague	1. Similarities – same causes and ineffective cures 2. Differences – some improvement in the understanding of how diseases spread and more government action