Medicine Stands Still

1. Religion played a massive part in people’s lives, so many believed God was responsible for causing and curing disease.
2. Learned ideas about medicine were largely based on Ancient Greek and Roman ideas, particularly two men – Hippocrates and Galen.
3. The Four Humours were the most widely held belief about health. If your humours were out of balance you could get ill. You needed to balance them to be cured.
4. The Four Humours are blood, phlegm, yellow bile and black bile.
5. Doctors were for the wealthy. Ordinary people would visit a barber-surgeon or apothecary.
6. Many cures were herbal, though bleeding was also common to balance your humours.
7. The Church was important in setting up hospitals and caring for the sick.
8. Disease spread quickly in towns which were smelly, dirty and overcrowded.
9. Arab medicine was far more advanced than European at this time. Muslim writers such as Avicenna were responsible for saving the works of Hippocrates and Galen which were later translated back for use in Europe, as well as adding their own work.
10. The biggest health crisis in the Medieval world was the Black Death, 1348-51 in Britain. It is estimated one third of the population was killed.

The Beginnings of Change

1. The Renaissance (meaning re-birth) was a time of discovery and development in art, culture, religion, literature and science. It began in the mid-fifteenth century in Europe.
2. Two inventions were important for medical developments: the microscope and the printing press.
3. Vesalius (1514-64) challenged the ideas of Galen by studying anatomy and correcting Galen’s mistakes.
4. Paré (1510-90) is often known as the ‘father of modern surgery’. He experimented widely and wrote a lot to educate others. He used ligatures to seal a wound.
5. Harvey (1578-1657) discovered that blood circulated round the body and used experiments to show the function of the heart and veins.
6. However, changes in knowledge were slow to reach everyday practice. Many people rejected the new ideas and continued with their medieval cures.
7. Doctors and surgeons began to be more qualified and regulated, with an improvement in their status. However, many people continued to use ‘quack’ doctors.
8. An increasing number of hospitals were set up to treat the sick.
9. Edward Jenner discovered a vaccination for smallpox in 1798. He found that people who were given a dose of cowpox didn’t catch smallpox.
10. His ideas were slow to catch on, but smallpox was such a dangerous disease that in 1853 the government made it compulsory for all children to be vaccinated against smallpox.

A Revolution in Medicine

1. Remember the Industrial Revolution? Well, there was a revolution in medicine too!
2. The nineteenth century saw massive population growth – from 16.3 million in 1801 to 41.6 million in 1901.
3. Three people made major scientific discoveries for medicine: Louis Pasteur, Robert Koch and Paul Ehrlich. They paved the way for further developments.
4. Pasteur discovered germ theory – the idea that disease is called by germs. Koch invented a way to stain bacteria so you could see them and identify which bacteria caused different diseases. Ehrlich invented ‘magic bullets’, drugs which could target specific organisms in the body.
5. The discovery of germs led to improvements in cleanliness in hospitals. Lister began to use carbolic spray during operations as an antiseptic.
6. Anaesthetics were also developed to make surgery and childbirth less painful.
7. Once surgery was pain free and patients were likely to survive, new techniques could be developed.
8. Rapid growth in towns led to initial public health problems, including diseases such as cholera.
9. Reform and improvements came, including the development of a sewage system and clean water.
10. The government worked to improve public health, with Public Health Acts in 1848 and 1875.

Modern Medicine

1. Alexander Fleming worked on developing penicillin – an antibiotic which could kill bacteria and cure disease.
2. World War One and its horrific injuries led to developments in plastic surgery, skin grafts and reconstruction.
3. The National Health Service was set up in 1948, offering free healthcare to all.
4. Alternative medicine, including herbal remedies, acupuncture, aromatherapy and reflexology, offer a different approach to pills and drugs.
5. X-ray technology was developed in the early 20th century to allow doctors to easily see inside patients.
6. Many new surgical procedures have been developed, including transplants, heart pacemakers, hip replacements and test tube babies. Keyhole surgery is now common.
7. There are debates about whether science and technology is taking us too far and there is a risk we could end up ‘playing God’, with experiments in cloning and sterilisation taking place.
8. The Liberal Government of 1906 – 14 passed a series of laws to improve the health and well-being of the people, including introducing National Insurance (1911) and banning back to back houses (1909).
9. Nowadays we have new concerns – obesity, unhealthy lifestyles, smoking, alcohol and the risk that ‘super-bugs’ will develop which can’t be killed by antibiotics.
10. Many diseases have been wiped out altogether in Britain, but research continues in the battle against diseases such as cancer and new threats appear in the media, such as swine flu or the Zika virus.