

YEAR 9 HISTORY

REMOTE LEARNING BOOKLET

'THE HEALTH OF THE PEOPLE IN BRITAIN'



UNIT 1: HEALTH AND THE PEOPLE IN THE MEDIEVAL PERIOD (1000-1450)

LESSON 1: YWBAT understand the Theory of the Four Humours

Hippocrates was an ancient Greek doctor and Galen was an ancient Roman doctor. They believed the Four Humours made people ill. This was WRONG.

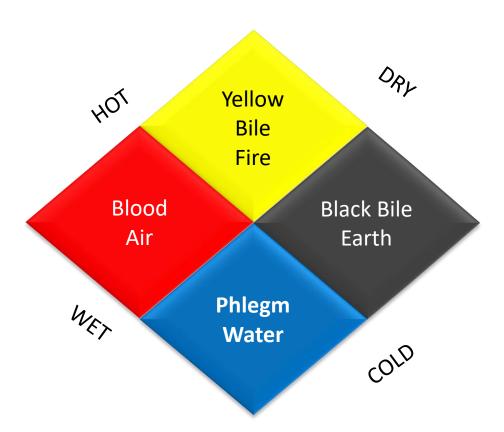
Although it contained body fluids the ideas were wrong and lasted for hundreds of years.

Hippocrates believed that in order to keep the body health, the Four Humours must be in balance. The human body contains blood, phlegm, yellow bile and black bile. Disease occurs when there is too much or too little of these humours.

Their beliefs arrived to Europe via Islamic texts. Christian church leaders liked Galen's writings as he referred to the creator (god). This helped Galen's ideas spread.

Task 1: Note take the above

Task 2: Draw the below diagram



LESSON 2: YWBAT understand the ideas of Hippocrates and Galen

HIPPOCRATES 460-370BC

- The first doctor to treat the body as a whole, rather than parts.
- Believed in the Four Humours.
 Incorrect idea about keeping body fluids balanced.
 - He believed in observation (watching).
- Linked to 60 books (many have been written by his followers).
 - He believed in diet and rest.
- Today, new doctors still take the Hippocratic Oath (a promise to be a good & honest doctor).

GALEN, AD130-C210

- Studied medicine in Egypt before moving to Rome.
- Took Hippocrates' ideas further.
- He dissected (cut open) animals to understand the human body.
 - He worked for 3 years as a doctor in a gladiator school (warriors).
- He used the theory of the Four Humours.
- He believed in listening to a patient's pulse.
- His ideas affected English ideas about medicine for hundreds of years.

Task 1: Note take the above

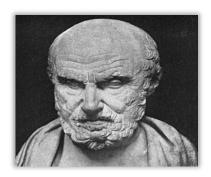
Task 2: Highlight your notes. Is this a good idea or a bad idea?

<u>Task 3:</u> Why were Hippocrates ideas good and bad?

POINT: Hippocrates had good/bad ideas. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good/bad because... LINK: This links with _____ because...

Task 4: Why were Galen's ideas good and bad?

POINT: Galen had good/bad ideas. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good/bad because... LINK: This links with ____ because...





LESSON 3: YWBAT explain the importance of Arabic medicine

Muslim or Islamic writers from the Middle-East translated Ancient Greek and Roman medicine books into modern languages. This meant doctors in the 900s could learn from the Ancient Greeks and Romans. The translated books were passed to the West so English doctors could learn.

Avicenna was an Arabic/Islamic doctor in the 900s and early 1000s. 40 of his medical books are still around. The most famous of Avicenna's books are the 'Book of Healing' and the 'Canon of Medicine'. The 'Canon of Medicine' was printed in Europe 60 times and was still used 500 years after Avicenna was alive.

Arabic or Islamic hospitals were very important and far better than the hospitals in Europe and England. The most famous Islamic hospitals were in Baghdad (Iraq), Damascus (Syria) and Cairo (Egypt). Arabic/Islamic hospitals had classrooms, libraries and pharmacies. They were very clean, had windows to let in fresh air and had clean water fountains.

Task 1: Note take the above

<u>Task 2</u>: Rank your notes: What were the most important features of Arabic medicine? (1st, 2nd, 3rd etc.)

Task 3: Explain two reasons Arabic medicine/doctors were important.

POINT: Arabic ideas were important. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was important because... LINK: This links with _____ because...

POINT: Another important Arabic idea was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 4: YWBAT understand medieval people's beliefs about illness

People had bad ideas about what caused illness. They though God was punishing them for their sins. They thought bad smells caused diseases. They though the supernatural (witches, demons) caused illnesses. They even used ancient ideas like the Four Humours which was wrong.

Barber surgeons cut hair and carried out small operations. They set broken bone, pulled out rotting teeth and were cheap.

Apothecaries mixed herbs to make medicines (1 herb = simple & 2 herbs = compound). Their medicines didn't always work and they were very expensive.

A wise woman used old and traditional remedies often based on religion. She would sometimes work as a midwife. She was very cheap.

When someone was ill doctors would 'bleed' them. Cupping: A doctor would cut open a small vein and let 'bad' blood pour out. Leeching: Doctors would place leeches on the skin. They would suck out 'bad' blood. This did NOT work.

Doctors would use a urine chart to see how to help. A chart showed different colours of wee. This helped a doctors decide what the problem or illness was. This did NOT work. Doctors would decide what medicine to use based on the colour, smell or even taste!!

Doctors would also use a zodiac chart to decide on what medicine to use. The Zodiac chart uses Star signs to decide how to treat someone. This does NOT work.

Task 1: Note take the above

<u>Task 2</u>: Rank your notes: What were the worst ideas? (1st, 2nd, 3rd etc.)

Task 3: Explain the worst medieval idea about medicine.

POINT: Medieval ideas were very bad. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with ____ because...







LESSON 5: YWBAT understand medieval surgery

John Arderne was an English surgeon. He mostly cut out lumps from a patient's anus. He created a pain-killer using hemlock, opium & henbane. Too much could kill! John Arderne worked during the Hundred Years' War for experience. He charged the rich heavily but treated the poor for free. John Arderne had a 50% survival rate. This was great for the 1300s.

Barber surgeons cut hair, helped broken bones and pulled out rotten teeth.

Army surgeons became quicker at amputations (very painful). Pain could lead to shock and death. Most surgeons held down their patient.

Cauterisation was burning wounds with hot metal to stop the bleeding. This was painful and could get infected.

Hugh of Lucca and his son Theodoric told people to stop rubbing pus on wounds. They began using wine to clean wounds and used an arrow cup to remove arrow heads in the flesh.

Task 1: Note take the above

<u>Task 2</u>: What are the positives and negatives? Highlight your facts using two colours.

Task 3: Explain why medieval surgery was good and bad.

POINT: Medieval surgery was bad. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...

POINT: However, medieval surgery was also good. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...



LESSON 6: YWBAT understand how the church affected medieval medicine

- The church told people to PRAY for their illness to stop.
- People went on religious journeys or PILGRIMAGES hoping God would cure them.
 - People left SMALL MODELS of infected body parts at religious places hoping God would cure it.
- The church set up over 700 HOSPITALS between 1000 and 1700 (small but better than nothing).
- The grave of SAINT JOHN OF BRIDLINGTON was thought to be a place of miracles- people went on pilgrimages here.
 - The *church* made it difficult to DISSECT (CUT OPEN) human bodies for research.
- The church controlled English UNIVERSITIES like Oxford and Cambridge

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 The church controlled English UNIVERSITIES like Oxford and Cambridge.

 The church controlled English UNIVERSITIES like Oxford and Cambridge.
 - MONKS copied old medical books for doctors to STUDY.
 - The church didn't like new ideas. They only LIKED OLD IDEAS such as Galen's.
- The church preferred GALEN who based much if his work on animals.
- Roger Bacon was ARRESTED in 1277 for spreading new ideas and anti-Galen views.
 - During desperate times the church gave people a sense of HOPE.

Task 1: Note take the above

<u>Task 2</u>: What are the positives and negatives? Highlight your facts using two colours.

<u>Task 3:</u> Explain why the church had a good and a bad impact on medieval medicine/ideas.

POINT: The church had	d a bad impact on medieval medicine/ideas.
EVIDENCE: For examp	e, (Use one fact). EXPLAIN: This was bad because
LINK: This links with	_because

POINT: The church had a good impact on medieval medicine/ideas. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with ____ because...



LESSON 7: YWBAT understand church hospitals and how they cared for the sick

- Hospitals were divided for men and women.
- Clothing and food was arranged for patients.
 - Guardians would look after sick people.
- Hospitals were payed for by the church or rich people.
- Hospitals received medicines & herbal remedies (from monasteries).
- Special hospitals were made in 1123 for poor, pregnant women and 1247 for mentally ill people.
 - St Giles hospital was for the sick and any bishops that needed confess their sins.
- Some hospitals didn't allow mentally ill, contagious diseases or pregnant women due to a lack of knowledge.
- Patients would first go to the chapel to pray before being given a place to rest.
- Nuns or old women would care for patients (Old women couldn't 'tempt' male patients).
 - Patients dirty clothes were boiled and patients had a bath.
 - Not many hospitals employed physicians (doctors) or surgeons.
 - The church and the hospital told people to pray to God to cure their illness.
 - Scottish monks knew how to amputate limbs, make surgical tools and even create hangover cures.

Task 1: Note take the above

<u>Task 2</u>: What are the positives and negatives? Highlight your facts using two colours.

Task 3: Explain why church hospitals were good and bad.

POINT: Church hospitals were good. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...

POINT: However, church hospitals were also bad. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...

LESSON 8: YWBAT understand Public Health in medieval towns and monasteries (churches)

TOWNS: Towns would often throw sewage (toilet waste) into rivers. Businesses & chemical companies also emptied their waste in rivers. This was dangerous as people used the rivers for drinking and washing. Cesspits (holes for waste) were not emptied regularly. Councils didn't improve towns because they didn't want to annoy people by raising taxes but laws were made to make people clean their streets but many ignored it. People didn't know about the importance of keeping clean and often couldn't afford to even if they wanted to.

MONASTERIES (CHUCHES): Monasteries had pipes that brought clean water inside the monastery, wash rooms or Lavatoriums and waste was moved away from the church by the river. Toilets (Privies) were always cleaned & waste removed. Poo was collected and sent to farmers for fertiliser. Monks had regular baths & washed their clothes. Monks read medical books so kept themselves clean.

Task 1: Note take the above

<u>Task 2</u>: What are the positives and negatives? Highlight your facts using two colours.

<u>Task 3:</u> Explain how monasteries did a good job dealing with Public Health well and how towns did a bad job.

POINT: Monasteries did a good job in dealing with Public Health. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good because... LINK: This links with _____ because...

POINT: Towns did a bad job in dealing with Public Health. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...





LESSON 9: YWBAT understand church hospitals and how they cared for the sick

The Black Death was a horrid killer disease. People grew black lumps called buboes on their armpits and groin. Rats spread infected fleas with the bacteria to people. People than transmitted it to each other.

People believed the Black Death was caused by the position of stars or planets, bad smells in the air, gods punishment for sins and Jewish people poisoning water – all of which were wrong!

People treated the black death by drinking mercury (poisonous liquid metal), put shaved chickens on their armpits, stopped having sex, used leeches to suck out 'bad blood', drank/bathed in urine, left infected areas and tried to avoid people. Some of these methods were good and some bad.

The Black Death killed 50% of England and whole towns were wiped out. Less workers and farmers meant food in the fields was left to rot which caused food shortages. Some farmers had to start farming sheep instead of food as it required less people (which added to the food shortages). As food prices rose many people wanted higher wages.

Task 1: Note take the above

Task 2: How did the Black Death spread?

<u>Task 3:</u> Colour code the ideas about what caused the black death and the different treatments. Which are good and bad?

<u>Task 4:</u> Rank the different ways the Black Death affected England. What is the worst? (1st, 2nd, 3rd, etc.)

<u>Task 5:</u> What was the worst things about the Black Death? Peoples ideas, treatments or its impact?

POINT: The worst thing about the Black Death was people's ideas/people's treatments/the impact it had. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...



LESSON 10: End of unit Medieval GCSE style question

1. Doctors used old tools such as a urine chart or zodiac chart. They even used bleeding to make people better.	2. After the Black Death peoples wages rose as they had more work to do.	3. The Medieval church told doctors to use Galen's work. Galen used animal dissection to learn about humans.	4. People would visit the apothecary, barber surgeon or wise woman for advice and treatment.
5. People believed ancient and incorrect ideas about health such as Hippocrates' 'Four Humours'.	6. Hugh of Lucca and his son Theodoric used wine to stop infection & an arrow cup to help wounds.	7. The church set up 700 hospitals to care for sick people. They also built medical universities in Europe.	8. Public Health was horrid. Waste was in the streets and rivers. Rats & disease was common.
9. Monasteries were modern. They had water pipes, rules on being clean and copied medical books.	10. People believed God, demons, witches, Jews or planets caused disease.	11. Black Death in 1348 killed 50% of England. People didn't have a cure. Strange methods were used.	12. The Black Death led to food shortages, higher prices and death.
13. Avicenna was an Islamic doctor that influenced European medicine with his books, 'The Cannon of Medicine' & the 'Book of Healing'.	14. Medieval hospitals cared for but couldn't cure people. St Giles was a religious hospital. People prayed. Hospitals were not very good.	15. John Arderne was an English surgeon in the 1300s. He had a 50% survival rate cutting lumps from the anus. He used opium as a painkiller.	16. Roger Bacon was arrested by the church for having new ideas and going against Galen.

Task 1: Note take the above

<u>Task 2:</u> Code each fact using the following factors: WAR, GOVERNMENT, INDIVIDUALS, SCIENCE, LUCK, COMMUNICTAION, GOVERNMENT, RELIGION, IDEAS

<u>Task 3:</u> End of unit assessment: Has religion been the main factor in the development of medicine during Medieval times? (16 Marks)

- PEE paragraphs why the religion was important to medicine.
- PEE paragraphs why other factors were important to medicine.
- Conclusion: How important was religion and which factor is most important

LESSON 11: Medieval medicine Knowledge Test

1. Hippocrates and Galen

- 1. How did Hippocrates want to treat the body?
- 2. What theory did Hippocrates create?
- 3. What was this theory made up of?
- 4. Hippocrates believed in the importance of what?
- 5. How many books have been attributed to Hippocrates?
- 6. What did Hippocrates believe was important to a patient's recovery?
- 7. What promise do doctors take today?
- 8. Where did Galen study before moving to Rome?
- 9. What did Galen do with Hippocrates' ideas?
- 10. Galen practised dissection. What is dissection?
- 11. What did Galen dissect?
- 12. Galen highlighted the importance of listening to patients what?

2. Ancient and Arabic medicine

- 1. Who discovered that medical care was taking place as far back as the stone age?
- 2. What ancient societies had hospitals, medical experts and medical texts?
- 3. Where was medicine better? European, American, Arabic or African?
- 4. How did Avi Senna help people learn from ancient medical books?
- 5. What two books did Avicenna make?6. How many times was the second book printed and who used it?
- 7. Where were the 3 hospitals in the Middle East?8. Name 3 things these hospitals contained?
- What did the Arab doctor want to treat the man with a sore leg and woman with a sore head?
- 10. What did the French doctor do to treat the man with a sore leg and woman with a sore head?

3. Medieval beliefs and doctors

- 1. People believed God made people sick because of their what?
- 2. People would carry sweet herbs or burn fires. Why?
- 3. People believed the supernatural caused illness. Give an example of the supernatural.
- 4. What ancient belief did many people have?
- 5. Who would cut hair and carry out small operation or even set a broken leg?
- 6. Who mixed herbs into medicines?
- 7. What is a medicine from 1 herb called and a medicine from more called?
- 8. Who would use traditional remedies and act as a midwife?
- 9. What is it called when doctors cut open a small vein to let out 'bad blood'?
- 10. What is it called when doctors used leeches to suck out 'bad blood'?
- 11. What chart was used which involved a doctor checking colour, smell and taste?
- 12. What chart was used to check a person's star sign and then decide a medicine?

4. Medieval surgery

- 1. John Arderne was an English surgeon that cut lumps from where?
- 2. Arderne used hemlock, henbane and what in his pain killer?
- 3. Arderne gained experience in what war?
- 4. Arderne charge the rich but what for the poor?

- 5. What was Arderne's survival rate percentage?
 6. What did army surgeons become quicker at doing?
 7. What could pain lead to which could then lead to death?
 8. Hugh of Luca and his son Theodoric told people to stop rubbing what in wounds?
 9. Hugh of Luca and his son Theodoric used what to clean wounds?
- 10. Hugh of Luca and his son Theodoric used what t pull out arrow heads in the body?
- 11. What dangerous method did surgeons use to stop an open wound bleeding by using hot metal to melt the skin?

5. The church and medical Progress

- 1. What did the church encourage people to do to stop illness?
- 2. People went on religious journeys to stop illness or disease. What are religious journeys known as?
- 3. What would people put on shrines to help illness?
- 4. What saint's grave did people visit?
- 5. How many hospitals did the church make between 1000-1700?
- 6. Who copied out old medical texts by hand?
- 7. What buildings did the church control such as Oxford and Cambridge?
- 8. What did the church try and stop people doing to learn about the human body?
- 9. People believed in Galen's opinions. What was wrong with his theories on the human body?
- 10. Who was arrested for speaking out against the church?
- 11. When was he arrested?

6. Medieval Church Hospitals

- 1. Medieval hospitals were divided for who?
- 2. What was arranged for patients?
- 3. Who would look after the sick?
- 4. Who paid for hospitals?
- 5. What did monasteries give hospitals?
- 6. Give an example of a special hospital.
- 7. What hospital was for the sick and for bishops to confess their sins?
- 8. Due to a lack of knowledge what could stop someone being able to go to a hospital?
- 9. Where would patients first go in a hospital?
- 10. What women would often act as nurses?
- 11. What happened to dirty clothes?
- 12. Many medieval hospitals didn't hire who?
- 13. Who knew how to amputate, make surgery tools and even create hangover cures?

7. Public Health: Towns and Monasteries

- 1. What was wrong with water?
- 2. What companies added to the waste problem?
- 3. What was the medieval toilet called?
- 4. What deep holes stored human waste?
- 5. What was not built in towns and cities that could get rid of human waste?
- 6. Why did councils not buy technology to improve waste?
- 7. In order to pay for new technology what would councils have to do (They didn't want to do this as it would anger people)?
- 8. What did monasteries have that meant they had safe drinking water?
- 9. What was the name for the monastery wash rooms?
- 10. Poo from monasteries were collected regularly and sent where?
- 11. How did monks stay clean?
- 12. How did monks have good knowledge?
- 13. Why did the church have the money to improve public health?
- 14. What did monks do that meant they were not surrounded by towns people?

8. Black Death

- 1. Describe the symptoms of the Black Death.
- 2. What year was the Black Death in England?
- 3. What percentage of England was killed?
- 4. How many people died from the Black Death in England?
- 5. Name 3 different beliefs about what caused the Black Death.
- 6. Name 4 different ways people tried prevent the Black Death.
- 7. Name 2 ways people tried to cure the Black Death.
- 8. What impact did food shortages (less farmers due to disease) have on food prices?
- 9. What did peasants demand as they had to work harder?
- 10. What law tried to prevent peasants getting their demands?

LESSON 12: Medieval Knowledge Test Answers

1. Hippocrates and Galen

- 1. How did Hippocrates want to treat the body? AS A WHOLE
- What theory did Hippocrates create? 4 HUMOURS
- What was this theory made up of? BLACK BILE, YELLOW BILE, PHLEGM, BLOOD
- 4. Hippocrates believed in the importance of what? OBSERVATION
- 5. How many books have been attributed to Hippocrates? 60
- What did Hippocrates believe was important to a patient's recovery? GOOD DIET AND REST
- What promise do doctors take today? HIPPOCRATIC OA
 Where did Galen study before moving to Rome? EGYPT What promise do doctors take today? HIPPOCRATIC OATH
- 9. What did Galen do with Hippocrates' ideas? TOOK FURTHER
- 10. Galen practised dissection. What is dissection? **CUTTING OPEN**
- 11. What did Galen dissect? ANIMALS
- 12. Galen highlighted the importance of listening to patients what? PULSE

2. Ancient and Arabic medicine

- 1. Who discovered that medical care was taking place as far back as the stone age? **ARCHAEOLOGISTS**
- What ancient societies had hospitals, medical experts and medical texts? EGYPT, GREECE & ROME
- 3. Where was medicine better? European, American, Arabic or African? ARABIC
- 4. How did Avi Senna help people learn from ancient medical books? TRANSLATED THEM
- 5. What two books did Avicenna make? BOOK HEALING & CANON OF MEDICINE
- 6. How many times was the second book printed and who used it? 60 TIMES BY MEDICAL STUDENTS
- 7. Where were the 3 hospitals in the Middle East? DAMASCUS, CAIRO & BAGHDAD
- 8. Name 3 things these hospitals contained? LECTURE ROOMS, LIBRARIES, PHARMACIES, FOUNTAINS, **FRESH AIR**
- 9. What did the Arab doctor want to treat the man with a sore leg and woman with a sore head? POULTICE (HERBS) FOR LEG AND GOOD DIET FOR HEAD
- 10. What did the French doctor do to treat the man with a sore leg and woman with a sore head? CUT KNIGHTS LEG OFF AND SLICE OPEN WOMAN'S HEAD IN SHAPE OF CROSS AND POOR SALT ON IT

3. Medieval beliefs and doctors

- 1. People believed God made people sick because of their what? **SINS**
- 2. People would carry sweet herbs or burn fires. Why? DIRVE AWAY BAD AIR
- 3. People believed the supernatural caused illness. Give an example of the supernatural. EVIL SPIRITS, **DEMONS & WITCHES**
- 4. What ancient belief did many people have? FOUR HUMOURS
- 5. Who would cut hair and carry out small operation or even set a broken leg? BARBER SURGEON
- 6. Who mixed herbs into medicines? APOTHECARY
- 7. What is a medicine from 1 herb called and a medicine from more called? SIMPLE & COMPUND
- 8. Who would use traditional remedies and act as a midwife? WISE WOMAN
- 9. What is it called when doctors cut open a small vein to let out 'bad blood'? CUPPING
- 10. What is it called when doctors used leeches to suck out 'bad blood'? **LEECHING**
- 11. What chart was used which involved a doctor checking colour, smell and taste? URINE CHART
- 12. What chart was used to check a person's star sign and then decide a medicine? ZODIAC CHART

4. Medieval surgery

- 1. John Arderne was an English surgeon that cut lumps from where? **ANUS**
- 2. Arderne used hemlock, henbane and what in his pain killer? OPIUM
- 3. Arderne gained experience in what war? HUNDRED YEAR WAR
- 4. Arderne charge the rich but what for the poor? FREE
- 5. What was Arderne's survival rate percentage? **50%**
- 6. What did army surgeons become quicker at doing? **AMPUTATIONS**
- 7. What could pain lead to which could then lead to death? SHOCK
- 8. Hugh of Luca and his son Theodoric told people to stop rubbing what in wounds? PUS
- 9. Hugh of Luca and his son Theodoric used what to clean wounds? WINE

- 10. Hugh of Luca and his son Theodoric used what t pull out arrow heads in the body? ARROW CUP
- 11. What dangerous method did surgeons use to stop an open wound bleeding by using hot metal to melt the skin? CAUTERISATION

5. The church and medical Progress

- 1. What did the church encourage people to do to stop illness? **PRAY**
- 2. People went on religious journeys to stop illness or disease. What are religious journeys known as? **PILGRIMAGES**
- 3. What would people put on shrines to help illness? CLAY BODY PARTS
- 4. What saint's grave did people visit? ST JOHN OF BRIDLINGTON
- 5. How many hospitals did the church make between 1000-1700? 700
- 6. Who copied out old medical texts by hand? MONKS
- 7. What buildings did the church control such as Oxford and Cambridge? UNIVERSITIES
- 8. What did the church try and stop people doing to learn about the human body? **DISSECTION**
- 9. People believed in Galen's opinions. What was wrong with his theories on the human body? BASED ON ANIMALS
- 10. Who was arrested for speaking out against the church? ROGER BACON
- 11. When was he arrested? 1277

6. Medieval Church Hospitals

- 1. Medieval hospitals were divided for who? MEN AND WOMEN
- 2. What was arranged for patients? **CLOTHING AND FOOD**
- 3. Who would look after the sick? GUARDIANS
- 4. Who paid for hospitals? RICH PEOPLE or CHURCH
- 5. What did monasteries give hospitals? MEDICINES/HERBS
- 6. Give an example of a special hospital. POOR or PREGNANT or MENTALLY ILL7. What hospital was for the sick and for bishops to confess their sins? ST GILES
- 8. Due to a lack of knowledge what could stop someone being able to go to a hospital? **DISEASE**, **METAL ILLNESS OR PREGNANT**
- 9. Where would patients first go in a hospital? CHAPEL/PRAY
- 10. What women would often act as nurses? **NUNS**
- 11. What happened to dirty clothes? BOILED
- 12. Many medieval hospitals didn't hire who? **DOCTORS**
- 13. Who knew how to amputate, make surgery tools and even create hangover cures? **SCOTISH MONKS**

7. Public Health: Towns and Monasteries

- 1. What was wrong with water? CONTAMINATED WITH WASTE
- 2. What companies added to the waste problem? BUSINESES & CHEMICAL COMPANIES
- 3. What was the medieval toilet called? PRIVY
- 4. What deep holes stored human waste? **CESSPITS**
- 5. What was not built in towns and cities that could get rid of human waste? SEWERS
- 6. Why did councils not buy technology to improve waste? **MONEY**
- 7. In order to pay for new technology what would councils have to do (They didn't want to do this as it would anger people)? RAISE TAX
- 8. What did monasteries have that meant they had safe drinking water? PIPES
- 9. What was the name for the monastery wash rooms? LAVATORIUMS
- 10. Poo from monasteries were collected regularly and sent where? FARMERS
- 11. How did monks stay clean? BATHS
- 12. How did monks have good knowledge? MEDICAL BOOKS
- 13. Why did the church have the money to improve public health? **DONATIONS**
- 14. What did monks do that meant they were not surrounded by towns people? LIVED IN ISOLATION

8. Black Death

- 1. Describe the symptoms of the Black Death. HOT, SWEATY, RASHES, ACHY BONES, ACHY JOINTS, SWOLLEN THROAT, BOILS, BUBOES, BLACK PUSS OR VOMIT BLOOD
- 2. What year was the Black Death in England? 1348-49
- 3. What percentage of England was killed? 50%-66%
- 4. How many people died from the Black Death in England? 1.5 MILLION

- Name 3 different beliefs about what caused the Black Death. BAD SMELLS, FOUR HUMOURS, GOD, PLANETS or JEWS POISON WATER
- 6. Name 4 different ways people tried prevent the Black Death. PRAYING, AVOID EATING, AVOID BATHS, AVOID SEX, AVOID PLAGUE VICTIMS, CLEAN STREETS, CARRY SWEET SMELLING HERBS, BATHE IN URINE OR DRINK URINE
- 7. Name 2 ways people tried to cure the Black Death. POP BUBOES, ATTACH LIVE CHICKEN TO BUBOES, DRINK VINEGAR AND MERCURY, FLAGGELATION (WHIP YOURSELF FOR GOD) OR BLEEDING
- 8. What impact did food shortages (less farmers due to disease) have on food prices? PRICES ROSE
- 9. What did peasants demand as they had to work harder? MORE PAY
- 10. What law tried to prevent peasants getting their demands? STATUTE OF LABOURERS

UNIT 2: HEALTH AND THE PEOPLE IN THE RENAISSANCE (1450-1750)

LESSON 1: YWBAT understand the work of Vesalius, Pare and Harvey

Andreas Vesalius was a Professor of surgery. He dissected human bodies. His book (Humani Fabrica) had detailed pictures of human skeletons & muscles. He proved Galen wrong. Galen used animals to learn about the human body. His book was used to teach English surgeons about the body for decades. Most people preferred Galen (even though he was wrong).

Amboise Pare was an Army surgeon. He helped soldiers. He used rose oil, egg whites and turpentine to help heal wounds rather than cauterising. After amputations he stitched blood vessels with ligatures and made fake limbs. His book of surgery was used by English surgeons. William Clowes was an English surgeon for Queen Elizabeth I. He read Pare when using his chest of medicines.

<u>William Harvey</u> was an English doctor. He studied blood and the heart. Proved the heart pumped blood around the body. Discovered blood circulation. Used science to prove Galen wrong about blood. It took 50 years for his ideas to be accepted by universities. His ideas only had an impact in the 1900s (300 years later with modern technology).

Task 1: Note take the above

<u>Task 2:</u> Colour code the good and bad things each person did.

Task 3: Explain why EACH man was important to medical knowledge.

POINT: Vesalius/Pare/Harvey was important to medical knowledge. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was important

because... LINK: This links with ____ because...







LESSON 2: YWBAT understand how people prevented the plague in 1665

The Plague in 1665 killed 100,000 people in London (25%). It was the same disease as the Black Death that killed 50% of England in 1348 (300 hundred years before). People still didn't know how to cure it but did have better ways to prevent the illness.

- Public entertainment was stopped.
- Animals were banned from the city.
- Dogs and cats were caught and killed.
 - Rubbish in the streets was cleared.
 - Fires were lit to drive away 'bad' air.
- Plague victims were sealed for 40 days in their house (red cross painted on door)
 - Strangers in the city had to have a health certificate
 - Bodies were buried at night and outside the city.
 - People prayed in groups.
 - People fasted (no eating and drinking).

Task 1: Note take the above

Task 2: Colour code the good and bad ideas.

Task 3: Rank the ideas from best to worst.

Task 4: What was the best and worst idea people had in 1665 to deal with the plague?

POINT: People had good ideas about how to prevent the plague. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good because... LINK: This links with _____ because...

POINT: However, people still had bad ideas about how to prevent the plague. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with ____ because...

LESSON 3: YWBAT understand Renaissance medicines and doctors

- Doctors would bleed someone to remove 'bad blood'. This did not work.
- Surgeons would cauterise a wound with hot metal to seal it. This stopped blood loss but was very painful and deadly.
- Barber surgeons fixed broken bones and pulled out rotting teeth.
- Apothecary would sell medicines. Some worked and some didn't. A simple is one herb and a compound is a mixture.
 - Wise women would act as midwives.
 - Tobacco was smoked as a cure but actually damages lungs.
 - Opium was used to stop pain. This is used in heroin and can kill.
 - Cinchona bark was used to help treat malaria (disease).
 - Mercury was drunk as a medicine. This is a poisonous liquid metal.
 - Quack doctors were fake doctors that travelled to towns selling medicines that didn't work.
 - Nicholas Culpepper made a book of cures called the 'Complete herbal'. It had some good and bad ideas.
 - Honey was used for basic illnesses. Honey can kill some types of bacteria.

Task 1: Note take the above

Task 2: Colour code the good and bad medicines/doctors.

Task 3: Rank the medicines from best to worst.

<u>Task 4:</u> What was the best and worst medicine/doctor in the Renaissance period?

POINT: The best medicine/doctor used in the Renaissance was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good because... LINK: This links with _____ because...

POINT: However, the worst medicine/doctor used in the Renaissance was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with ____ because...



LESSON 4: YWBAT understand Renaissance hospitals

- Hospitals in the 1700s hired doctors to cure people.
- Hospitals were paid for by rich people or groups (E.g. Westminster Hospital was paid for by a bank).
 - Hospital doctors trained and improved using new ideas.
 - Bleeding and the four humours were still used.
- Rich people could pay for treatment and some poor people could be treated for free if they were lucky.
 - Specific hospitals were built (E.g. Pregnant women in 1747 & STDs in 1746).
 - London alone had 20,000 patients a year.
 - Thomas Coram built the Foundling Hospital in 1741. This gave abandoned children food, clothes and a basic education till they were 15. It was a popular charity.

Task 1: Note take the above

Task 2: Colour code the good and bad features of Renaissance hospitals.

Task 3: Rank the hospital features from best to worst.

Task 4: What was the best and worst features of Renaissance hospitals?

POINT: The best feature of Renaissance hospitals was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good because... LINK: This links with _____ because...

POINT: However, the worst feature of Renaissance hospitals was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...



LESSON 5: YWBAT understand the work of John Hunter

TEACHER: Hunter joined the Company of Surgeons in 1768 to help improve knowledge of other surgeons. He set up his own surgery practice and trained other young surgeons. He inspired famous surgeons and doctors in his lessons. For example, Edward Jenner (look at his work in the 1800s).

SCIENTIFIC METHOD: He believed in carefully observing a person's injuries. He injected himself with a disease to learn about it (Gonorrhoea). He operated on a man's leg. He changed the flow of blood by tying an artery. The man's leg was saved and didn't need to be amputated.

SPECIMINS: He experiments with blood vessels in his collection. He collected anatomical (ano-tom-ical) specimens (collected body parts) to learn. His collection of body parts included a very tall skeleton (2.3 meter or 7f17').

BOOKS: Blood Inflation and Gunshot Wounds was a book that showed gunshots didn't poison people. Natural History of Teeth was a book in 1771 about dentistry. Venereal Diseases was a book in 1786 about diseases based on his own self-experiments.

Task 1: Note take the above

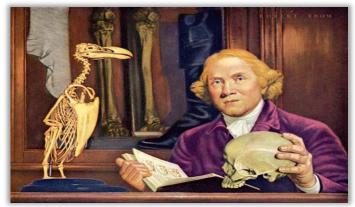
<u>Task 2:</u> Colour code the good and bad features of John Hunter that would help medical knowledge.

Task 3: Rank John Features facts from best to worst.

Task 4: What were the 2 best things John Hunter did?

POINT: The best thing John Hunter did was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good because... LINK: This links with _____ because...

POINT: The second best thing John Hunter did was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...



LESSON 6: YWBAT understand Renaissance surgery

- There were no safe anaesthetics. Opium and wine were still used for pain relief. Opium could kill and alcohol made the patient drunk.
- Ambroise Pare used herbs to heal wounds without cauterising. He also stitched blood vessels with ligatures to stop blood loss and made fake limbs.
 - Many surgeons were members of the newly created (1600) 'Royal College of Surgeons'. You could only be a surgeon with a license.
- Samuel Pepys had a stone removed from his bladder in 1658. He was so relieved not to die he held a party every year.
- William Cheseldon, of St Thomas Hospital, could remove a stone from the bladder in less than a minute.
 - John Hunter used the Scientific Method of observation and experimentation to improve his skills. He even practised on himself!!
- Fanny Burney had a mastectomy (operation to remove her breast). She had no pain relief and had her breast removed whilst awake.
 - 1811 rules made surgeons take 1 course in anatomy and 1 course in surgery. In 1813 surgeons had to have 1 years' experience in a hospital.
- In 1856, only 4% of the 10,220 surgeons had a degree from a University.

Task 1: Note take the above

<u>Task 2:</u> Colour code the good and bad features of Renaissance surgery

<u>Task 3:</u> Rank the features of Renaissance surgery from best to worst.

<u>Task 4:</u> What were the best and worst features of Renaissance surgery?

POINT: The best features of Renaissance surgery was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was good because... LINK: This links with ____ because...

POINT: The worst features of Renaissance surgery was. EVIDENCE: For example, ... (Use one fact). EXPLAIN: This was bad because... LINK: This links with _____ because...



LESSON 7: YWBAT understand the work of Edward Jenner

- Edward Jenner randomly heard rumours that milkmaids who had cowpox never seemed to catch smallpox.
 - Jenner had an idea that catching cowpox first would make people immune from smallpox.
- To prove his theory, Jenner experimented on local people. He chose a 9year-old boy, James Phipps, who had never had cowpox or smallpox.
- Jenner injected the boy with cowpox. James developed cowpox. When James recovered, Jenner injected him with a dose of smallpox. The boy was not affected and was immune.
- Jenner had proved that catching cowpox would stop people catching smallpox. He created the first vaccination! However, he could not prove why.
- In 1797 Jenner carried out many more experiments including his own 11month-old son.
- In 1798 Jenner published a book called 'An Inquiry into the Causes and Effects of Cow Pox'.
 - In 1802 he was awarded £10,000 by the Government for research.
- In 1807 he was awarded £20,000 by the Royal College of Physicians for further research.

Task 1: Note take the above

<u>Task 2:</u> Decide which factor each bullet point belongs: CHANCE, GOVERNMENT, SCIENCE/TECH, INDIVIDUAL, COMMUNICATION, IDEAS

Task 3: Summarise each part of the story into 9 key words.



LESSON 8: YWBAT understand how people responded to the work of Edward Jenner

- Doctors were worried that they would lose money from their inoculations because of Jenner's new & safer vaccination.
- People thought the vaccination was wrong. They didn't understand the science. They thought it was wrong to put cowpox into humans.
- The government made it free for all children to get the vaccination in 1840.
- Many parents refused to get their children vaccinated. They didn't like the government telling them to inject cowpox into their children.
- In 1853 the government made the vaccination compulsory. Everyone <u>had</u>
 to get the vaccine.
- In 1866 a group of people that didn't agree with the vaccinations created the 'Anti-Vaccine League'.
 - In 1871 the government began fining parents that refused to get their children vaccinated.
 - By 1887 the death rate went down. The government gave parents the choice to get the vaccine.

<u>Task 1:</u> Note take the above.

<u>Task 2:</u> Decide if each fact supports or opposes Edward Jenner's vaccination to smallpox (for or against Jenner's vaccination).

<u>Task 3:</u> Why was it important the vaccination was made free to all children in 1840?

Task 3: Why was it important the vaccination was made compulsory in 1853?

<u>Task 3:</u> Why was it a problem that the Anti-Vaccine League was set up in 1866?



LESSON 9: End of unit Renaissance GCSE style question

1. Ambroise Pare used a mixture of rose oil, egg whites and turpentine to heal wounds rather than cauterising. He also tied off arteries using ligatures to stop blood loss & made fake limbs.	2. In 1840 smallpox vaccination were free for children. The Government made vaccinations compulsory in 1853. Smallpox numbers reduced and was declared eradicated in 1980.	3. William Harvey taught the heart controlled blood flow. This challenged Galen's view about the liver being central. His work couldn't be properly used for hundreds of years with modern technology.	4. Some traditional and wrong ideas remained. Bleeding patients, the theory or the four humours and miasma (bad smells cause illness). During the Plague in 1665 people would pray in large groups.
5. Even though smallpox vaccinations saved lives many people didn't trust it. Religion and fear made people think it was bad. The Anti-Vaccine League was set up in 1866.	6. The Plague struck in 1665. Towns were dirty so it spread quick. 30% of York and 25% of London were killed. There was no known cure.	7. Quack doctors sold false cures ad medicines to make money. They would leave before people found out their lies.	8. Thomas Coram built the Foundling Hospital in 1741. This gave abandoned children food, clothes and a basic education till they were 15. It was a popular charity.
9. Edward Jenner discovered Cowpox vaccination helped people become immune to Smallpox. He experimented on James Phipps to prove science could cure illness.	10. Andreas Vesalius dissected bodies to learn. His book, Humani Fabrica, had detailed pictures of the human skeleton & muscles.	11. The king and mayor's laws to prevent the spread of the plague included banning public entertainment, sealing victims in houses for 40 days & streets cleaned.	12. Ingredients from around the world were used in medicines. Some were bad such as tobacco, mercury and opium. Some were good such as cinchona bark and honey.
13. Royal College of Physicians was set up in 1600. Surgeons had to join to discuss and learn. Surgeons also had to take classes in surgery and anatomy (human body).	14. The printing press was a machine that meant medical books could be made easily and quickly.	15. John Hunter the surgeon collected body parts to learn. He wrote many books and even experimented on himself. He saved a man's leg by tying an artery to stop it clotting.	16. Hospitals were paid for by rich people or groups (E.g. Westminster Hospital was paid for by a bank. This meant the church didn't control them anymore.

Task 1: Note take the above

<u>Task 2:</u> Code each fact using the following factors: WAR, GOVERNMENT, INDIVIDUALS, SCIENCE, LUCK, COMMUNICTAION, GOVERNMENT, RELIGION, IDEAS

<u>Task 3:</u> End of unit assessment: <u>Has 'the role of the individual' been the main factor in the development of medicine during the Renaissance and Early Modern period? (16 Marks)</u>

- PEE paragraphs why the individuals were important to medicine.
- PEE paragraphs why other factors were important to medicine.
- Conclusion: How important were individuals and which factor is most important

LESSON 10: Renaissance Knowledge Test (100 questions)

1. Renaissance intro

- 1. What does renaissance mean?
- 2. What ancient ideas of medicine and architecture did the Renaissance like?
- 3. What method became more popular during the Renaissance period?
- 4. During the renaissance people drew accurate pictures of what?
- 5. What was invented that meant books could be quickly made and no longer rely on monks to hand write?
- 6. What meant warfare caused horrible injuries?
- 7. Who would learn from the horrid war injuries caused on the battlefield?
- 8. What was created that meant people could see tiny things they could never see before?

2. Andreas Vesalius, Ambroise pare and William Harvey

- 1. Vesalius was a professor of surgery. What did he do to improve his knowledge of the human body?
- 2. What was the name of Vesalius' book?
- 3. What did Vesalius' book contain images of?
- 4. Who did Vesalius prove wrong about the human body?
- 5. Who read Vesalius' book in England for decades?
- 6. Pare stopped cauterising and instead used a herbal wrap to heal wounds. What three ingredients made the wrap?
- 7. What did Pare use to stitch blood vessels to stop blood loss?
- 8. How did Pare help soldiers that had amputations during war?
- 9. Pare made a book of surgery using another book to help him. This book had accurate pictures of the human body. Whose book did Pare use?
- 10. What English surgeon read Pare and used it in his treatment?
- 11. The English surgeon was the personal surgeon to what important English woman of the 15/1600s?
- 12. William Harvey was the doctor for an English. What did he study?
- 13. What did Harvey discover?
- 14. Who did Harvey prove wrong?
- 15. How long did it take for universities to teach the work of Harvey?
- 16. Why did it take so long for Harvey's ideas to make a real impact?

3. Plague

- 1. The Plague killed 30% of what city in 1604?
- 2. When was the Great Plague of London?
- 3. How much of London died during the Plague outbreak?
- 4. What professionals ran away/fled?
- 5. Where did many rich people leave to?
- 6. Who made laws to try and deal with the Plague?
- 7. What was stopped to prevent people being close together?
- 8. What were banned from the city?
- 9. What pets were killed (people thought they were spreading the disease)?
- 10. What was cleared from the streets?
- 11. Why did people burn fires?
- 12. How were victims of the plague dealt with?
- 13. Strangers were only allowed into the city if they showed what?
- 14. What days people do in public to beg for the disease to go away?

15. People fasted. What does this mean?

4. Renaissance medicine

- 1. What 2 things would doctors do to patients to help balance the four humours?
- 2. Doctors began to stop cauterising patients wounds. What would doctors pour onto wounds to stop the bleeding?
- 3. What three types of medical professionals carried on during the Renaissance period?
- 4. What new ingredient was thought to be healthy and was smoked?
- 5. What dangerous drug was used as an anaesthetic?
- 6. What bark was used to successfully treat malaria?
- 7. What poisonous metal was drunk?
- 8. Who sold fake medicines in town to make easy money?
- 9. Who made a book or herbs?
- 10. What was the name of his book?
- 11. What ingredient was used that actually killed some bacteria?

5. Renaissance hospitals

- 1. Hospitals in the 1700s changed. Who were hired to try and cure people?
- 2. How were hospitals paid for?
- 3. What rich group paid for Westminster hospital?
- 4. What incorrect ideas of treatment continued from the medieval period into the renaissance period?
- 5. Specific hospitals were built. Give two examples.
- 6. By the end of the renaissance period (1800) how many people were being treated in hospitals each year?
- 7. Who built a special hospital for abandoned children?
- 8. What was the name of the hospital for abandoned children?
- 9. What three things did this special hospital for abandoned children provide?
- 10. What age would the abandoned children be looked after till?

6. John Hunter

- 1. What did John Hunter join in 1768 to increase his and other surgeon's knowledge?
- 2. John Hunter was a surgery teacher. What influential man did John Hunter teach who went on to find a vaccination for smallpox?
- 3. Hunter believed in observation. What does this mean?
- 4. What STD did Hunter inject himself with to learn?
- 5. Hunter saved a man's leg from amputation. How?
- 6. What blood related body parts did Hunter collect?
- 7. Hunter collected body parts. What is the fancy word for this?
- 8. Hunter had the skeleton of a tall man. How tall was he?
- 9. Hunter published a book proving gunshot wounds didn't poison people. What was the name of his book?
- 10. What book did Hunter include knowledge about dentistry?
- 11. What books was about diseases?

7. Surgery over time

- 1. What dangerous drug was used as an anaesthetic during the Renaissance period?
- 2. What alcohol was used as an anaesthetic during the Renaissance period?
- 3. What was created in 1600 for surgeons to become members and improve their knowledge of surgery?
- 4. Surgery was very dangerous in the 1600s. What did Samuel Pepys have removed from his bladder in 1658 which he then celebrated every year for actually surviving?

- 5. What surgeon had to operate on a bladder in less than a minute because there was no effective pain killer?
- 6. What surgeon in the 1750s used the scientific method and even experimented on himself?
- 7. What operation did Fanny Burney have with no pain killer in 1811?
- 8. Regulations in 1811 meant surgeons had to attend 1 course in what and what?
- 9. In 1813 regulations meant surgeons had to have 1 years' experience in what?
- 10. What percentage of English medical professionals had a medical degree by 1856?

8. Edward Jenner

- 1. Edward Jenner's idea was based around chance. Who did he hear never caught smallpox?
- 2. What minor disease did Jenner think would help cure smallpox?
- 3. Jenner injected a young boy. What was his name?
- 4. The young boy became immune from smallpox because he was first given the minor disease. What does immune mean?
- 5. Jenner needed to prove his theory worked. He even tested it on his baby. How old was his baby?
- 6. What year did Jenner publish his book?
- 7. What was the name of his book?
- 8. How much did the government give Jenner to research in 1802?
- 9. How much money was Jenner given in 1807?
- 10. Who gave Jenner money in 1807?

9. Reactions to Jenner's vaccinations

- 1. Who did not like vaccinations and were scared of losing money?
- 2. Why did people think the vaccinations were wrong?
- 3. Who did People not want to tell them what to do?
- 4. When were children given vaccinations for free?
- 5. Would wold often refuse to vaccinate children?
- 6. What happened in 1853?
- 7. What group was set up in 1866 to oppose the vaccinations?
- 8. What happened in 1871?
- 9. What year was smallpox declared eradicated (it was gone)?

LESSON 11: Renaissance Knowledge Test Answers

1. Renaissance intro

- 1. What does renaissance mean? RE-BIRTH
- 2. What ancient ideas of medicine and architecture did the Renaissance like? GREEK OR ROMAN
- 3. What method became more popular during the Renaissance period? SCIENTIFIC
- 4. During the renaissance people drew accurate pictures of what? **BODIES**
- What was invented that meant books could be quickly made and no longer rely on monks to hand write? PRINTING PRESS
- 6. What meant warfare caused horrible injuries? MUSKETS, CANONS, PISTOLS, GUNDPOWDER
- 7. Who would learn from the horrid war injuries caused on the battlefield? SURGEONS
- What was created that meant people could see tiny things they could never see before? MICROSCOPE

2. Andreas Vesalius, Ambroise pare and William Harvey

- Vesalius was a professor of surgery. What did he do to improve his knowledge of the human body? DISSECTIONS
- 2. What was the name of Vesalius' book? HUMANI FABRICA
- 3. What did Vesalius' book contain images of? **SKELETON**, **NERVES or MUSCLES**
- 4. Who did Vesalius prove wrong about the human body? GALEN
- 5. Who read Vesalius' book in England for decades? SURGEONS
- Pare stopped cauterising and instead used a herbal wrap to heal wounds. What three ingredients made the wrap? ROSE OIL, EGG WHITES and TURPENTINE
- 7. What did Pare use to stitch blood vessels to stop blood loss? LIGATURES
- 8. How did Pare help soldiers that had amputations during war? MADE FAKE LIMBS
- 9. Pare made a book of surgery using another book to help him. This book had accurate pictures of the human body. Whose book did Pare use? **VESALIUS**
- 10. What English surgeon read Pare and used it in his treatment? WILLIAM CLOWES
- 11. The English surgeon was the personal surgeon to what important English woman of the 15/1600s? **QUEEN ELIZABETH I**
- 12. William Harvey was the doctor for an English. What did he study? BLOOD AND HEART
- 13. What did Harvey discover? **BLOOD CIRCULATION**
- 14. Who did Harvey prove wrong? GALEN
- 15. How long did it take for universities to teach the work of Harvey? UP TO 50 YEARS
- 16. Why did it take so long for Harvey's ideas to make a real impact? ONLY MODERN TECHNOLOGY CAN HELP WITH BLOOD TRANSFUSIONS AND HEART SURGERY

3. Plague

- 1. The Plague killed 30% of what city in 1604? YORK
- 2. When was the Great Plague of London? 1665
- How much of London died during the Plague outbreak? 100,000 OR 25%
- 4. What professionals ran away/fled? DOCTORS
- 5. Where did many rich people leave to? **COUNTRYSIDE**
- 6. Who made laws to try and deal with the Plague? KING OF ENGLAND
- 7. What was stopped to prevent people being close together? PUBLIC ENTERTAINMENT
- 8. What were banned from the city? ANIMALS
- 9. What pets were killed (people thought they were spreading the disease)? CATS AND DOGS
- 10. What was cleared from the streets? RUBBISH
- 11. Why did people burn fires? DRIVE AWAY BAD SMELLS
- 12. How were victims of the plague dealt with? **LOCKED IN THEIR HOUSE FOR 40 DAYS (RED CROSS ON DOOR)**
- 13. Strangers were only allowed into the city if they showed what? HEALTH CERTIFICATE
- 14. What days people do in public to beg for the disease to go away? PRAY
- 15. People fasted. What does this mean? **DIDN'T EAT OR DRINK AS MUCH**

4. Renaissance medicine

- What 2 things would doctors do to patients to help balance the four humours? BLEEDING AND PURGING
- Doctors began to stop cauterising patients wounds. What would doctors pour onto wounds to stop the bleeding? HOT OIL
- 3. What three types of medical professionals carried on during the Renaissance period? BARBER SURGEON, APOTHECARY AND WISE WOMEN
- 4. What new ingredient was thought to be healthy and was smoked? TOBACCO
- 5. What dangerous drug was used as an anaesthetic? **OPIUM**
- 6. What bark was used to successfully treat malaria? CINCHONA
- 7. What poisonous metal was drunk? MERCURY
- 8. Who sold fake medicines in town to make easy money? QUACK DOCTORS
- 9. Who made a book or herbs? NICHOLAS CULPEPPER
- 10. What was the name of his book? COMPLETE HERBAL
- 11. What ingredient was used that actually killed some bacteria? HONEY

5. Renaissance hospitals

- 1. Hospitals in the 1700s changed. Who were hired to try and cure people? **DOCTORS**
- 2. How were hospitals paid for? RICH PEOPLE OR GROUPS
- 3. What rich group paid for Westminster hospital? BANK
- 4. What incorrect ideas of treatment continued from the medieval period into the renaissance period? **BLEEDING or FOUR HUMOURS**
- 5. Specific hospitals were built. Give two examples. PREGNANT WOMEN or STD
- 6. By the end of the renaissance period (1800) how many people were being treated in hospitals each year? **20,000**
- 7. Who built a special hospital for abandoned children? THOMAS CORAM
- 8. What was the name of the hospital for abandoned children? FOUNDLING HOSPITAL
- What three things did this special hospital for abandoned children provide? FOOD, CLOTHES and EDUCATION
- 10. What age would the abandoned children be looked after till? 15 YEARS OLD

6. John Hunter

- What did John Hunter join in 1768 to increase his and other surgeon's knowledge? COMPANY OF SURGEONS
- 2. John Hunter was a surgery teacher. What influential man did John Hunter teach who went on to find a vaccination for smallpox? **EDWARD JENNER**
- 3. Hunter believed in observation. What does this mean? LOOKING AT THE SYMPTOMS
- 4. What STD did Hunter inject himself with to learn? GONORRHOEA
- Hunter saved a mans leg from amputation. How? CHANGED THE FLOW OF BLOOD BY TYING AN ARTERY
- 6. What blood related body parts did Hunter collect? **BLOOD VESSELS**
- 7. Hunter collected body parts. What is the fancy word for this? **ANATOMICAL SPECIMINS**
- 8. Hunter had the skeleton of a tall man. How tall was he? **7 FOOT 7**
- 9. Hunter published a book proving gunshot wounds didn't poison people. What was the name of his book? **BLOOD INLFATION AND GUNSHOT WOUNDS**
- 10. What book did Hunter include knowledge about dentistry? NATURAL HISTORY OF TEETH
- 11. What books was about diseases? **VENEREAL DISEASES**

7. Surgery over time

- 1. What dangerous drug was used as an anaesthetic during the Renaissance period? OPIUM
- 2. What alcohol was used as an anaesthetic during the Renaissance period? WINE
- What was created in 1600 for surgeons to become members and improve their knowledge of surgery? ROYAL COLLEGE OF SURGEONS
- 4. Surgery was very dangerous in the 1600s. What did Samuel Pepys have removed from his bladder in 1658 which he then celebrated every year for actually surviving? **BLADDER STONE**
- 5. What surgeon had to operate on a bladder in less than a minute because there was no effective pain killer? **WILLIAM CHESELDON**
- What surgeon in the 1750s used the scientific method and even experimented on himself? JOHN HUNTER
- 7. What operation did Fanny Burney have with no pain killer in 1811? MASTECTOMY

- Regulations in 1811 meant surgeons had to attend 1 course in what and what? ANATOMY and SURGERY
- 9. In 1813 regulations meant surgeons had to have 1 years' experience in what? HOSPITAL
- 10. What percentage of English medical professionals had a medical degree by 1856? 4%

8. Edward Jenner

- Edward Jenner's idea was based around chance. Who did he hear never caught smallpox?
 MILKMAIDS
- 2. What minor disease did Jenner think would help cure smallpox? COWPOX
- 3. Jenner injected a young boy. What was his name? JAMES PHIPPS
- 4. The young boy became immune from smallpox because he was first given the minor disease. What does immune mean? PROTECTED FROM A DISEASE
- Jenner needed to prove his theory worked. He even tested it on his baby. How old was his baby?
 11 MONTHS OLD
- 6. What year did Jenner publish his book? 1797
- 7. What was the name of his book? AN INQUIRY INTO THE CAUSES AND EFFECTS OF COW POX
- 8. How much did the government give Jenner to research in 1802? £10,000
- 9. How much money was Jenner given in 1807? £20,000
- 10. Who gave Jenner money in 1807? ROYAL COLLEGE OF PHYSICIANS

9. Reactions to Jenner's vaccinations

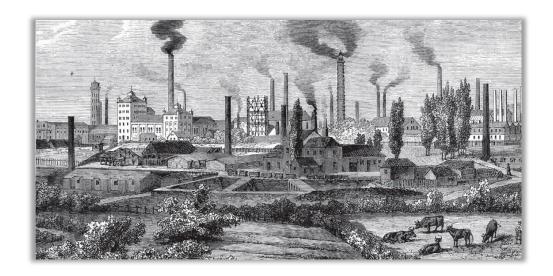
- 1. Who did not like vaccinations and were scared of losing money? **DOCTORS AND INOCULATORS**
- 2. Why did people think the vaccinations were wrong? WRONG TO PUT COWPOX INTO HUMANS
- 3. Who did People not want to tell them what to do? GOVERNMENT
- 4. When were children given vaccinations for free? 1840
- 5. Would wold often refuse to vaccinate children? PARENTS
- 6. What happened in 1853? VACCINATIONS MADE COMPULSORY
- 7. What group was set up in 1866 to oppose the vaccinations? ANTI-VACCINE LEAGUE
- 8. What happened in 1871? PARENTS COULD BE FINED
- 9. What year was smallpox declared eradicated (it was gone)? 1980

UNIT 3: HEALTH AND THE PEOPLE IN THE 1800s

LESSON 1: YWBAT explain why Public Health in the 1800s was terrible

- 1. Back-to-back housing was built for lots of workers. Groups of people would live in one room.
 - 2. People shared water from a water pump.
 - 3. There were no sewers. Waste flowed down streets into rivers.
 - 4. Typhoid and Cholera were common. They were caused by eating/drinking waste.
 - 5. Not many houses had toilets. People would share a street toilet.
 - 6. No street cleaners picked up rubbish.
 - 7. Towns and cities grew very quickly because of factories.
- 8. Tuberculosis or TB was common. It was caused by coughing or sneezing.
 - 9. Waste could be emptied in the street or sold to farmers as manure.
 - 10. Water pumps mostly got water from dirty ponds and rivers.
- 11. People bathed in dirty rivers and ponds as they didn't have fresh water.
 - 12. Some people would poo/wee in a bucket in the house.
- Task 1: Note take the above
- <u>Task 2:</u> Highlight your notes. Is this good public health or bad public health?
- **Task 3:** Explain how different facts link together.
- **Task 4:** 'Why was Public Health in the 1800s a concern?' (use PEEL structure).

POINT: Public Health in the 1800s was a concern. EVIDENCE: For example, ... (what was Public Health like? – use one fact). EXPLAIN: This was a concern because... LINK: This links with _____ because...



LESSON 2: YWBAT understand the impact Cholera had in the 1800s

1. The first outbreak:

In <u>1831</u>, cholera <u>killed around 50,000</u> people. Victims were <u>violently sick</u> and suffered from <u>painful diarrhoea</u>; the skin and nails turned black just before the victim fell into a <u>coma and died</u>. So many people were dying that <u>cemeteries</u> <u>had to be closed</u> because they were too full.

2. No cure:

People were frustrated because there <u>was no cure</u>. It was <u>new</u> and <u>people</u> <u>hadn't experienced it before</u>. It struck with such devastating speed, killing thousands in a few days.

3. What did people think caused it?

Many people believed disease was spread by <u>miasma</u> or <u>bad smells</u> from rotting food and dirty streets. Some towns and cities <u>cleaned up their streets</u> <u>to stop bad smells</u>. People <u>didn't know it was germs in water</u>. Even though towns were cleaned the disease came back.

4. Action:

After <u>more outbreaks of cholera in 1837 and 1838</u>, the <u>government decided</u> <u>to act</u>. In <u>1839</u> they set up an investigation into the health and conditions of towns and poor people.

Task 1: Note take the above

Task 2: What are the 3 biggest problems? Explain why

<u>Task 3:</u> Why is it important the government set up the investigation?

Task 4: 'Why was cholera a concern in 1831?' (use PEEL structure).

POINT: Cholera in the 1831 was a concern. EVIDENCE: For example, ... (outbreak, no cure, ideas). EXPLAIN: This was a concern because... LINK: This links with _____ because...



LESSON 3: YWBAT understand the importance of Edwin Chadwick and John Snow

The government had a 'laissez-faire' attitude which meant they believed they should keep out of people's lives. Edwin Chadwick didn't agree and made a report that showed people were too sick to work.

His report on the 'Sanitary Conditions of the Labouring Populations' made the government aware of the problems. This led to 1848 Public Health Act or Public Health Law.

The Public Health Act wanted towns to improve health and hire a medical officer. This was a good step but it wasn't compulsory so many towns chose not to pay for better Public Health.

In 1854 Cholera struck London. Cholera was a horrible disease caused by drinking dirty water. People didn't know this. Towns were so dirty Cholera was very common. In just 3 days it killed 127 people in a small area of London.

A doctor called John Snow plotted the deaths on a map and found they were all around a water pump called the Broadstreet Pump. John Snow believed Cholera may be spread by water.

Snow asked for the water pump to be removed and the disease went away.

John Snow had found that a toilet was leaking into the water which was
making people sick and die. He had proved Cholera was spread by dirty
water....but he didn't understand why. People didn't understand germs and
bacteria. But it was a start!

<u>Task 1:</u> Note take the above

<u>Task 2:</u> Explain why Edwin Chadwick's report, the 1848 Public Health Act and John Snow were important.

POINT: Edwin Chadwick/The 1848 Public Health Act/John Snow were important. EVIDENCE: For example, ... (what was it/what did they do?). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 4: YWBAT understand the importance of James Simpson and Chloroform

In 1847 James Simpson was experimenting with chemicals with his friends.

After pouring Chloroform into a beaker they all fell asleep. Simpson had found a way to help surgeons knock out their patients so they wouldn't feel pain.

James Simpson regularly showed doctors how to use chloroform safely.

In 1848 Hannah Greener died while being given chloroform during an operation to remove her toe nail.

With no pain doctors attempted more complex operations. This led to infections deeper in the body.

Many believed that pain was good for surgery. It showed how the patient was reacting to the treatment.

In 1853 Queen Victoria used chloroform while having her 8th baby. She publicly praised "that blessed chloroform".

The number of people dying from surgery increased <u>straight after the</u> introduction of anaesthetics.

From 1857 onwards anaesthetics became part of the standard practice for surgery. This led to the introduction of better chemicals.

Task 1: Note take the above

<u>Task 2:</u> Colour code each fact you have made. Is it a positive or negative fact about Chloroform?

<u>Task 3:</u> Explain why James Simpson was important.

POINT: James Simpson was important. EVIDENCE: For example, ... (what did he do?). EXPLAIN: This was important because... LINK: This links with ____ because...

Another reason James Simpson was important was... This was important because... This links with _____ because...



LESSON 5: YWBAT understand the importance of Florence Nightingale

Nightingale and 38 nurses were the first women to be allowed to serve in the army (Crimean War 1853).

Her nurses cleaned dirty military hospitals, made sure soldiers were fed and clothed and had access to fresh air.

Her work helped to make nursing a respectable career for women.

She met Queen Victoria. They persuaded the government to set up a Royal Commission into the health of the army.

She uncovered 16,000 of 18,000 deaths were not due to battle but preventable diseases.

In light of Florence's work, new army medical departments were made to improve healthcare.

In 1863 she published her most famous book –Notes on Hospitals.

She improved the health of the British army in India. She argued for safe water supplies.

She helped reduce the death rate during the Crimean War from 40% to just 2%

Her book 'Notes on Nursing" taught people about ways to care for the sick.

Task 1: Note take the above

<u>Task 2:</u> Rank the above from most to least important (use numbers e.g. 1^{st} , 2^{nd} , 3^{rd} ...)

Task 3: Explain why Florence Nightingale was important.

POINT: Florence Nightingale was important. EVIDENCE: For example, ... (what did she do?). EXPLAIN: This was important because... LINK: This links with ____ because...

Another reason Florence Nightingale was important was... This was important because... This links with _____ because...

LESSON 6: YWBAT understand the importance of the Great Stink and Joseph Bazalgette

In the Summer of 1858, a heat wave caused the filthy River Thames to smell worse than ever. The smells were so bad that politicians in the Houses of Parliament demanded to meet somewhere else. Some called this period 'The Great Stink'.

The smell from the Thames in 1858, combined with John Snow's evidence on cholera in 1854, caused such alarm that politicians (MPs) turned to a man they hoped could solve the problem. The man's name was Joseph Bazalgette.

Bazalgette made plans for a sewer. Gravity and a pump station at Crossness would push the waste to the sea. Government gave Bazalgette £3 million (£1 billion today) which paid for 318 million bricks covering 83 miles of sewers which moved 420 million gallons of poo. In 1866 the sewers completed. No more cholera!!!

Task 1: Note take the above

Task 2: Why was the Great Stink important? Why was it considered lucky?

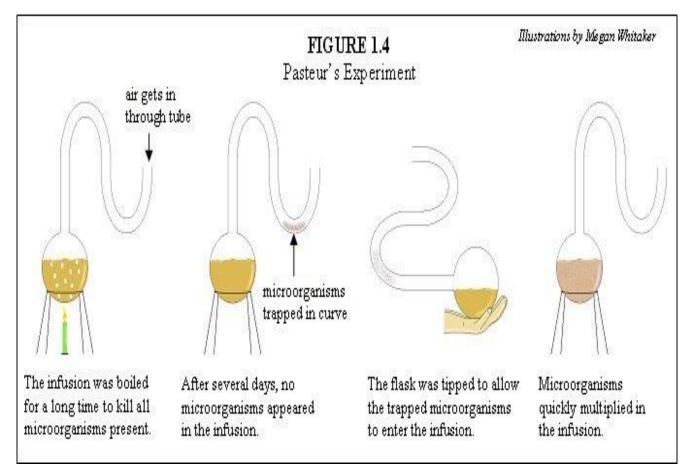
Task 3: Explain why Bazalgette was important.

POINT: Joseph Bazalgette was important. EVIDENCE: For example, ... (what did he do? - detail). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 7: YWBAT understand the importance of the Great Stink and Joseph Bazalgette

Louis Pasteur was a French Scientist who developed 'Germ Theory'. Pasteur discovered that germs caused disease! He first noticed the impact of germs when they made liquids like milk and wine go sour. This meant people knew the real cause of disease. This would lead to amazing scientific discoveries.



Task 1: Note take the above

<u>Task 2:</u> Why was Louis Pasteur important?

POINT: Joseph Bazalgette was important. EVIDENCE: For example, ... (what did he do? - detail). EXPLAIN: This was important because... LINK: This links with _____ because...

<u>Task 3:</u> Use the picture above to draw and label the experiment Pasteur used to prove that germs are in the air and can infect someone. This is what makes people catch diseases, bacteria getting into the body.

LESSON 8: YWBAT understand the importance of the Joseph Lister

Joseph Lister was a surgeon. He read Louis Pasteur's 'Germ Theory' and wanted to find a chemical that could kill germs and keep his operations safe.

He discovered Carbolic Acid was very effective.

Lister tested carbolic acid on a boy called Jamie Greenlees in 1865. Jamie had been run over by a cart and his leg bone was sticking out of his skin. Lister set the bone and wrapped the leg in bandages soaked in Carbolic Acid. After six weeks Jamie walked out of hospital (instead of hobbling on one leg).

Lister treated 11 other patients with Carbolic Acid. Before surgery Lister would wash his hands in Carbolic Acid. In 1875 Lister created a machine that could spray the room with Carbolic Acid. Lister soaked ligatures (stitches) with Carbolic Acid to stop arteries and wounds getting infected.

Carbolic Acid was messy, got caught in the throat and cracked the surgeon's hands. Many people didn't believe in germs so didn't accept Lister's ideas. Within a couple of years, the death rates went from 46% to just 15%. Lister wasn't very well liked because he felt his ideas were better than others. Carbolic Acid could be used to kill germs on the patient, in the room and even the surgical tools.

Task 1: Note take the above

<u>Task 2:</u> Use two different colours to highlight the positives and negatives and James Lister and Carbolic Acid.

<u>Task 3:</u> Explain why Lister was important.

POINT: Joseph Lister was important. EVIDENCE: For example, ... (what did he do? - detail). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 9: YWBAT understand how germs were understood in Britain

In 1866, Professor Lionel Beale, investigated a plague killing cows. He used a microscope to find the germ that was killing the cows. Many cows were killed.

A very experienced and respected scientist called John Tyndall made many speeches about Germ theory in 1870. He also taught the science behind Lister's use of carbolic Acid.

In 1874, Emanuel Klein found the germ for Typhoid. Typhoid was a common illness. He was actually wrong but 2 years later other scientists found the correct germ.

In 1890 a British surgeon called Berkley Moynihan was the first in England to use rubber gloves during surgery.

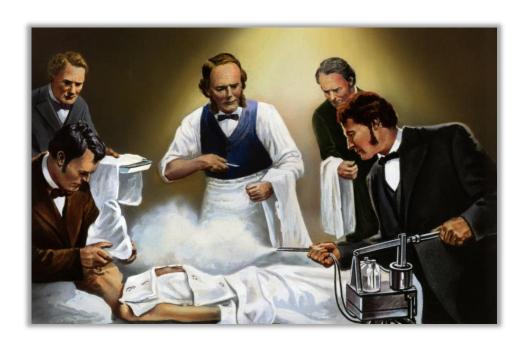
Task 1: Note take the above

<u>Task 2:</u> Rank the above British scientists/professors/surgeons. Who was the best?

Task 3: Explain why each was important.

POINT: Beale/Tyndall/Klein/Moynihan was important. EVIDENCE: For example, ... (what did he do? - detail). EXPLAIN: This was important because... LINK:

This links with because...



LESSON 10: YWBAT understand the importance of the 1875 Public Health Act

1875 Public Health Act

- 1. Towns were forced to hire a Medical Officer.
- 2. Sanitary inspectors made sure slaughterhouses were clean. They also made sure food being sold wasn't contaminated
 - 3. Towns had to cover open sewers and keep them in good condition
 - 4. Towns had to supply clean and fresh water to their citizens
 - 5. Towns had to organise rubbish to be collected.
 - 6. Towns had to provide street lighting.

Task 1: Note take the above

<u>Task 2:</u> Rank the above parts of the 1875 Public Health Act from most important (1st, 2nd, 3rd etc.)

<u>Task 3:</u> Explain why each term of the law was important.

1 was important because...

2 was important because...

Etc.



LESSON 11: YWBAT understand the importance of Louis Pasteur and Robert Koch

Louis Pasteur investigated why beer/wine went sour. He believed that the liquid had germs in it from the air. This was a revolutionary idea.

Pasteur used the Swan neck flask experiment to prove 'Germ Theory'. It showed how bacteria in the air can contaminate liquid.

However, Pasteur did not prove that germs caused diseases in humans. He only proved the Theory using liquid.

A German Doctor called Robert Koch found a way to grow germs. This meant he could focus on specific types.

Robert Koch would colour stain germs to identify the many different types. He did this using colour dyes. He could then pick out the one he wanted and test it.

Koch would use mice to study the specific germ he wanted to research. This meant he could begin the process of finding a cure.

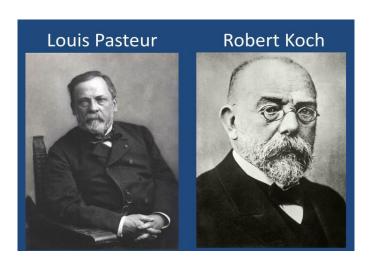
Task 1: Note take the above

<u>Task 2:</u> Explain why Louis Pasteur was important.

POINT: Louis Pasteur was important. EVIDENCE: For example, ... (what did he do? - detail). EXPLAIN: This was important because... LINK: This links with _____ because...

<u>Task 3:</u> Explain why Robert Koch was important.

POINT: Robert Koch was important. EVIDENCE: For example, ... (what did he do? - detail). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 12: YWBAT understand the importance of Louis Pasteur and Robert Koch

1861	Pasteur proves Germ Theory using his Sawn Neck Flask Experiment		
1870s	Both the French and German government supply both men with laboratories, equipment and teams to study		
1871	Germany was at war with France. Scientists competed to find cures that could save soldiers lives. Both men were given lots of money by their governments to study.		
1874	Pasteur is awarded the Copley Medal for his research		
1876	Koch finds the germ that causes Anthrax		
1879	Pasteur accidentally gives a chicken a weak cholera microbe. The chicken becomes immune. He proved weak vaccinations protect against the actual disease.		
1881	Pasteur creates a vaccine for 2 animal diseases (chicken cholera and anthrax)		
1881	Pasteur shows an audience of politicians, journalists and farmers his findings. This is spread to Europe by telegraph.		
1881	Koch's work on microbes is published in journals and conferences		
1883	Koch finds the germ that causes TB (Tuberculosis) in 1882 and then Cholera in 1883		
1885	Pasteur creates a vaccine. A young boy is cured of rabies after a dog bit him.		
1905	Koch is awarded the Nobel Prize for his research		
1909	Paul Ehrlich (Koch's student) finds a way for medicine to kill specific germs in the body. These became known as magic bullets. His most infamous example is Salvarsan 606 which was used to treat Syphilis.		

Task 1: Note take the above

<u>Task 2:</u> Code each fact using the following factors: WAR, GOVERNMENT, INDIVIDUALS, SCIENCE, LUCK, COMMUNICTAION

<u>Task 3:</u> Summarise the entire story of Pasteur, Koch and Ehrlich in a simple one-word flow chart (the first few have been done for you):

1861 \rightarrow Pasteur \rightarrow Germ Theory \rightarrow Swan Neck \rightarrow Laboratories \rightarrow 1870s \rightarrow ...



LESSON 13: End of unit 1800s GCSE style question

Florence Nightingale could only try out her ideas because of the Crimean War in 1853. It provided her with wounded soldiers.	2. The government introduced the 1875 Public Health Act. This reform improved public health in England and encouraged the 'great clean-up'.	3. It was lucky that a cholera outbreak occurred in a small area in 1854 in London that could prove Snow's ideas.
4. Pasteur and Koch proved Germ Theory with their experiments in the 1880s. This meant that people now realised that germs caused disease.	5. Joseph Lister introduced antiseptics into surgery in the 1870s. His carbolic spray meant that infections were reduced from 46% to 15%.	6. In 1847, James Simpson was experimenting with chemicals with his friends and was accidentally knocked out by Chloroform. This could be used to stop pain.
7. John Snow discovered that Cholera was spread through water in 1854. He helped the government decide to improve public health.	8. Florence Nightingale improved the conditions of hospitals and made nursing a profession. She lowered the death rate for patients.	9. Robert Koch identified specific bacteria that caused disease. His experiments led to successful vaccinations in humans.
10. The summer of 1858 was very hot and caused the 'Great Stink'. This caused the government to take notice of the disgusting water source.	11. The 1875 Public Health Act provided clean water, public toilets and proper drains and sewers.	12. The council of Lincoln improved the water supply after outbreaks of typhoid in 1904-1905.
13. The 1848 Public Health act started a process of the government taking the health of its citizens seriously.	14. Edwin Chadwick's report in 1842 raised awareness about the problems of living condition in England.	15. Queen Victoria used Chloroform whilst giving birth which helped it become popular.

Task 1: Note take the above

<u>Task 2:</u> Code each fact using the following factors: WAR, GOVERNMENT, INDIVIDUALS, SCIENCE, LUCK, COMMUNICTAION

<u>Task 3:</u> End of unit assessment: To what extent was the role of the individual the most important factor for medical change in the 1800s'? (16 Marks)

- PEE paragraphs why the role of individuals were important to medical change.
- PEE paragraphs why other factors were important to medical change
- Conclusion: How important were individuals and which factor is most important

LESSON 14: End of unit 1800s knowledge test 128 QUESTIONS

1. 1800s overview

- 1. What word is used to describe people moving from the country to the city?
- 2. What groups of people were not ready for the long hours in hard jobs?
- 3. What environmental issues were caused by the new factories?
- 4. What famous nurse improved hospital conditions?
- 5. What gave surgeons more practise?
- 6. What meant people and information could move around quicker?
- 7. What new materials meant better medical equipment?
- 8. What did the government begin to build to deal with waste?
- 9. What laws were passed to improve people's lives?

2. Public Health and Cholera in the early 1800s

- 1. What is public health?
- 2. What type of factories attracted new workers and meant cities grew?
- 3. What type of housing was built for the new factory workers or working class people?
- 4. Overcrowding was a huge problem. How many people were found living in one room in Liverpool in 1847?
- 5. Where did people get water from?
- 6. What was there not many of or none at all that meant human waste flowed in the streets and rivers?
- 7. Name one disease that was caused by dirty water or food.
- 8. What disease was spread by coughing and sneezing and was helped by the overcrowded conditions?
- 9. Where would people bathe? Why was this a problem?
- 10. In some places where would people poo and wee?

3. 1830s and Cholera

- 1. Why was cholera so scary in the 1800s?
- 2. What year did 50,000 people die of cholera?
- 3. Name two of the cholera symptoms: What happened to cemeteries during the outbreak?
- 4. Why did cholera scare people and doctors?
- 5. What did people think caused cholera?
- 6. What did the government do in 1839 after cholera outbreaks in 1837 and 1838?

4. Edwin Chadwick and John Snow

- 1. What was the name of Edwin Chadwick's report?
- 2. What did Chadwick's report show?
- 3. The government still didn't feel they should do anything. What is the phrase used?
- 4. What law did the government create and when?

- 5. What was good about the law?
- 6. What was bad about the law?
- 7. Who investigated cholera deaths?
- 8. What did he think caused cholera?
- 9. What pump did he think was causing the disease?
- 10. What was wrong with the pump in the area?

5. Battle against pain in surgery

- 1. What is the fancy word for pain killer or pain relief?
- 2. What were the three problems of surgery?
- 3. What liquid was used as pain relief?
- 4. What was the problem of using this liquid?
- 5. What dangerous drug was used as pain relief?
- 6. Why was this drug dangerous?
- 7. What gas was difficult to inhale, caused vomiting and was highly flammable?
- 8. What pain relief was also known as laughing gas?
- 9. What pain relief did James Simpson discover?
- 10. What year did James Simpson discover this pain relief?
- 11. What happened to a young girl that used Simpson's pain relief?
- 12. What was the girls name and what was the operation?
- 13. What problems increased in surgery after Simpson's pain relief was used?
- 14. In 1853 who used Simpson's pain relief and made it very popular?

6. Florence Nightingale

- 1. Nightingale and 38 nurses were the first women to serve in the what?
- 2. What war did Nightingale work in?
- 3. What did Nightingale do to hospitals?
- 4. How did Nightingale help soldiers?
- 5. What did Nightingale make the nursing profession?
- 6. What did Nightingale and Queen Victoria persuade the government to create for the armed forces? Nightingale discovered of the 18,000 deaths during war how many were from diseases that could be prevented?
- 7. In 1863 Nightingale published her most famous book. What was it called?
- 8. Before Nightingale died what was she awarded at the age of 90?
- 9. The death rate during the war went from 40% to what because of nightingale's work in cleaning hospitals?

7. Joseph Bazalgette and 'Cleaning up Britain'

- 1. What year was the hot summer that made London smell very bad?
- 2. What was this time known as?
- 3. Why was London so smelly?
- 4. Who decided to act after the horrid smell?
- 5. Joseph Bazalgette was asked to build a sewer. Where would it be built?
- 6. What would make the sewage move towards the sea in the sewers?
- 7. What was at Crossness that pushed the sewage out to sea from the Thames?
- 8. How much money was Joseph Bazalgette given to build the sewers?
- 9. The sewer was made from 318 million bricks but was how long?
- 10. How many gallons of sewage was removed from London each day?

8. Louis Pasteur and the development of science

- 1. What was the belief that germs appeared (as if by magic) when something rots or someone is ill? What is the belief that different germs cause different diseases?
- 2. What group of people believed disease was spread by contact with a victim?
- 3. What group of people believed an infected environment (water or dirt) caused diseases?
- 4. What country was Louis Pasteur from?
- 5. His belief that germs caused disease became known as what?
- 6. What liquid was he studying that proved germs make things go bad?
- 7. What is Louis Pasteur's experiment known as?
- 8. How did Pasteur get rid of germs and create a liquid 'sterile'?
- 9. How did he prove that germs in the beaker do not just magically grow?
- 10. How did he prove that germs from the air could contaminate the liquid?

9. Joseph Lister and Carbolic Acid

- 1. Who/What influenced Joseph Lister into finding a way to stop infections in surgery?
- 2. Carbolic Acid is an anti ?
- 3. Joseph Lister treated a young boy with carbolic acid. What happened to the boy? What did Joseph Lister do to the bandages that he wrapped around the boy's leg?
- 4. The boy did not become infected and survived. How long did it take for him to walk out the hospital?
- 5. To stop germs getting into people's bodies what did Lister wash with Carbolic Acid?
- 6. Lister created a machine. What did the machine do with Carbolic Acid?
- 7. Joseph Lister also soaked ligatures in Carbolic Acid. What are Ligatures? What were the three problems of Carbolic Acid that surgeons didn't like? Why did some people not believe Carbolic Acid would work?
- 8. The percentage of Joseph Lister's patients dying reduced from 46% to what?

10. Germ Theory in Britain

- 1. What word refers to substances that are put onto the body to reduce the chances of infection?
- 2. What word refers to free from contamination, bacteria, viruses, or other microorganisms?
- 3. What English surgeon used Carbolic Acid to kill germs and in turn supported the idea that germs caused disease?
- 4. Who investigated and proved germs were causing the cow plague? Why was the cow plague a problem?
- 5. What experienced and well respected scientist made many speeches about Germ theory in England?
- 6. What man claimed to find the germ for Typhoid (he was wrong but it was discovered 2 years later anyway)?
- 7. What French and German scientists/doctors worked with germs and germ identification? In 1890 what British surgeon became the first in Britain to wear gloves during surgery?

11. 1875 Public Health Act

- 1. (Public Health) Act is another word for what?
- 2. What was the main problem with the 1848 Public Health Act? What smelly event led to the government taking action?
- 3. Under the 1875 Public Health Act what type of Officer did towns have to hire?
- 4. Under the 1875 Public Health Act what inspectors would check cleanliness?
- 5. What type of industry/job would the inspectors look at?
- 6. Under the 1875 Public Health Act what was checked to make sure it wasn't contaminated?
- 7. Under the 1875 Public Health Act towns were made to do what to sewers?
- 8. Under the 1875 Public Health Act what water had to be made available to all people?
- 9. Under the 1875 Public Health Act what would happen to people's rubbish?

12. Louis Pasteur vs Robert Koch and Paul Ehrlich

- 1. Robert Koch found a way to do what with germs that meant he had plenty to study?
- 2. How did Robert Koch find a way to identify the different types of germs?
- 3. How would he identify which germ caused specific diseases?
- **4.** Why were the German and French governments happy to give Pasteur and Koch lots of money to research germs?
- 5. What medal was Louis Pasteur awarded in 1874?
- 6. In 1874 Koch found the germ that caused what disease?
- 7. In 1879 Pasteur accidentally vaccinated a chicken and it became immune. He found a way to create vaccines by chance. What disease was the chicken immune from?
- 8. In 1881 Louis Pasteur tried to spread his scientific discoveries by showing a live audience made up of farmers, politicians and who?
- 9. How did Koch try to spread his scientific discoveries?
- 10. In 1882 Koch found the germ that caused what major killer disease in Europe?
- 11. In 1883 Koch finds the germ that causes what horrid water based disease that struck England throughout the 1800s?
- 12. In 1885 Pasteur creates a vaccine to cure a small boy bitten by a dog. What did the vaccine cure?
- 13. In 1905 Koch was awarded with what prize?
- 14. Paul Ehrlich found a way to kill germs but not harm what?
- 15. What was Paul Ehrlich's specific germ killers called?
- 16. What was the name of his most infamous medicines?
- 17. What disease did his medicine treat?

LESSON 15: End of unit 1800s knowledge test Answers (128 QUESTIONS)

1. 1800s overview

- What word is used to describe people moving from the country to the city? URBANISATION
- 2. What groups of people were not ready for the long hours in hard jobs? CHILDREN
- 3. What environmental issues were caused by the new factories? **POLLUTION**
- 4. What famous nurse improved hospital conditions? FLORENCE NIGHTINGALE
- 5. What gave surgeons more practise? WARS
- 6. What meant people and information could move around quicker? **RAILWAY**, **TELEGRAPH or STEAMSHIPS**
- 7. What new materials meant better medical equipment? STEEL AND GLASS
- 8. What did the government begin to build to deal with waste? **SEWERS**
- 9. What laws were passed to improve people's lives? **PUBLIC HEALTH ACTS**

2. Public Health and Cholera in the early 1800s

- 1. What is public health? HEALTH AND WELLBEING OF ORDINARY PEOPLE
- 2. What type of factories attracted new workers and meant cities grew? **CLOTH**, **POTTERY**, **IRON OR STEEL**
- 3. What type of housing was built for the new factory workers or working class people? **BACK-TO-BACK**
- 4. Overcrowding was a huge problem. How many people were found living in one room in Liverpool in 1847? **40**
- 5. Where did people get water from? WATER PUMP
- 6. What was there not many of or none at all that meant human waste flowed in the streets and rivers? **SEWERS**
- Name one disease that was caused by dirty water or food. TYPHOID OR CHOLERA
- 8. What disease was spread by coughing and sneezing and was helped by the overcrowded conditions? **TB**
- 9. Where would people bathe? Why was this a problem? RIVERS WERE DIRTY
- 10. In some places where would people poo and wee? **BUCKET IN CORNER OF ROOM**

3. 1830s and Cholera

- 1. Why was cholera so scary in the 1800s? IT WAS NEW
- 2. What year did 50,000 people die of cholera? 1831
- 3. Name two of the cholera symptoms: VIOLENTLY SICK, PAINFUL DIARRHOEA. SKIN AND NAILS TURNED BLACK, COMA AND DIED.
- 4. What happened to cemeteries during the outbreak? CLOSED
- 5. Why did cholera scare people and doctors? NO CURE OR UNDERSTANDING OF IT
- 6. What did people think caused cholera? MIASMA (ROTTING FOOD OR DIRTY STREETS)

7. What did the government do in 1839 after cholera outbreaks in 1837 and 1838? SET UP AN INVESTIGATION INTO THE HEALTH AND CONDITIONS OF TOWNS AND POOR PEOPLE

4. Edwin Chadwick and John Snow

- What was the name of Edwin Chadwick's report? SANITARY CONDITIONS OF THE LABOURING POPULATIONS
- What did Chadwick's report show? POOR PEOPLE IN ENGLAND WERE BECOMING TOO ILL TO WORK
- 3. The government still didn't feel they should do anything. What is the phrase used? **LAISSEZ FAIRE**
- 4. What law did the government create and when? 1848 PUBLIC HEALTH ACT
- What was good about the law? ENCOURAGED LOCAL TOWNS TO IMPROVE PUBLIC HEALTH, MEDICAL OFFICER
- 6. What was bad about the law? **NOT COMPULSORY AND THE RICH DIDN'T WANT TO SPEND MONEY ON THE POOR**
- 7. Who investigated cholera deaths? JOHN SNOW
- 8. What did he think caused cholera? DIRTY WATER
- 9. What pump did he think was causing the disease? BROADSTREET
- 10. What was wrong with the pump in the area? INFECTED WITH SEWAGE

5. Battle against pain in surgery

- 1. What is the fancy word for pain killer or pain relief? ANAESTHETIC
- 2. What were the three problems of surgery? PAIN, INFECTION AND BLOOD LOSS
- 3. What liquid was used as pain relief? ALCOHOL
- 4. What was the problem of using this liquid? THINS THE BLOOD
- 5. What dangerous drug was used as pain relief? **OPIUM**
- 6. Why was this drug dangerous? OVERDOSE
- 7. What gas was difficult to inhale, caused vomiting and was highly flammable? **ETHER**
- 8. What pain relief was also known as laughing gas? NITROUS OXIDE
- 9. What pain relief did James Simpson discover? CHLOROFORM
- 10. What year did James Simpson discover this pain relief? 1847
- 11. What happened to a young girl that used Simpson's pain relief? **DIED FROM OVERDOSE**
- 12. What was the girls name and what was the operation? **HANNAH GREENER WAS HAVING A TOE NAIL REMOVED**
- 13. What problems increased in surgery after Simpson's pain relief was used? **MORE PEOPLE CAUGHT INFECTIONS**
- 14. In 1853 who used Simpson's pain relief and made it very popular? **QUEEN VICTORIA DURING CHILDBIRTH**

6. Florence Nightingale

- 1. Nightingale and 38 nurses were the first women to serve in the what? **ARMY**
- 2. What war did Nightingale work in? CRIMEAN WAR
- 3. What did Nightingale do to hospitals? **CLEANED THEM**
- How did Nightingale help soldiers? MADE SURE THEY HAVE FOOD, CLOTHES AND FRESH AIR

- 5. What did Nightingale make the nursing profession? MORE RESPECTABLE
- 6. What did Nightingale and Queen Victoria persuade the government to create for the armed forces? **ROYAL COMMISSION INTO HEALTH**
- 7. Nightingale discovered of the 18,000 deaths during war how many were from diseases that could be prevented? **16,000**
- 8. In 1863 Nightingale published her most famous book. What was it called? **NOTES ON HOSPITALS**
- Before Nightingale died what was she awarded at the age of 90? MERIT OF ORDER
- 10. The death rate during the war went from 40% to what because of nightingale's work in cleaning hospitals? **2%**

7. Joseph Bazalgette and 'Cleaning up Britain'

- 1. What year was the hot summer that made London smell very bad? 1858
- 2. What was this time known as? THE GREAT STINK
- 3. Why was London so smelly? **SEWAGE DUMPED IN RIVER THAMES**
- 4. Who decided to act after the horrid smell? POLITICIANS AND THE GOVERNMENT
- Joseph Bazalgette was asked to build a sewer. Where would it be built? UNDERGROUND TUNNELS
- 6. What would make the sewage move towards the sea in the sewers? **GRAVITY**
- 7. What was at Crossness that pushed the sewage out to sea from the Thames? **PUMP**
- 8. How much money was Joseph Bazalgette given to build the sewers? £3 MILLION (OR £1 BILLION IN TODAYS MONEY)
- 9. The sewer was made from 318 million bricks but was how long? 83 MILES
- 10. How many gallons of sewage was removed from London each day? **420 MILLION GALLONS**

8. Louis Pasteur and the development of science

- 1. What was the belief that germs appeared (as if by magic) when something rots or someone is ill? **SPONTANEOUS GENERATION**
- 2. What is the belief that different germs cause different diseases? **SPECIFITY**
- What group of people believed disease was spread by contact with a victim? CONTAGIONISTS
- 4. What group of people believed an infected environment (water or dirt) caused diseases? **ANTI-CONTAGIONISTS**
- 5. What country was Louis Pasteur from? **FRANCE**
- His belief that germs caused disease became known as what? GERM THEORY
- 7. What liquid was he studying that proved germs make things go bad? MILK
- 8. What is Louis Pasteur's experiment known as? SWAN NECK FLASK EXPERIMENT
- 9. How did Pasteur get rid of germs and create a liquid 'sterile'? BOIL IT
- 10. How did he prove that germs in the beaker do not just magically grow? **HE LEFT THE 'STERILE' BEAKER**
- 11. How did he prove that germs from the air could contaminate the liquid? **HE REMOVED THE SWAN NECK OR LID OF THE BEAKER**

9. Joseph Lister and Carbolic Acid

- Who/What influenced Joseph Lister into finding a way to stop infections in surgery? LOUIS PASTEUR/GERM THEORY
- 2. Carbolic Acid is an anti ? ANTISEPTIC
- 3. Joseph Lister treated a young boy with carbolic acid. What happened to the boy? FRACTURED LEG AFTER BEING RAN OVER BY A CART
- 4. What did Joseph Lister do to the bandages that he wrapped around the boy's leg? **SOAKED THEM IN CARBOLIC ACID**
- 5. The boy did not become infected and survived. How long did it take for him to walk out the hospital? **6 WEEKS**
- 6. To stop germs getting into people's bodies what did Lister wash with Carbolic Acid? **HANDS**
- Lister created a machine. What did the machine do with Carbolic Acid?
 SPRAYED AROUND THE ROOM/PATIENT
- 8. Joseph Lister also soaked ligatures in Carbolic Acid. What are Ligatures? **STITCHES TO STICH UP BODIES/ARTERIES OR ORGANS**
- What were the three problems of Carbolic Acid that surgeons didn't like? IT WAS MESSY, GOT STUCK IN PEOPLES THROATS AND IT CRACKED SURGEONS' HANDS
- Why did some people not believe Carbolic Acid would work? THEY DIDN'T BELIEVE IN GERM THEORY
- 11. The percentage of Joseph Lister's patients dying reduced from 46% to what? 15%

10. Germ Theory in Britain

- What word refers to substances that are put onto the body to reduce the chances of infection? ANTISEPTICS
- What word refers to free from contamination, bacteria, viruses, or other microorganisms? ASEPTIC
- 3. What English surgeon used Carbolic Acid to kill germs and in turn supported the idea that germs caused disease? **JOSEPH LISTER**
- 4. Who investigated and proved germs were causing the cow plague? **LIONEL BEALE**
- 5. Why was the cow plague a problem? PEOPLE HAD LESS FOOD AND MILK
- 6. What experienced and well respected scientist made many speeches about Germ theory in England? **JOHN TYNDALL**
- 7. What man claimed to find the germ for Typhoid (he was wrong but it was discovered 2 years later anyway)? **EMANUEL KLEIN**
- 8. What French and German scientists/doctors worked with germs and germ identification? LOUIS PASTEUR AND ROBERT KOCH
- In 1890 what British surgeon became the first in Britain to wear gloves during surgery? BERKLEY MOYNIHAN

11. 1875 Public Health Act

- 1. (Public Health) Act is another word for what? LAW
- What was the main problem with the 1848 Public Health Act? IT WASN'T COMPULSORY/MANY TOWNS IGNORED ITS ADVICE
- 3. What smelly event led to the government taking action? GREAT STINK
- Under the 1875 Public Health Act what type of Officer did towns have to hire?
 MEDICAL
- 5. Under the 1875 Public Health Act what inspectors would check cleanliness?

 SANITARY

- 6. What type of industry/job would the inspectors look at? **SLAUGHTERHOUSES**
- 7. Under the 1875 Public Health Act what was checked to make sure it wasn't contaminated? **FOOD AND WATER**
- 8. Under the 1875 Public Health Act towns were made to do what to sewers? **COVER ANY OPEN SEWERS**
- Under the 1875 Public Health Act what water had to be made available to all people? FRESH/CLEAN WATER
- 10. Under the 1875 Public Health Act what would happen to people's rubbish? **COLLECTED**

12. Louis Pasteur vs Robert Koch and Paul Ehrlich

- Robert Koch found a way to do what with germs that meant he had plenty to study? GROW THEM IN SCIENCE DISHES
- 2. How did Robert Koch find a way to identify the different types of germs? **COLOUR STAINED THEM USING DYES**
- 3. How would he identify which germ caused specific diseases? **HE COLLECTED A GERM AND INJECTED MICE**
- 4. Why were the German and French governments happy to give Pasteur and Koch lots of money to research germs? THEY WERE AT WAR AND WANTED TO SAVE AS MANY LIVES AS POSSIBLE FROM DISEASE
- 5. What medal was Louis Pasteur awarded in 1874? COPLEY MEDAL
- 6. In 1874 Koch found the germ that caused what disease? ANTHRAX
- 7. In 1879 Pasteur accidentally vaccinated a chicken and it became immune. He found a way to create vaccines by chance. What disease was the chicken immune from? **CHICKEN CHOLERA**
- 8. In 1881 Louis Pasteur tried to spread his scientific discoveries by showing a live audience made up of farmers, politicians and who? **JOURNALISTS**
- How did Koch try to spread his scientific discoveries? JOURNALS AND CONFERENCES
- 10. In 1882 Koch found the germ that caused what major killer disease in Europe? **TB OR TUBERCULOSIS**
- 11. In 1883 Koch finds the germ that causes what horrid water based disease that struck England throughout the 1800s? **CHOLERA**
- 12. In 1885 Pasteur creates a vaccine to cure a small boy bitten by a dog. What did the vaccine cure? **RABIES**
- 13. In 1905 Koch was awarded with what prize? NOBEL PRIZE
- 14. Paul Ehrlich found a way to kill germs but not harm what? **THE REST OF THE BODY OR ORGANS**
- 15. What was Paul Ehrlich's specific germ killers called? MAGIC BULLETS
- 16. What was the name of his most infamous medicines? SALVARSAN 606
- 17. What disease did his medicine treat? SYPHILIS

UNIT 4: HEALTH AND THE PEOPLE IN THE 1900s

LESSON 1: YWBAT understand why the Boer War, Charles Booth and Seebohm Rowntree were important for making Public Health better.

During the Boer war in South Africa, the British army found it difficult to find fit men to recruit as soldiers. 1/3 recruits failed to reach the requirements. In some towns 90% failed. These shocked politicians and led to questions being asked about the condition of the British population.

Charles Booth investigated London. He published a book called 'Life and Labour of the people' in 1889 that showed 35% of the city lived in poverty.

Seebohm Rowntree investigated York. He published a book called 'Poverty, A study in Town Life' in 1901 that showed 50% of the working classes lived in poverty. He also influenced the government to help.

Task 1: Note take the above

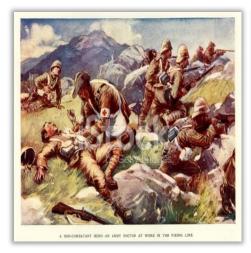
<u>Task 2:</u> Explain why the Boer War would make Britain healthier.

Task 3: Explain why the Charles Booth would make Britain healthier.

<u>Task 4:</u> Explain why the Seebohm Rowntree would make Britain healthier.

<u>Task 5:</u> What would make the government change Public Health the most? The Boer War, Charles Booth or Seebohm Rowntree?

POINT: _____ would make the government change Public Health the most EVIDENCE: For example, ... (Describe). EXPLAIN: This was important because... LINK: This links with ____ because...







LESSON 2: YWBAT understand how the Liberal Laws made Public Health better.

YEAR	LAW PASSED	EFFECT OF THE LAW
1906	Workmen's Compensation Act	Gave compensation money for an injury at work.
1908	Education Act	Introduced free school meals for children and school medical inspections.
1908	Children and Young Person's Act	Illegal to sell alcohol, tobacco or fireworks to children. Parents were also breaking the law if they neglected their children
1908	Old-Age pension	Over 70s were given 5 shillings a week and 7shillings for a married couple even though average age of death was 50.
1909	Housing and Town Planning Act	Illegal to build back-to-back houses (2 houses connected at the back were cramped).
1911	National Insurance Act	Pay for people who were sick or unemployed. Only if people had paid regular payments into the scheme but most of these people did not work regularly.

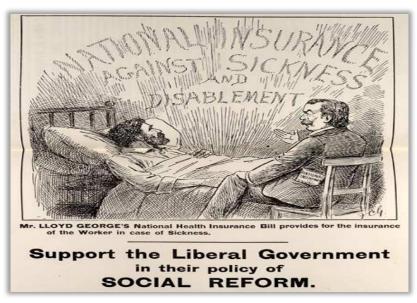
Task 1: Note take the above

<u>Task 2:</u> Rank the liberal laws from most to least important.

Task 3: Explain why each liberal law was important.

Task 4: What was the most important Liberal Law?

POINT: The most important Liberal Law was... EVIDENCE: For example, ... (Describe). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 3: YWBAT understand what Penicillin is and how it was discovered.

- Alexander Fleming worked in France during WW1. He wanted to find a cure for infections which killed many soldiers.
 - Fleming conducted many experiments to find a way to kill the Staphylococcus bacteria.
- Fleming went on holiday in 1928. When he came back penicillin mould had grown and killed the Staphylococcus in a petri dish.
- Fleming discovered that penicillin killed bacteria. He published his book about his findings in 1929.
 - In the 1930s, Oxford scientists, Howard Florey and Ernst Chain, tested penicillin on mice and found that it helped them recover from infections.
- In 1941 Florey and Chain tested penicillin on an infected police officer. His infection cleared but he died when the penicillin ran out.
- Florey and Chain asked for money from the British government but were only given £25. After their test they went to America.
- The American government gave \$80 million to mass produce Penicillin. On D-Day in 1945 2.3 million doses were used!
 - By the end of the war 2 million doses were being used a month and penicillin saved 15% of wounded men from certain death.
 - After WW2 penicillin became available for civilian use. Infections like scarlet fever, syphilis and gonorrhoea.
 - Huge drug companies grew such as GlaxoSmithKline. Today, the pharmaceutical industry is worth around £300 billion.
- Fleming, Florey and Chain received the Nobel Prize for Medicine in 1945.

Task 1: Note take the above

<u>Task 2:</u> Colour code your facts using the following factors: WAR, INDIVIDUAL, SCIENCE, CHANCE/LUCK, GOVERNMENT.

<u>Task 3:</u> Explain why Penicillin was important.

<u>Task 4:</u> What was factor was the most important in the discovery of penicillin.

POINT: The most important factor in the discovery of penicillin was _______
EVIDENCE: For example, ... (Describe). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 4: YWBAT understand the impact of the Spanish Lady

- 20-40 million died worldwide. 20% of the population was infected. The Spanish Lady proved deadliest for 20-40 year olds. Many believed it was biological warfare or the consequences of mustard gas. Mass troop movements in 1918 helped spread the disease at the end of WW1. There was no recognised treatment.
 - 280,000 people died in the UK.
 - The General Medical Council (government) introduced several preventions.
- They suggested wearing a mask over the nose and mouth to prevent infection.
 - Children were encouraged to stay away from adults.
 - The government encouraged people to gargle salt.
 - People boiled their handkerchiefs and stayed in bed.
 - Drink no alcohol or drink lots of alcohol.
 - Give up smoking.
 - Drink lots of beef tea- OXO spent a fortune advertising for this.
- Most people used cupboard remedies: Opium, rhubarb, treacle and vinegar (none would work).

Task 1: Note take the above

<u>Task 2:</u> Colour code your facts to show if they are positive or negative (good ideas/events or bad ideas/events).

<u>Task 3:</u> Explain what the different treatments tell you about people's knowledge of the disease.



LESSON 5: YWBAT understand how war improved surgery in the 1900s.

- Wilhelm Roentgen invents X-ray machine in 1895. Doctors can look at broken bones & diseases in the body. During WW1 bullets and shrapnel could be found.
 - In 1901 Karl Landsteiner discovered blood groups. In 1914 surgeons added anticoagulant to blood to stop it clotting. In 1915 during WW1, 'blood banks' could store blood in bottles for operations.
- Harold Gillies used plastic surgery to treat facial injuries in WW1. By 1917 Gillies he set up a hospital for facial repairs. Over 5,000 servicemen were treated.
 - Between WW1 and WW2 CT scans let surgeons see tissue and bones in 3D. This later developed into laser technology used to target cancer cells.
- During WW1, 80,000 men suffered with shell shock (a mental problem caused by war). 306
 of them were executed as cowards.
 - William Rivers was a psychologist during WW1. He created the 'talking cure'. He would speak to men suffering with mental problems and help them get through their issues.
 - Before WW2 the British government set up the Army Blood Supply Depot. In 1940 blood became easier to transport and store when plastic wallets replaced bottles.
 - Sir Archibald McIndoe worked mostly on burns (such as shot down pilots).
 - He took Harold Gillies (cousin) plastic surgery methods further and improved them.
 - The 'Guinea Pig Club' was set up in 1941 by Archibald McIndoe. It was a social club made for patients wanting support. He would offer support for them returning back to normal life with horrid injuries.
 - The NHS was created in 1948 just 3 years after WW2. People had fought & died for their country so healthcare was now free for all people (doctors, dentists and surgeons).
 - Major organ transplants became more available to people on the NHS. Kidney (1952),
 Heart pacemaker (1961), heart transplant (1967/68), Hip (1972).

<u>Task 1:</u> Note take the above

<u>Task 2:</u> Colour code your facts using the following factors: INDIVIDUAL, SCIENCE, GOVERNMENT, COMMUNICATION

Task 3: Explain why each fact was important.

Task 4: What was the most important reason war helped surgery.

POINT: The most important reason war helped surgery was EVIDENCE: For example, ... (Describe). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 6: YWBAT understand the role of the Welfare state and how the NHS was built.

The following features are part of the British 'Welfare State': the NHS or National Health
Service (Free Healthcare to all), the Weekly Family Allowance (Money given to all people
who have children), Benefits (money given to vulnerable people), the school leaving age
was risen to 15 (make sure people have a decent level of education) and slums or bad
housing were replaced with new houses/estates.

Story of the NHS

- During WW2 people made sacrifices & felt they deserved to be rewarded.
- In 1942 (During WW2) William Beveridge wrote a report about the poor health of Britain.

 100,000 copies of his report were bought in the first month.
 - Wealthy people in the countryside looked after children from London to help them
 escape the bombing. They were horrified by how dirty and unhealthy the children were.
 They demanded change!
- The famous Beveridge Report (made by William Beveridge) believed the government should keep people safe from <u>disease</u>, <u>need</u>, <u>ignorance</u>, <u>idleness</u> and <u>poverty</u>.
- Clement Attlee promised to create a welfare state that would keep people safe if people voted him as Prime Minister (PM).
 - In 1945 Clement Attlee became Prime Minister and began creating the Welfare State, including the NHS.
- Nye Bevan was Clement Atlee's 'Minister of Health'. Bevan had the job of making sure all
 British people had access to free hospitals, doctors, nurses and dentists payed for by
 taxes.

Task 1: Note take the above

<u>Task 2:</u> Rank the features of the welfare state from most to least important (NHS, Family Allowance, Benefits, school leaving age and sums)

<u>Task 3:</u> Summarise the story of the NHS in a simple one-word flow chart. I have started it off for you. $WW2 \rightarrow Sacrifice \rightarrow reward \rightarrow Beveridge \rightarrow Report \rightarrow poor \rightarrow$

Task 4: Why was the Welfare system important?

POINT: The welfare system was important for Britain. EVIDENCE: For example, ... (Describe). EXPLAIN: This was important because... LINK: This links with _____ because...



LESSON 7: YWBAT understand why people support and oppose the NHS.

- New drugs and technology are expensive. The NHS sometimes cannot afford these things.
- The NHS provided different services. (hospitals, doctors, nurses, dental and opticians)
 - Around 8 million people could not afford a doctor before the NHS was created. They could now be helped.
 - Free Health care for all means more people need to be seen. Waiting times for meetings and operations can be long.
 - Doctors and nurses received better equipment and hospitals were improved.
- People live longer today. The elderly need the NHS for many things which costs too much.
- Today, the cost of the NHS is huge. Obesity problems (heart and cancers)
 alone cost around £15.8 billion a year.
- Peoples lifestyles impact the NHS. People eat bad foods, drink too much alcohol, smoke and do little exercise. These lead to health problems.
 - In 1950 the cost of the NHS was too much. In 1952 glasses, dental and prescriptions had to be paid for.

Task 1: Note take the above

<u>Task 2:</u> Code each fact you have written. Does it support or oppose the NHS (is it for or against the NHS?)

<u>Task 3:</u> What is the best argument for and against the NHS?

POINT: The best reason that supports the NHS is. EVIDENCE: For example, ... (Describe). EXPLAIN: This was important because... LINK: This links with ____ because...

POINT: The best reason that opposes the NHS is. EVIDENCE: For example, ... (Describe). EXPLAIN: This was important because... LINK: This links with ____ because...



LESSON 8: YWBAT understand why people support and oppose the NHS.

Modern problems:

- MRSA: Antibiotics like penicillin kill infections and germs. However, some bacteria have evolved and become resistant to some antibiotics. The MRSA or 'Superbug' was first reported in 1961.
 - SAFETY: Drug companies in the 1950s didn't properly test new drugs.
 Thalidomide was a sleeping pill for pregnant women. Many babies were affected and were born with severe physical problems.
 - LIFESTYLE: Eating too much fatty and sugary food causes major health issues like heart disease and cancer. People are also living longer and need lots of care at old age. These cost huge amounts of money and time.

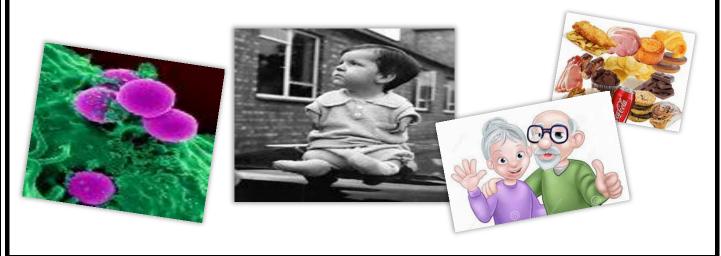
Alternative medicines

- Aroma-therapy: oils are messaged into the skin. This helps relaxation and promotes good blood flow and positive emotions.
 - Hypno-therapy: Patients are hypnotised. Positive thinking helps people overcome stress, anxiety, allergies or even smoking.
- Homeopathy: Herb medicine that causes similar symptoms of the illness are taken. The body creates natural defences and can fight hay fever, depression and eczema.
 - Acupuncture: Needles are put into parts of the body. This stimulates muscles and blood flow, reduces some pain and promotes some healing.

Task 1: Note take the above

<u>Task 2:</u> Rank the modern problems (MRSA, SAFETY and LIFESTYLE). Explain why each was a problem.

<u>Task 2:</u> Rank the alternative medicines (Aroma, Hypno, Homeo and Accupuncture). Explain why each was good.



LESSON 9: End of unit 1900s GCSE style question

1. Alexander Fleming discovered Penicillin when he left mould in a petri dish. He found it when he returned from holiday in 1928.	2. Florey and Chain tested penicillin on mice and people in the 1930s and early 1940s. The US government gave them \$80 million to mass produce penicillin.	3. Thalidomide was a drug to help pregnant women with morning sickness. Thousands of babies were born with malformed limbs in the 1950s.	4. The Spanish Lady (1918-1919) killed millions after WW1. The government promoted traditional remedies like rhubarb or strange ones like drinking OXO gravy.
5. X-rays were discovered by chance in 1895 by Wilhelm Roentgen. X-rays were also used in WW1 to help surgeons find bullets and shrapnel.	6. Harold Gillies treated face injuries using skin grafts in WW1. 5000 men were treated. In WW2 Archibald McIndoe used skin grafts on pilots who had bad burns.	7. Archibald McIndoe also set up the Guinea Pig Club in 1941. This was to support burn victims mentally.	8. Blood groups were discovered in 1901 by Karl Landsteiner. In 1915 blood banks were set up for WW1. Army Blood Supply Depot set up in 1938. Blood stored in plastic wallets in 1940.
9. William Rivers (psychologist) developed the 'talking cure' to help Shell Shock	10. Complex operations took place such as the first kidney transplant in 1952 and heart transplant in 1967.	11. Charles Booth made a report that proved 35% of London lived in poverty. He wrote a book called 'Life and Labour of the people'	12. The Liberal Government (1906- 1911) made laws to look after people. The 1906Education Act gave students free school meals.
13. The 1911 national Insurance Act gave money to people who were sick or unemployed.	14. Labour Prime Minister, Clement Attlee, agreed to make the NHS. The NHS was created on 4 July 1948. This was led by Nye Bevan (Health Minister).	15. The NHS was free medical care for all British people. Paid by taxes.	16. Anti-viral drugs are used to help keep AIDS patients alive. AIDS was identified in 1981. Many died after 10 years as there is no cure.

Task 1: Note take the above

<u>Task 2:</u> Code each fact using the following factors: WAR, GOVERNMENT, INDIVIDUALS, SCIENCE, LUCK, COMMUNICTAION

<u>Task 3:</u> End of unit assessment: <u>To what extent was war the most important factor for medical change in the 20th century? (16 marks)</u>

- PEE paragraphs why the role of individuals were important to medical change.
- PEE paragraphs why other factors were important to medical change.
- Conclusion: How important were individuals and which factor is most important.

LESSON 10: 1900 KNOWLEDGE TEST (96 QUESTIONS)

1. Why did health improve in the first few years of the 1900s?

- 1. Who are the Liberal Laws or Liberal Reforms named after?
- 2. When the government reforms living conditions they are changing them to make them what?
- 3. The health and well-being of a country is known as what?
- 4. What war between Britain and South Africa found many British men were not healthy?
- 5. What fraction of British soldiers failed their health tests before the war?
- 6. What city did Charles Booth investigate?
- 7. Charles Booth found what percentage of the city lived in poverty?
- 8. What was the name of Charles Booth's book? LIFE AND LABOUR OF THE PEOPLE
- 9. What city did Seebohm Rowntree investigate?
- 10. Seebohm Rowntree found what percentage of the city lived in poverty?
- 11. What was the name of Seebohm Rowntree's book?
- 12. Who did Rowntree influence to help the poor people in society?
- 13. The 'Workmen's Compensation Act' gave money to workers who had what problem?
- 14. What was the name of the law that aimed to help school children?
- 15. How were school children helped with food?
- 16. How were school children helped with their health?
- 17. The 'Children and Young Person's Act' made it illegal to sell what to children?
- 18. The 'Children and Young Person's Act' would do what to parents that neglected their children?
- 19. The 'Old Age Pension Act' gave money to who?
- 20. What did the 'National Insurance Act' do for sick or unemployed workers?

2. Penicillin

- 1. Alexander Fleming worked in France during WW1 to find a way to cure what medical problem?
- 2. After the war Fleming experimented on what particular bacteria?
- 3. Where did Fleming go to find the bacteria had been killed by Penicillin?
- 4. What year did Fleming write a book about Penicillin the germ killer?
- 5. In the 1930s what two Oxford scientists began experimenting with Penicillin?
- 6. What did the scientists first experiment penicillin on?
- 7. Eventually the scientists experimented on a human. The man had a bad reaction to a scratch. What job did the man have?
- 8. The scientists asked for money. How much did the British government give them?
- 9. After this they asked the US government. How much did they give them?
- 10. Penicillin could now be mass produced. How many doses were used during WW2 on D-Day?
- 11. By the end of WW2 penicillin saved what percentage of wounded men?
- 12. After WW2 who did Penicillin become available to?
- 13. What is the name of a drug company that sells antibiotics and other medicines?
- 14. What is this industry worth today?
- 15. What were Fleming, Florey and Chain awarded with for their work on Penicillin?

3. Spanish Lady

- 1. The Spanish Lady was what form of illness?
- 2. How many people in England died from the Spanish Lady?
- 3. Who tried to introduce preventions?
- 4. What did the group tell people to put over their nose and mouth?
- 5. People were encouraged to gargle what?
- 6. People wouldn't drink what?

- 7. What was the name of the gravy people drank?
- 8. People even used old cupboard remedies like what?

4. Surgery: WW1, WW2 and the modern age

- 1. Who invented the X-Ray machine?
- 2. What did X-Ray machines let surgeons do during WW1?
- 3. What did Karl Landsteiner discover?
- 4. Blood Banks were set up for blood transfusions. What was blood stored in during WW1?
- 5. What is added to blood to stop it curdling?
- 6. Who operated on soldiers injured faces in WW1?
- 7. What was set up in 1917 to help soldiers with facial injuries?
- 8. How many servicemen with facial injuries were treated? What method was used to help facial injuries?
- 9. What was developed between WW1 and WW2 that meant surgeons had 3D images?
- 10. How many men suffered with shell shock during WW1?
- 11. How many men with shell shock were executed as cowards?
- 12. What is shell shock also known as? What psychologist began treating men with shell shock?
- 13. What was the treatment of Shell Shock soldiers called?
- 14. During WW2 blood was stored in what?
- 15. What surgeon carried on the work of facial injuries during WW2?
- 16. What was set up in 1941 during WW2 for soldiers with mental injuries to talk and help each other emotionally? What was set up in 1948 that meant free surgery to all?
- 17. Name at least one of the modern forms of surgery/transplants.

5. Welfare State and the NHS

- 1. What major event made people feel they deserved to be looked after?
- 2. Who made a report looking into the problems of health during WW2?
- 3. How any copies of this health report were sold in the first month?
- 4. The report said the government needed to stop DISEASE, NEED, IGNORANCE, IDELNESS AND POVERTY. What did these become known as?
- 5. What Prime Minister was voted into power because he promised to listen to the report?
- 6. What political Party created the Welfare State and NHS?
- 7. Who was the Health minister that carried out the creation of the NHS?
- 8. The NHS wold give all British people free healthcare. How would it be paid?
- 9. A Welfare State is when who protects the health and wellbeing of its people?
- 10. The Welfare State aims to help people from when they are born till the day they die. What phrase is used to describe this?
- 11. The Welfare State set up the NHS. What dos this stand for?
- 12. What was paid to women when they had children?
- 13. What is given to people struggling?
- 14. What age was the school leaving age risen to so young people could get better qualifications?
- 15. What type of housing was replaced with new and better designed estates?
- 16. The NHS struggles because of money problems. Name two things that cost the NHS too much money. Before the NHS was created how many people had never seen a doctor?
- 17. As more people need a doctor what became more time consuming?
- 18. Name two different services provided by the NHS.
- 19. How much money does just obesity cost the NHS?

6. Modern treatment and surgery

1. What pill was made in 1951 to prevent women becoming pregnant?

- 2. In 1957 what drug was not tested leading to babies being born with severe physical disabilities?
- 3. In 1978 what was used to help women become pregnant?
- 4. In 2007 what piece of technology was created? A Bionic _____?
- 5. In 2008 the first full what transplant was successful?
- 6. What is the name given to the bacteria that evolved and could not be killed by modern drugs?
- 7. A drug for women led to babies being born with malformed limbs. Why did this happen?
- 8. People making bad lifestyle choices such as fatty foods or sugary snacks leads to problems such as what? Some people do not take the advice of NHS doctors. Instead they use different and sometimes not useful treatments. What are these known as?
- 9. What is the name given to the therapy where oils are massaged in the skin for relaxation and blood flow?
- 10. What is the name given to the therapy where people are hypnotised to relieve stress or anxiety?
- 11. What therapy uses herbs that cause similar symptoms as a disease to make the body naturally stronger?
- 12. What therapy uses needles to relieve stress and pain in muscles?

LESSON 11: 1900 KNOWLEDGE TEST ANSWERS (96 QUESTIONS)

1. Why did health improve in the first few years of the 1900s?

- Who are the Liberal Laws or Liberal Reforms named after? LIBERAL GOVERNMENT (LIBERAL PARTY)
- 2. When the government reforms living conditions they are changing them to make them what? **BETTER**
- 3. The health and well-being of a country is known as what? PUBLIC HEALTH
- What war between Britain and South Africa found many British men were not healthy?
 BOER WAR
- 5. What fraction of British soldiers failed their health tests before the war? 1/3
- 6. What city did Charles Booth investigate? LONDON
- 7. Charles Booth found what percentage of the city lived in poverty? 30%
- 8. What was the name of Charles Booth's book? LIFE AND LABOUR OF THE PEOPLE
- 9. What city did Seebohm Rowntree investigate? YORK
- 10. Seebohm Rowntree found what percentage of the city lived in poverty? 50%
- 11. What was the name of Seebohm Rowntree's book? POVERTY: A STUDY IN TOWN LIFE
- 12. Who did Rowntree influence to help the poor people in society? GOVERNMENT
- 13. The 'Workmen's Compensation Act' gave money to workers who had what problem?
 INJURY
- 14. What was the name of the law that aimed to help school children? EDUCATION ACT
- 15. How were school children helped with food? FREE SCHOOL MEALS
- 16. How were school children helped with their health? MEDICAL INSPECTION
- 17. The 'Children and Young Person's Act' made it illegal to sell what to children? ALCOHOL or TOBACCO or FIREWORKS
- 18. The 'Children and Young Person's Act' would do what to parents that neglected their children? **FINES**
- 19. The 'Old Age Pension Act' gave money to who? ELDERLY PEOPLE AFTER WORK
- 20. What did the 'National Insurance Act' do for sick or unemployed workers? REGULAR PAYMENTS

2. Penicillin

- 1. Alexander Fleming worked in France during WW1 to find a way to cure what medical problem? **INFECTION**
- 2. After the war Fleming experimented on what particular bacteria? STAPHYLOCOCCUS
- 3. Where did Fleming go to find the bacteria had been killed by Penicillin? HOLIDAY
- 4. What year did Fleming write a book about Penicillin the germ killer? 1929
- In the 1930s what two Oxford scientists began experimenting with Penicillin? FLOREY AND CHAIN
- 6. What did the scientists first experiment penicillin on? MICE
- 7. Eventually the scientists experimented on a human. The man had a bad reaction to a scratch. What job did the man have? **POLICEMAN**
- 8. The scientists asked for money. How much did the British government give them? £25
- 9. After this they asked the US government. How much did they give them? \$80 MILLION
- Penicillin could now be mass produced. How many doses were used during WW2 on D-Day? 2.3 MILLION DOSES
- 11. By the end of WW2 penicillin saved what percentage of wounded men? 15%
- 12. After WW2 who did Penicillin become available to? CIVILIANS
- 13. What is the name of a drug company that sells antibiotics and other medicines? **GLAXOSMITHKLINE**
- 14. What is this industry worth today? £300 BILLION
- 15. What were Fleming, Florey and Chain awarded with for their work on Penicillin? **NOBEL PRIZE**

3. Spanish Lady

- 1. The Spanish Lady was what form of illness? FLU
- 2. How many people in England died from the Spanish Lady? 280,000
- 3. Who tried to introduce preventions? GENERAL MEDICAL COUNCIL
- 4. What did the group tell people to put over their nose and mouth? MASK
- 5. People were encouraged to gargle what? **SALT**
- 6. People wouldn't drink what? ALCOHOL
- 7. What was the name of the gravy people drank? **OXO**
- 8. People even used old cupboard remedies like what? RHUBARB or TREACLE or VINEGAR

4. Surgery: WW1, WW2 and the modern age

- 1. Who invented the X-Ray machine? WILHELM ROENTGEN
- What did X-Ray machines let surgeons do during WW1? SEE BULLETS OR SHRAPNEL IN THE BODY
- 3. What did Karl Landsteiner discover? **BLOOD GROUPS**
- Blood Banks were set up for blood transfusions. What was blood stored in during WW1?
 BOTTLES
- 5. What is added to blood to stop it curdling? ANTI-COAGULANT
- 6. Who operated on soldiers injured faces in WW1? HAROLD GILLIES
- 7. What was set up in 1917 to help soldiers with facial injuries? HOSPITAL
- 8. How many servicemen with facial injuries were treated? 5000
- 9. What method was used to help facial injuries? SKIN GRAFTS
- 10. What was developed between WW1 and WW2 that meant surgeons had 3D images? CT SCAN
- 11. How many men suffered with shell shock during WW1? 80,000
- 12. How many men with shell shock were executed as cowards? 306
- 13. What is shell shock also known as? PTSD (POST TRAUMATIC STRESS DISORDER)
- 14. What psychologist began treating men with shell shock? WILLIAM RIVERS
- 15. What was the treatment of Shell Shock soldiers called? TALKING CURE
- 16. During WW2 blood was stored in what? PLASTIC WALLETS
- 17. What surgeon carried on the work of facial injuries during WW2? ARCHIBALD MCINDOE
- 18. What was set up in 1941 during WW2 for soldiers with mental injuries to talk and help each other emotionally? **GUINEA PIG CLUB**
- 19. What was set up in 1948 that meant free surgery to all? NHS
- 20. Name at least one of the modern forms of surgery/transplants. **KIDNEY or HEART PACEMAKER or HEART or HIP**

5. Welfare State and the NHS

- 1. What major event made people feel they deserved to be looked after? WW2
- 2. Who made a report looking into the problems of health during WW2? WILLIAM BEVERIDGE
- 3. How any copies of this health report were sold in the first month? 100,000
- 4. The report said the government needed to stop DISEASE, NEED, IGNORANCE, IDELNESS AND POVERTY. What did these become known as? **5 EVILS**
- 5. What Prime Minister was voted into power because he promised to listen to the report? **CLEMENT ATTLEE**
- 6. What political Party created the Welfare State and NHS? LABOUR PARTY
- 7. Who was the Health minister that carried out the creation of the NHS? NYE BEVAN
- 8. The NHS wold give all British people free healthcare. How would it be paid? TAXES
- A Welfare State is when who protects the health and wellbeing of its people?
 GOVERNMENT
- 10. The Welfare State aims to help people from when they are born till the day they die. What phrase is used to describe this? **CRADLE TO THE GRAVE**
- 11. The Welfare State set up the NHS. What dos this stand for? NATIONAL HEALTH SERVICE

- 12. What was paid to women when they had children? FAMILY ALLOWENCE
- 13. What is given to people struggling? **BENEFITS**
- 14. What age was the school leaving age risen to so young people could get better qualifications? 15
- 15. What type of housing was replaced with new and better designed estates? **SLUMS**
- 16. The NHS struggles because of money problems. Name two things that cost the NHS too much money. TECHNOLOGY or WAGES FOR STAFF or ELDERLY or UNHEALTHY PROBEMS (OBESITY) or GLASSES or DENTAL
- 17. Before the NHS was created how many people had never seen a doctor? 8 MILLION
- 18. As more people need a doctor what became more time consuming? WAITING LINES
- 19. Name two different services provided by the NHS. **DOCTOR or SURGEON or NURSE or DENTIST or OPTICIAN**
- 20. How much money does just obesity cost the NHS? £15.8 BILLION

6. Modern treatment and surgery

- 1. What pill was made in 1951 to prevent women becoming pregnant? CONTRACEPTIVE
- 2. In 1957 what drug was not tested leading to babies being born with severe physical disabilities? **THALIDOMIDE**
- 3. In 1978 what was used to help women become pregnant? IVF
- 4. In 2007 what piece of technology was created? A Bionic _____? EYE
- 5. In 2008 the first full what transplant was successful? FACE TRANSPLANT
- 6. What is the name given to the bacteria that evolved and could not be killed by modern drugs? MRSA
- 7. A drug for women led to babies being born with malformed limbs. Why did this happen?

 NOT TESTED PROPERLY
- **8.** People making bad lifestyle choices such as fatty foods or sugary snacks leads to problems such as what? **HEART DISEASE or CANCER**
- 9. Some people do not take the advice of NHS doctors. Instead they use different and sometimes not useful treatments. What are these known as? **ALTERNATIVE MEDICINES**
- 10. What is the name given to the therapy where oils are massaged in the skin for relaxation and blood flow? **AROMATHERAPY**
- 11. What is the name given to the therapy where people are hypnotised to relieve stress or anxiety? **HYPNOTHERAPY**
- 12. What therapy uses herbs that cause similar symptoms as a disease to make the body naturally stronger? **HOMEOPATHY**
- 13. What therapy uses needles to relieve stress and pain in muscles? ACUPUNCTURE