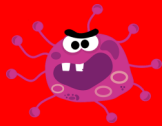




**Sponsored by...**

# **Germ Theory**



# **PASTEUR**

## **Key work...**

He was the first to suggest that GERMS caused DISEASE

## **Important because...**

Before his work scientists thought that his germs were caused by SPONTANEOUS GENERATION

Published Germ Theory in 1861—proved links between germs and disease

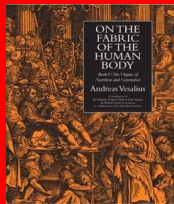
Developed vaccines for Anthrax and Rabies

His work was the key that unlocked so much further discoveries. He helped to inspire Lister and anti-septics, Koch built upon his work, confirmed Snow's work on Cholera



**Sponsored by...**

**Anatomy  
Books**



**VESALIUS**

**Key work...**

Pointing out the mistakes of Galen and wrote books on ANATOMY with accurate drawings

**Important because...**

One of the Big 3 of the Renaissance period

Dissected bodies of criminals who had been executed—studied closely

Showed there were no holes in the septum of the heart

Encouraged others to question Galen and his work was the first step to improving the diagnosis of disease



**Sponsored by...**  
**Pare's cool**  
**ointment**



# PARÉ

#### Key work...

He was an army surgeon who improved surgical techniques

#### Important because...

Before pare gunshot wounds were mainly treated by cauterisation (burning)

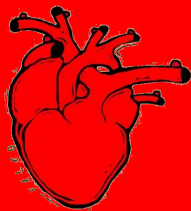
Pare (when he ran out of oil) made a cool ointment which worked better for patients

Improved amputations—he developed a technique for tying off vessels

Designed some sophisticated artificial limbs



**Sponsored by...**  
**Blood**  
**Circulation**



# HARVEY

#### Key work...

He discovered the circulation of the blood around the body

#### Important because...

Before Harvey people thought that there were 2 kinds of blood that flowed in different systems round the body (Galen's idea!)

He found that blood circulates round the body and was pumped by the heart

People at the time didn't believe his theories but would help future discoveries





**Sponsored by...**

**London  
Grave  
Robbers**



# HUNTER

**Key work...**

Developed better approaches to surgery as he was present at 2000 dissections (some of which were bodies dug up by grave robbers)

**Important because...**

Worked at a London Anatomy school and also worked on the battlefield as an army surgeon

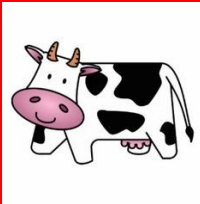
He had unrivalled knowledge of the human body

Leant a lot about venereal disease

Developed a new way to treat blocked blood vessels—prevented amputations



**Sponsored by...**  
**Gloucester**  
**Milkmaids**



# JENNER

#### Key work...

Discovered the small pox vaccine that was the first vaccine—huge step forward in the development of medicine

#### Important because...

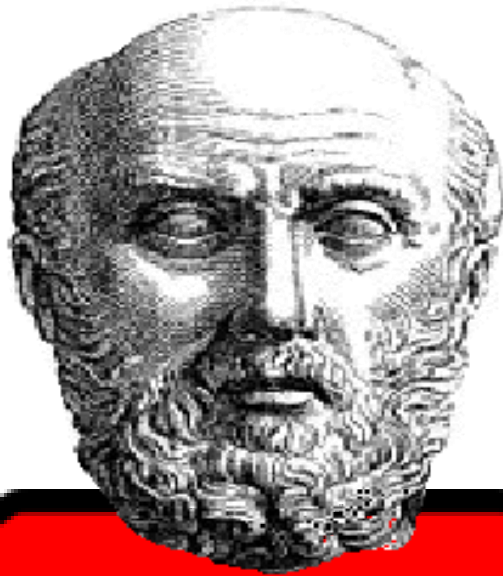
Small pox was one of the deadliest diseases in the 1700's

Before Jenner the only way to prevent was inoculation

Used scientific methods to find if it was true that milkmaids who had cowpox didn't get smallpox

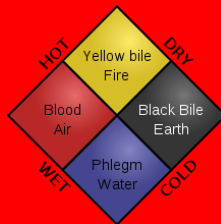
Experimented and developed a vaccine

Didn't know why his vaccine worked.



**Sponsored by...**

**The 4  
Humours**



# HIPPOCRATES

## Key work...

Influenced medical treatment for centuries

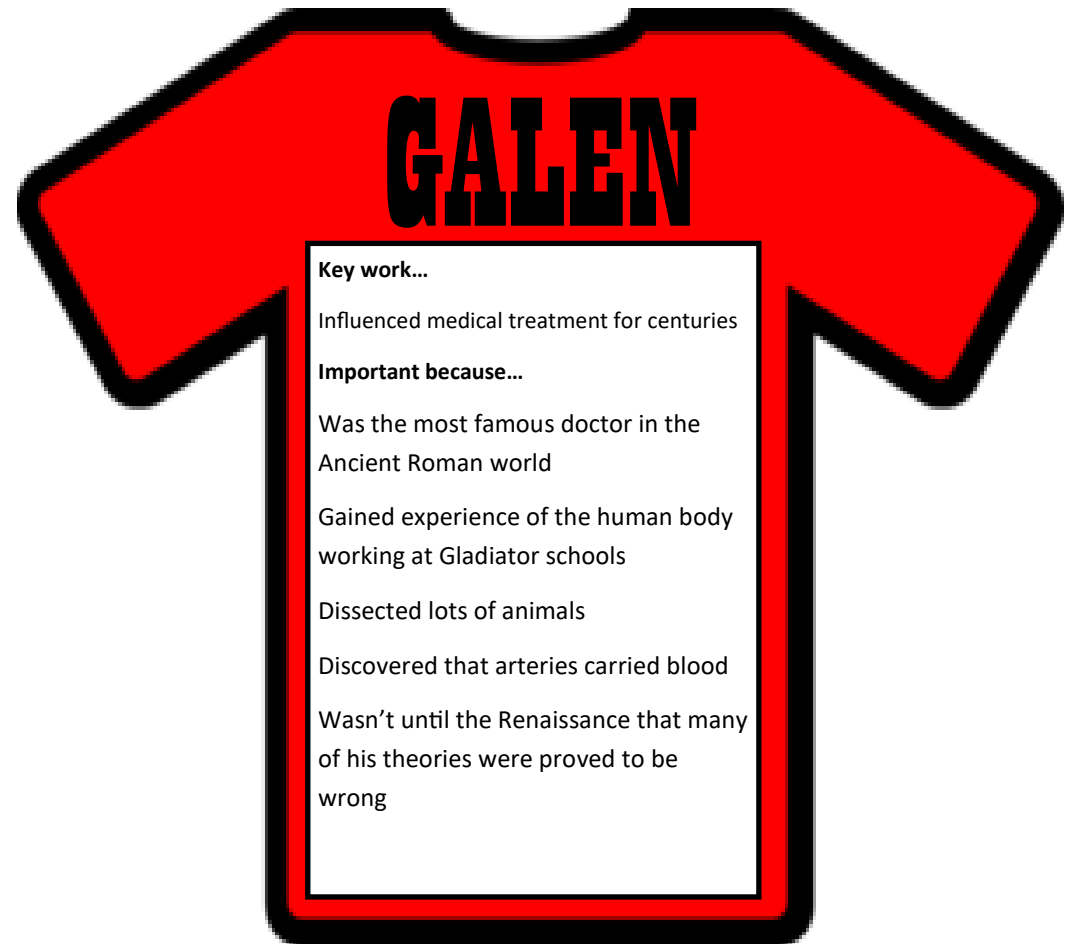
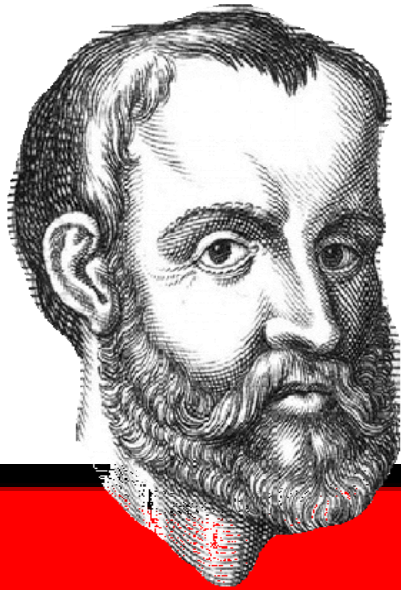
## Important because...

Wrote down all his discoveries which were translated into many languages

Ideas considered the TRUTH

Credited with the theory of the four humours which influenced medicine for centuries after his death

The Hippocratic oath is promise made by doctors to this day



**Key work...**

Influenced medical treatment for centuries

**Important because...**

Was the most famous doctor in the Ancient Roman world

Gained experience of the human body working at Gladiator schools

Dissected lots of animals

Discovered that arteries carried blood

Wasn't until the Renaissance that many of his theories were proved to be wrong



**Sponsored by...**

***I hate***

***France***



# KOCH

#### Key work...

Used dyes to identify different microbes (germs that cause disease)

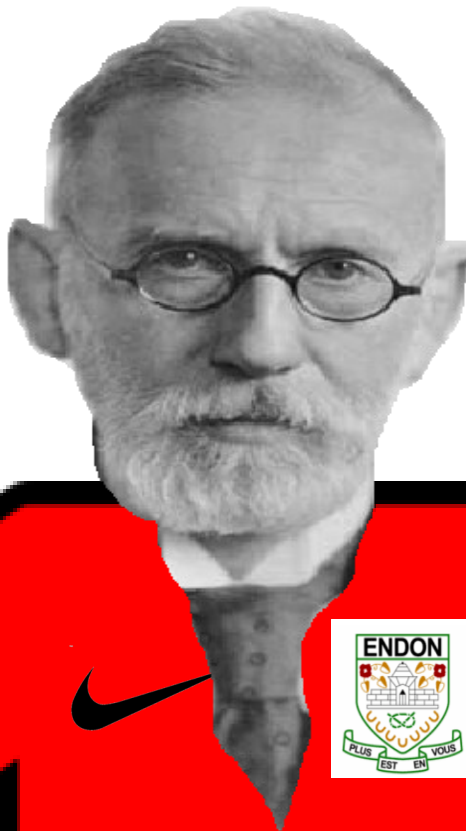
#### Important because...

Built upon the work of Pasteur

Linked specific diseases to specific bacteria using revolutionary scientific methods e.g. used dye to stain them so they could be seen under microscopes

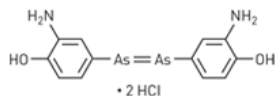
Identified killer bacteria such as tuberculosis and cholera

His true importance is that he inspired other microbe hunters



**Sponsored by...**

## **Magic Bullets**



# **ELRICH**

### **Key work...**

Developed chemicals that acted like the bodies anti-bodies and could attack specific microbes in the body—nicknamed “magic bullets”

### **Important because...**

In 1905 the bacteria causing syphilis was found

He hoped to use arsenic as a magic bullet to target and kill the syphilis bacteria—tried over 600 compounds and the 606th worked!

Inspired the development of other magic bullets



**Sponsored by...**

**Chloroform**

**“Knocking you out  
since 1847”**



# SIMPSON

## Key work...

Solved the problem of pain in operations with the use of Chloroform

## Important because...

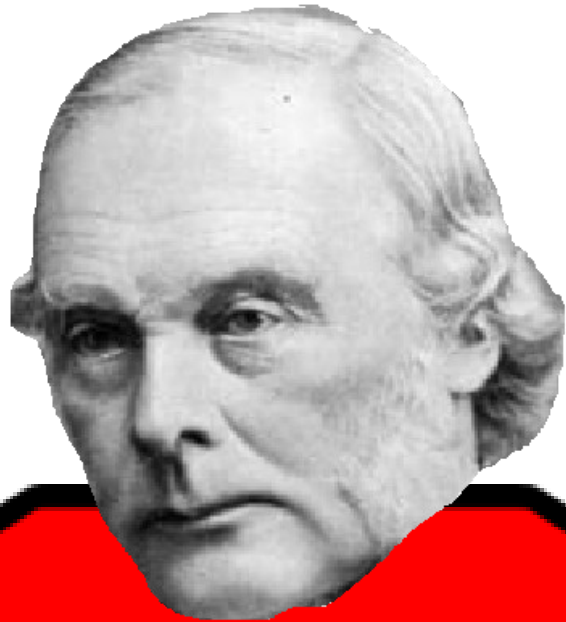
Pain had been a huge problem for surgeons

Previous attempts at using anaesthetics didn't really work properly

His discovery led to longer and more complex operations being possible

Patients still died from infection because Germ Theory not found until 1861

Hugely important in the long term



**Sponsored by...**

**Listerine**



**LISTER**

**Key work...**

He was a pioneer in the use of anti-septic's and inspired a-septic surgery (anti-septic's used to kill germs near wounds and a-septic methods stopped germs getting near wounds)

**Important because...**

Tried to use carbolic acid in his operating theatres

Heard about Germ Theory and realised that germs could be on surgical instruments and people's hands

Immediately reduced death rates in his surgery

In the future people developed a-septic operating theatres





**Sponsored by...**

# **The Chadwick Report**

Report on the  
Sanitary Conditions  
of the Labouring  
Population of Great  
Britain  
  
Edwin Chadwick

# **CHADWICK**

## **Key work...**

His report in 1842 on the Public Health in Industrial towns led to the Public Health Act of 1848

## **Important because...**

His report showed that living conditions in towns were causing people to be unhealthy

He suggested that the government pass laws to make conditions better

The government passed the Heath Act of 1848 but often towns ignored the new laws



**Sponsored by...**

**Broad St  
Water  
Pump**



**SNOW**

**Key work...**

Showed that there was a connection between dirty water and Chloera

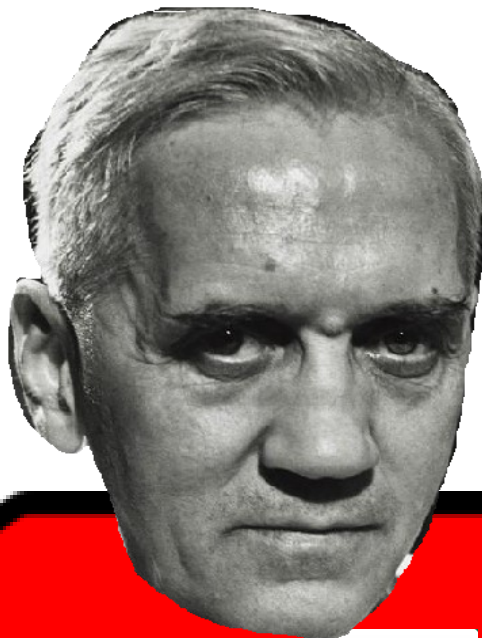
**Important because...**

Studied a Cholera outbreak in Broad Street, London—found all the victims used the same water pump

However, most people still believed in Miasma

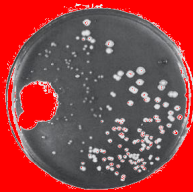
Changed after the Great Stink of 1858

His work partly led to the Public Health Act of 1875 and it became compulsory for councils to offer clean water and sewer systems



**Sponsored by...**  
**Fleming's week-  
end getaways**

**"Getting you out of  
the lab since 1928"**



# FLEMING

#### Key work...

Discovered Penicillin—the world's first anti-biotic

#### Important because...

Saw many soldiers die during WWI from infected wounds caused by staphylococcal bacteria

Was experimenting with way to kill the bacteria—left out some dirty Petri dishes—came back to lab after weekend and found mould stopping the bacteria growing—called the fungus Penicillin

Published findings but no-one was willing to fund further research



**Sponsored by...**

**The US  
Army**



**FLOREY/CHAIN**

**Key work...**

Took on the work of Fleming and took penicillin to the USA for mass production

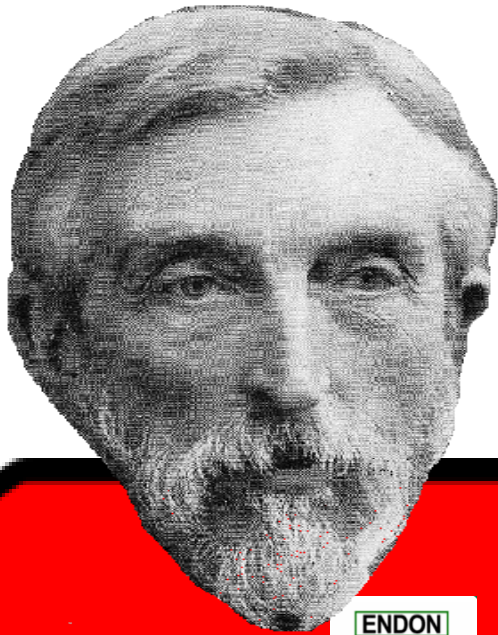
**Important because...**

Worked at Oxford university but didn't have the money to mass produce penicillin

Tested it on humans but a patient died when they ran out of penicillin

Took to America as they know it would be good for treating soldiers in WW2

Grants given out after 1941 and it was produced in huge quantities—saved the lives of 1000's of soldiers



**Sponsored by...**

**London  
Slums**



**BOOTH**

**Key work...**

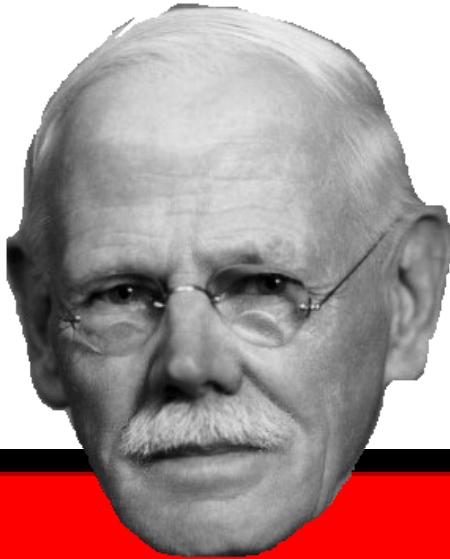
Wrote a report on the state of people living in poverty in London during the Industrial Revolution

**Important because...**

Showed that 30% of Londoners were living in severe poverty and that many could not find work

Showed that people's wages were not enough to support a family

Partly influenced the Liberal government to start to make changes in 1906



**Sponsored by...**



# ROWNTREE

**Key work...**

Did a study of people living in poverty in York and found that it was not always people's fault that they lived in poverty and there were many factors that contributed to this

**Important because...**

Found that many people in York could not afford basic food and housing

Convinced members of the Liberal Party that the government needed to improve basic health and welfare care for people



**Sponsored by...**

**The 5  
Giants**



**BEVERIDGE**

**Key work...**

In 1942 he called for the government to provide care for people, "From the cradle to the grave"

**Important because...**

He said that the government had a duty to care for all of its citizens

He proposed a creation of a welfare state to provide grants and services to people

The Labour government was elected in 1945 on a promise that they would do this

Led to formation of the NHS in 1948



**NHS**

**BEVAN**

**Key work...**

He was the Labour Minister for Health who introduced the National Health Service

**Important because...**

The NHS provided free health care for all people in the UK

Doctors were opposed to the NHS but he persuaded them it was the right thing to do and offered them payment for patient and still allowing them to treat patients for privately for money

The NHS has contributed to a dramatic improvement in the health and life expectancy of people in the UK