LEEDS CASTLE

BUGS & BOILS CHALLENGE

'BUGS AND BOILS' - A HISTORY OF MEDICINE RESOURCE FOR KS3

THIS BOOK BELONGS TO

_____

LEEDS CASTLE KENT ENGLAND

This booklet is designed to help you to explore the topic of the History of Medicine, and to encourage you to do some 'finding out' before you start your GCSE History studies. Some of the questions and activities are designed to get you thinking and as such don't necessarily have a 'correct answer'. However we have included some answers on the last page of this booklet.

To start you off...

Look at these two pictures, which show surgery (patients having operations)

➢ **How many differences can you find between the two images?**

➢ **What can you learn from these two pictures about how medical knowledge has changed from 1800 to the present day?**

PREHISTORIC MEDICINE

'Prehistoric' means 'before written history'.

1. What sort of problems might historians have when trying to find out about medicine in prehistoric times?

....

....

....

2. There are some societies around the world that even in modern times have not used a written language. Can you find some examples of these?

....

....

3. How might people without a written language pass on their knowledge from one generation to the next of how to treat illness and injuries?

....

....

4. Belief in the spirit world was very important in prehistoric societies. People thought that getting rid of evil spirits inside you was the way to get well again.
This image of a skull, which is thousands of years old, gives us a clue as to how pain and illness was sometimes treated.

What do you think happened to this patient? (Look closely at the hole!)

....

....

Did he survive?

....

MEDICINE IN ANCIENT EGYPT

In Ancient Egypt writing (**hieroglyphics**) had been developed so we have more information about medical knowledge at that time.

The **pharaohs** ruled Egypt and were worshipped as kings and gods. When they died they were buried in huge tombs and **pyramids** containing lots of information: wall-carvings, paintings and scrolls of **papyrus**.

Egyptians had **priests** who were also doctors who wrote down their treatments so the information could be passed on to other doctors.
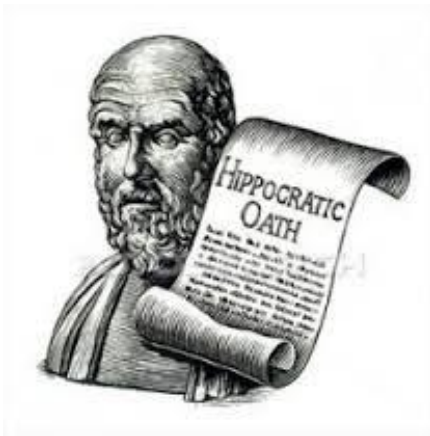
Egyptians **mummified** bodies because they believed they would be needed in the life after death (**afterlife**): the main organs were taken out and preserved and the body was treated with **salt** and **oils** and wrapped in bandages before it rotted.

Egyptians believed that the body had **channels** that needed to be kept clear for good health. They got ideas like this from observing the flow of water from the River **Nile**, which **irrigated** their crops.

Find the key words (in bold above) in this Word Search:

```
F D E T A G I R R I T Y J G K
N E W L P M U M M I F I E D N
G S G Q I S H S O C X I C L E
S G K Q U C S T W R R H O A W
N A C U E I C S G B N E L I N
H Z L V F H Y E S C S M X Q J
F Q M T I P K I A L H N S Y Y
P T O A L Y D R S M O Q D E A
A P K Y R L Y P L V A X I W K
P Z C A E G Q I E U R X M E N
Y R N T T O N E N O A Q A K S
R S Q V F R G U N V H E R L L
U T F H A E H H A M P R Y A I
S N O D J I Z Y H F E Q P K O
T J W X V H L E C H V F N D P
```

THE ANCIENT GREEKS

5

Hippocrates was a Greek doctor who lived nearly 2,500 years ago. He is sometimes called the 'Father of Medicine' because he wrote down his ideas about how doctors should treat their patients and these ideas were passed down over hundreds of years and influenced many doctors. He also wrote about the Theory of the Four Humours, body fluids that needed to be kept in balance for good health.

There are two things for you to find out and write/draw in the boxes below:

1.   Three things that the Hippocratic Oath says doctors should do.

2.   A diagram to explain the Theory of the Four Humours.

The Hippocratic Oath

The Theory of the Four Humours

PUBLIC HEALTH IN THE ROMAN EMPIRE

The Romans believed there was a link between dirt and disease, but they didn't really understand it. Their main aim was to keep the Roman Army healthy because they needed the army to control their huge empire.

The Romans built water systems such as aqueducts to bring clean water into their towns and cities, and sewers to take away the dirty water. They built public bathhouses and toilets (latrines) to keep the people clean.

When the Romans came to Britain they built huge bath complexes in many of their cities and even in smaller towns and villas (large country houses belonging to rich people) Find out the name of the Roman bath or villa that would have been nearest to where you live.

....

Unscramble these words:

Quadcute…………………………………………

Werses………………………………………

Nesaltir…………………………………………

Pirmee …………………………………………

Hushatsboes ……………………………………………

In 2013 archaeologists found this object when they were excavating Fishbourne Roman Villa.

What do you think it is?

....

....

MEDIEVAL EUROPE

In the Middle Ages (about 400 AD – 1500 AD) most doctors followed the ancient ideas of Hippocrates and Galen (a famous Greek doctor who taught in Rome and wrote many books) The Church taught that these ancient beliefs were the only correct ones. The Church also said that disease was a punishment from God and that only praying to God could cure you.

In 1348 a disease called the plague came to England. It has since become known as the Black Death because it killed nearly half the population of Europe. It was probably so severe because two types of plague spread at the same time: Pneumonic and Bubonic.

Pneumonic plague was spread by people breathing or coughing germs over each other. Bubonic plague was spread by fleas jumping from disease-ridden rats to humans and biting them.
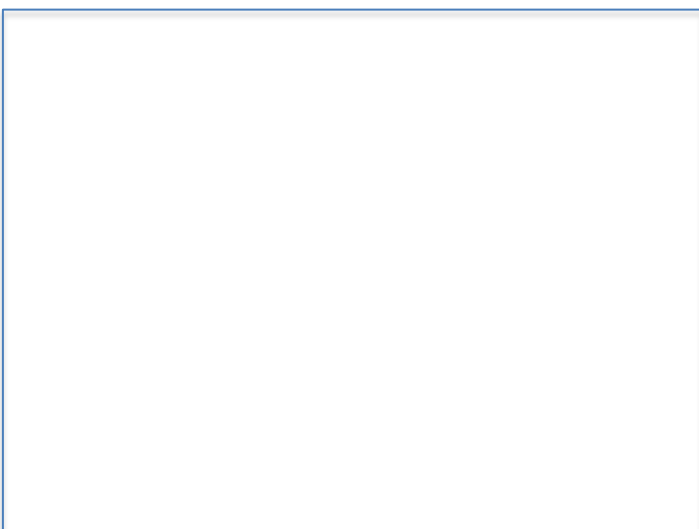
Because people did not know about germs at that time they did lots of strange things to try and protect themselves from catching the plague, or to find a cure.
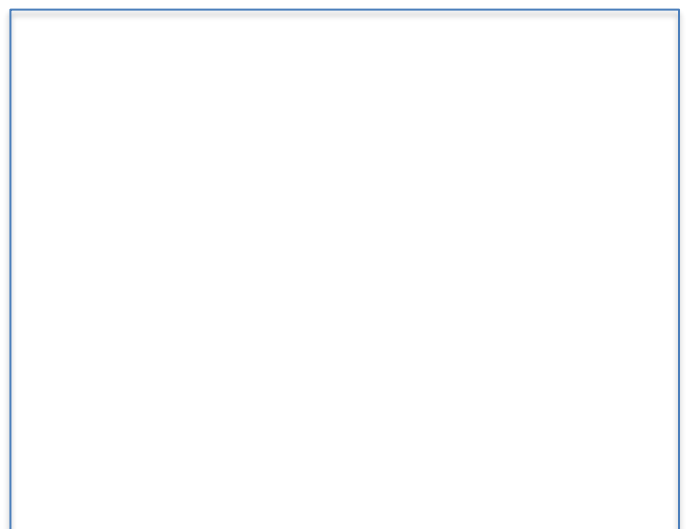**Can you work out what these people are doing and why?**

Now draw two diagrams or pictures showing how the two different types of plague were spread.

Pneumonic Plague	Bubonic Plague

THE RENAISSANCE

In the 16th century people began to challenge the old ideas about diseases, medicine and how the body worked. They wanted to find out for themselves, by experimenting and observing.

People began to understand the anatomy of the body because Vesalius and other people published drawings of dissections of human bodies.

Surgeons such as Pare found better ways to deal with wounds from surgery or battle and published their ideas.

And William Harvey finally worked out how blood circulates around the body – quite important if you're going to do a surgical operation on someone!

13thcentury medical textbook

16th century medical textbook

Compare these two drawings and explain why you might be slightly safer having surgery in the 16th century than the 13th century!

....

....

THE INDUSTRIAL REVOLUTION: 1750 – 1900

From around 1750 to 1900 life changed very rapidly for many people. New inventions and changes to the way we worked made everyday day life better and healthier in many ways.

However in some ways it seemed like no real progress had been made. The huge cities that had grown up around the new factories to house the factory workers were overcrowded, and living conditions were often appalling. Typhoid and cholera epidemics regularly swept through Britain, killing thousands of people.

Label all the threats to health you can spot in this cartoon:

A COURT FOR KING CHOLERA.

....

....

....

19TH CENTURY MEDICAL HEROES

In the 19th century there were many great medical advances, often the result of individual people being inspired or working hard to make improvements.

Find out who these people were from the clues we've given you:

1. My 'Germ Theory' was the result of my research into the wine and beer industry in France, and explained the link between germs and disease.

    ....
2. I pioneered the use of vaccination against smallpox.

    ....
3. I was the first woman to qualify as a doctor in Britain.

    ....
4. I discovered that chloroform could be used as an anaesthetic.

    ....
5. I was known as the 'Lady with the Lamp'

    and improved standards of nursing during and after the Crimean War. There's a small bronze statue of me in Leeds Castle.

    ....
6. I was a civil servant who reported to the government in the 1830s and 40s on the links between poverty, living conditions and ill health.

    ....
7. I developed the use of carbolic spray to reduce infection during surgical operations.

    ....
8. I proved the link between cholera and the water supply around Broad Street in London in 1854

    ....
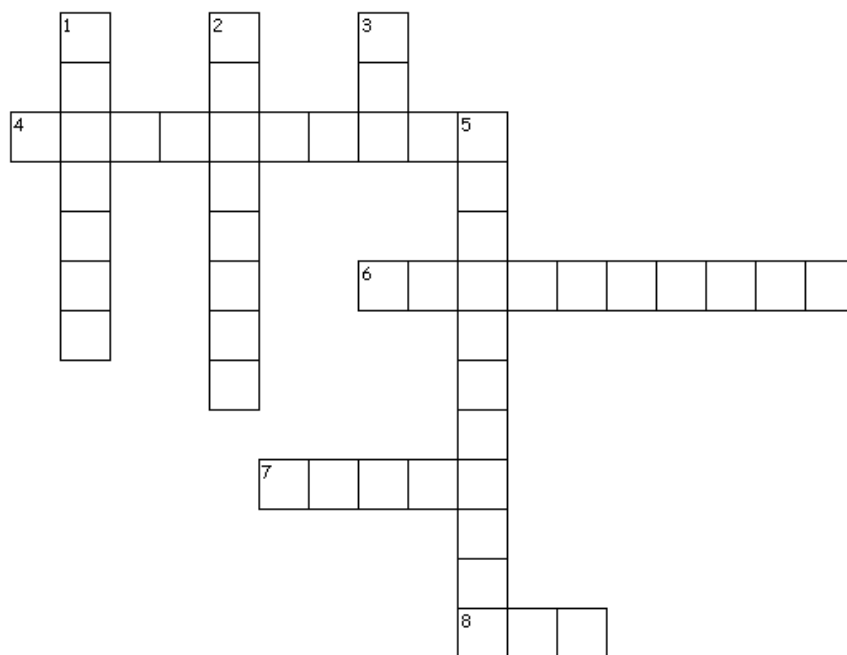
20TH CENTURY MEDICINE

In the 20th century private and government investment, technological advances and pioneering teamwork enabled huge leaps in medical knowledge. Two World Wars (WWI and WW2) caused huge loss of life but also meant faster development of surgical procedures and infection control.
After the wars government began to take an even greater role in controlling and improving public health.

Research some key developments during this period, to solve this crossword.

Across

4. A method of replacing missing organs or limbs

6. Antibiotic discovered by Alexander Fleming

7. Help doctors see inside the human body

8. Set up in 1948 to provide free health care to everyone in Britain

Down

1. Performed the world's first heart transplant in 1967

2. A type of surgery pioneered by Archibald MacIndoe during WW2. Some of his patients convalesced at Leeds Castle

3. Discovered in 1953 by Crick, Watson and Franklin

5. A way of replacing blood lost due to injury or surgery

Answers

Page 1:
1. No written records of treatments
2. Aborigines in Australia
3. Through stories or songs
4. He was trepanned – the patient probably survived the operation as the bone has healed

Page 6: aqueduct, sewers, latrines, empire, bath houses
It was a toilet sponge, which the Romans used instead of loo paper!

Page 7: Key word here is **flagellants**

Page 10:
Pasteur, Jenner, Garrett, Simpson, Nightingale, Chadwick, Lister, Snow

Page 11:
Xrays Help doctors see inside the human body
Penicillin Antibiotic discovered by Alexander Fleming
Transfusion A way of replacing blood lost due to injury or surgery
DNA Discovered in 1953 by Crick, Watson and Franklin
Transplant A method of replacing missing organs or limbs
Cosmetic A type of surgery pioneered by Archibald Macindoe during WW2. His patients convalesced at Leeds Castle
Barnard Performed the world's first heart transplant in 1967
NHS Set up in in 1948 to provide free health care to everyone in Britain