Key Features of Renaissance Medicine.

SCIENCE & TECH, INDIVIDUALS, ATTITUDES
Causes and Diagnosis of disease

As you’re starting to see, there hasn’t been much progress on ideas of what causes disease. BUT – some doctors were trying.

Thomas Sydenham was a PIONEERING doctor who made some progress, especially in diagnosis.

• He believed that each disease was different and that it was important to identify the exact disease so the correct remedy could be chosen.
• Taking a patient’s pulse was very important to Sydenham

Sydenham became one of the most respected physicians in London.
• “You must go to the bedside. It is there alone that you can learn about disease”
• He stressed the importance of getting the patients full history, health & symptoms, OBSERVING and recording the illness with great care so the correct diagnosis was made.
Sydenham became known as the ‘English Hippocrates’ – **What can you infer from this?**

- He made very detailed descriptions of many illnesses including the first description of scarlet fever.
- He also believed the body should be left to fight the illness itself. *Imagine this compared to the traditional order of bleeding and purging! Sydenham prescribed ‘Roast chicken and a bottle of wine’*

**Epidemiology** is the study of how often diseases occur in different groups of people and why.

**FACTOR: WAR / ATTITUDES**

1624-89: Sydenham’s practical approach to medicine may have developed because he spent several years fighting in the English Civil Wars, as a result, spending less time at university.
Scientific Developments

- The first meetings of people interested in discussing new scientific ideas was in 1645. The group met weekly to discuss new ideas in:
  - Physics
  - Botany
  - Astronomy
  - Medicine
  - Other sciences

  Members also demonstrated experiments (source A) because the society had its own lab and equipment such as microscopes.

- It also published books and articles to spread new ideas and discoveries.

- In 1662 the group became known as the **ROYAL SOCIETY** after King Charles II attended the meetings.

**FACTORS: SCIENCE / COMMUNICATION / ATTITUDES**

**Founding of the Royal Society in 1660.** Their sponsorship of scientists in research and assistance with publication, improving the spread of knowledge.

**In 1665 Richard Lower, a member of the Royal Society, made the first experimental blood transfusion. He transfused blood from a dog to another dog and later from a sheep to a man, a ‘crackbrained’ student called Arthur Coga. It was said that people hoped this would make Coga cleverer!**
Technology

During the 1600’s changing ATTITUDES created a ‘Scientific revolution’. Scientists challenged old ideas, experimented to make new discoveries.

The importance of printing
Earlier in this chapter there have been references to the development of printing. Printing was a crucial development which helped change ideas in medicine and many other subjects because it spread new ideas far more rapidly. Books could be printed faster and more cheaply than when they were copied by hand. The printing press was invented by Johannes Gutenberg in the 1450s. By 1500 printing presses were being used throughout western Europe. Some books were highly illustrated such as this page from Andreas Vesalius’s book on anatomy.

Stage 1
Read what has been written before – e.g. about the human body.

Stage 2
Think about what you have read and ask questions about it.

Stage 3
Test what you have read by experiment or observation. Create your own hypothesis, then test that to see if it is right or wrong.

Stage 4
Write up your findings and tell other people about them.
Let’s reflect...

Stepping stones to the future

1. The new experimental approach to science changed the way scientists and doctors thought. Now they were prepared to challenge old ideas by looking for new discoveries that would make a difference to people’s lives.

2. Books by scientists and doctors and their discussions at meetings stimulated more ideas and thinking.

3. Support for the ideas of Galen faded during the late 1600s.

BUT ...

1. This change of attitude was only the beginning. Many more discoveries were needed before people’s health would be much better. Medical treatments in the late 1600s still included ingredients such as frogspawn and ‘cold deadman’s skull’.

2. It took time to end opposition to experimental science from supporters of Galen.