## Scientific method

<u>History</u>



Scientific Method Assignment Instructions: Using this document, provide brief but complete answers to the questions below. Use your own words – do not copy text from the textbook or websites. Cite any sources and provide references where needed.

1. What is the Scientific Method?

The scientific method involves a number of steps. Firstly, there must be a question that needs answering. This can be used to formulate a hypothesis, which will later be proved or disproved. This hypothesis must then be rigorously tested and investigated. Further analysis of the results will then show whether the hypothesis is true or false.

2. What is the heliocentric view of the universe?

The heliocentric view is the one that is currently accepted by science, and suggests that all the planets in the solar system revolve around the sun.

3. What is the geocentric view of the universe?

The geocentric view suggests that the Earth is the body around which all the planets and the Sun in the solar system orbit (Young, 2006).

4. Which of the above views of the universe is observed to be correct? The scientific method suggests that the heliocentric view of the universe is most correct, through observations and calculations (Young, 2006).

5. Who is attributed as first proposing this observed view of the universe? Copernicus

6. Who was successful at promoting this view? How did the Roman Catholic Church respond?

Galileo also contributed to providing evidence for the heliocentric view of the Universe. The Roman Catholic Church denied the heliocentric view and suggested that people that believed this view were heretics (Young, 2006) https://assignbuster.com/scientific-method-essay-samples/ because it contradicted some of the passages in the Bible.

7. How did new scientific discoveries and changes in thought challenge Christian beliefs during the Scientific Revolution?

Many of the new scientific discoveries were thought to be at odds with the teachings of Christ and therefore were not accepted in the eyes of many Christians at the time (and some are still not accepted). This made it very difficult for scientists to publish their works for fear of being ostracized from society.

8. What did Rene Descartes mean by, " I think, therefore I am"? Descartes was implying that the very act of thinking allows him to believe in himself – if an individual has thought, then something must exist.

9. How did Baruch (Benedict) Spinoza' s philosophical views differ from Descartes'?

Spinoza believed that there was only infinite substance, in contrast to Descartes' dualistic view that there is infinite and finite substance. He also rejected the thought that there is a ' thinking substance'.

10. What role did Protestantism play in the Scientific Revolution? Protestant values are thought to have encouraged the development of scientific thought by separating Church from state and therefore allowing these ideas to be published and spread legally and politically. The Catholic Church began to have less power and therefore science had the freedom to spread.

## References

Young, Mitchell. 2006. The Scientific Revolution. Greenhaven Press.