

Name _____

Galileo Galilei: Pioneering the Science of the Stars

Open-Ended Response Answer Key

1. Galileo's invention of the telescope revolutionized astronomy by allowing detailed observations of celestial bodies, providing evidence for heliocentrism, and advancing the understanding of the universe.
2. The conflict between Galileo's scientific findings and the Catholic Church's teachings led to his trial for heresy. He was forced to recant his views, and the Church's opposition to heliocentrism persisted for centuries.
3. The scientific method involves making observations, forming hypotheses, conducting experiments, and drawing conclusions. Galileo's work exemplified these principles through his systematic observations, experiments, and emphasis on empirical evidence.
4. Without Galileo's contributions, our understanding of the universe might have been delayed, and the acceptance of heliocentrism could have taken longer. Scientific progress in astronomy and physics might have been slower, affecting subsequent developments in science and technology.

