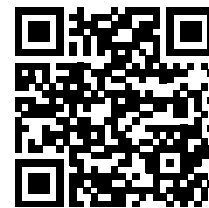


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Natural Philosophy in the Age of the Scientific Revolution



In the 16th and 17th centuries, a transformation in _____ began that led to the birth of modern science. This period is known as the Scientific Revolution. It was a time when _____ about the natural world began to expand rapidly. The term "natural _____" referred to the study of nature and the physical universe. It was the precursor to what we now call _____.

Key figures of this era, like _____, Galileo, and Newton, challenged the traditional views of the universe. Copernicus proposed the _____ model, placing the Sun at the center of the universe, contrary to the Earth-centered model that had prevailed for centuries. This idea faced much _____, especially from the church, as it contradicted the established _____ view.

Galileo furthered the heliocentric theory through his _____ with a telescope, a revolutionary tool at the time. He discovered moons orbiting _____, proving that not everything in the heavens orbited the Earth. This evidence supported the Copernican system and marked a significant shift in _____ thought.

Isaac _____ introduced the laws of motion and universal gravitation, which unified celestial and terrestrial mechanics. His work, Principia _____, is considered one of the most important works in the history of science. Newton's laws explained why the planets move in _____ orbits around the Sun, providing a mathematical framework for the heliocentric theory.

The Scientific Revolution was not just about the _____ but also about a new way of thinking. It emphasized observation, _____, and questioning of traditional beliefs. This new approach laid the groundwork for the modern _____ method, which is the basis of scientific inquiry today.

heliocentric

Jupiter

Copernicus

observations

Mathematica

astronomical

science

opposition

scientific

philosophy

knowledge

geocentric

elliptical

discoveries

Newton

thinking

experimentation