

name: _____

class: _____

date: _____

The Dawn of Modern Science



In the 16th and 17th centuries, a significant _____ occurred in the way humans acquired knowledge. This period, known as the _____ Revolution, marked the emergence of modern science through the development of new _____ and methodologies. One key figure, Galileo Galilei, utilized the _____ to observe the heavens, challenging long-held views about the universe. His observations provided strong _____ against the geocentric model, which placed Earth at the center of the universe, and supported the heliocentric theory, where the _____ is at the center. Another revolutionary figure, Isaac _____, formulated the laws of motion and universal gravitation, fundamentally changing our understanding of the physical _____. Newton's work demonstrated how a set of laws could explain both earthly and celestial phenomena, unifying the _____ under a single theoretical framework.

The scientific method, characterized by systematic observation, _____, and experiment, followed by the formulation, testing, and modification of _____, became the standard for acquiring knowledge. This method contrasts sharply with previous approaches that relied more on philosophical _____ or appeal to authority than on empirical evidence. The shift towards empirical evidence and the scientific method encouraged skepticism and _____, leading to further discoveries in chemistry, physics, and biology.

One notable achievement was the development of the _____, which opened up the microscopic world to human observation, leading to advancements in biology and medicine. Scientists like Robert _____ and Antonie van Leeuwenhoek made groundbreaking discoveries about the cell and _____, respectively. The Scientific Revolution laid the groundwork for the _____, a period where reason and scientific thought were advocated as the primary sources of legitimacy and _____. This era fundamentally changed how society viewed nature, the universe, and human capability, establishing the basis for modern _____.

Newton

transformation

inquiry

world

authority

Scientific

measurement

cosmos

techniques

telescope

science

Hooke

microscope

hypotheses

reasoning

microorganisms

Sun

evidence

Enlightenment