

name: class: date:

Physics and the Scientific Revolution



During the 16th and 17th centuries, a significant change occurred in the way people understood the _____. This period, known as the Scientific Revolution, marked the emergence of modern science through the development of _____, astronomy, biology, and chemistry. Before this era, many explanations of the natural world were based on _____'s theories, which were often accepted without question. However, figures like _____ Galilei and _____ Newton challenged these old ideas and laid the groundwork for modern physics. Galileo, using his _____, made discoveries that contradicted the geocentric model of the universe, which placed Earth at the center. Instead, he provided evidence for the _____ model, where the Earth and other planets orbit the sun. Isaac Newton further transformed physics with his _____ of motion and universal gravitation, explaining how objects move on Earth and in space. This revolution wasn't just about new discoveries; it was about a new way of thinking. Scientists began to rely on _____ and mathematical proofs to understand the universe, moving away from philosophical speculation. The invention of the _____ press also played a crucial role, allowing ideas to spread more quickly than ever before. One of the most important outcomes of the Scientific Revolution was the _____ of scientific inquiry it established. This method emphasized observation, hypothesis formation, and experimentation as the basis for gaining knowledge. It represented a move towards a more empirical and systematic _____ to science and knowledge. The impact of the Scientific Revolution extended beyond the realm of science. It influenced the Enlightenment and the development of modern _____, promoting ideas of progress, rationality, and the capability of humans to understand and shape their world.

world

Galileo

Isaac

approach

printing

physics

Aristotle

society

method

heliocentric

laws

experimentation

telescope