

THE SCIENTIFIC REVOLUTION

16th - 18th CENTURIES

A period of major advances in science and knowledge. Thinkers used observation, experimentation and reason to understand the natural world.

EXAMPLES

Galileo's telescopic observations

He saw Jupiter's moons, the phases of Venus and the mountains on the Moon.



Newton's law of gravity

The same force that makes apples fall from trees keeps the planets in orbit.



Scientific experiments

Scientists like Robert Boyle studied gases and showed that air has properties that can be measured.



MAJOR FIGURES



Nicolaus Copernicus (1473-1543)
Proposed that the Earth orbits the Sun.



Galileo Galilei (1564-1642)
Used the telescope to observe the heavens and support new ideas.



Isaac Newton (1642-1727)
Discovered the law of gravity and the laws of motion.



KEY IDEAS



Observation
Careful watching of the natural world.



Experimentation
Testing ideas through experiments.



Reason
Using logic and mathematics to find answers.



Skepticism
Questioning old beliefs and accepting evidence.

IMPACT



Changed how people understood the world.



Laid the foundations for modern science.



Encouraged progress in technology, medicine and education.

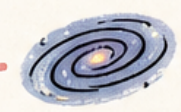


Promoted a culture of curiosity, inquiry and critical thinking.

KEY DISCOVERIES



Heliocentrism
The Sun is at the center of the solar system.



New view of the universe
The universe is vast and follows natural laws.



Laws of motion and gravity
Objects move in predictable ways; gravity attracts objects.



Advances in medicine, chemistry and biology
Better understanding of the human body, substances and living things.