Astronomy is the natural science that studies celestial objects and phenomena.

History:

Ptolemy (c90-168AD): Greek Astronomer who developed the Geocentric Model of the universe, where the earth was the center of the universe and all the planets and the sun orbited around it.

Nicolaus Copernicus (1473-1543): Mathematician and astronomer who formulated the Heliocentric Theory, stating the Sun, not the Earth was the center of the universe.

Tycho Brahe (1546-1601): Danish nobleman developed astronomical instruments and worked in measuring and fixing the positions of stars, which paved the way for future discoveries made by Johannes Kepler.

<http://galileoandeinstein.physics.virginia.edu/lectures/tycho.htm>

Galileo Galilei (1564-1642): Italian scientist that paved the way for modern physics and astronomy. While Galileo did not invent the telescope, he did build his own, modeled by others made in other parts of Europe. Galileo was instrumental in “confirming” the Heliocentric Theory.

Johannes Kepler (1571-1630): Starting as an assistant to astronomer Tycho Brahe, Kepler was a German mathematician, and astronomer known for his laws of planetary motion:

1. Law of Elipses: All planets move about the Sun in elliptical orbits, having the Sun as the foci
2. Law of Equal Areas: A radius vector joining any planet to the Sun sweeps out equal areas in equal lengths of time.
3. Law of Harmonies: The ratio of the squares of the periods of any two planets is equal to the ratio of the cubes of their average distances from the Sun.

[www.physicsclassroom.com/class/circles/Lesson-4/Kepler-s-Three-Laws](http://www.physicsclassroom.com/class/circles/Lesson-4/Kepler-s-Three-Laws)

Isaac Newton (1643-1727): Study the works of Kepler, and Kepler’s Laws, Newton developed theories for universal gravitation, Laws of Gravity.