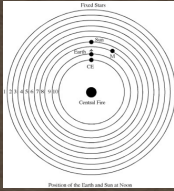


Plato
430 BC – 348 BC



Student of Socrates who recorded his conversations or dialogues. His dictum in the *Timaeus* requiring that all celestial objects move in uniform circles constrained astronomical models for nearly two millennia until Kepler showed that planets move in ellipses.

Philolaus of Croton
471 BC – 386 BC



Defined the universe in terms of discrete and continuous elements in proper proportions, and (following Pythagoras) proposed that the earth is not the center of the universe. <http://plato.stanford.edu/entries/philolaus/noon.jpg>

Aristarchus of Samos
311 BC – 231 BC



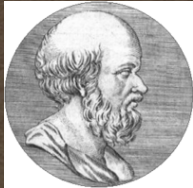
Determined the distance from the earth to the moon and sun (correct method, incorrect results), and according to Archimedes, thought that the planets revolved around the sun.

Eudoxus of Cnidus
411 BC – 356 BC



Developed method of exhaustion, used multiple interconnected spheres to account for retrograde motion.

Eratosthenes of Cyrene
277 BC – 196 BC



Created a system of latitude and longitude, calculated the circumference of the earth and tilt of earth's axis, attempted to calculate the distance to the Moon and Sun.

Aristotle
385 BC – 323 BC



Student of Plato who built philosophy based on observation, induction of general principles. Theory of causes determined motion and material of celestial objects.

Hipparchus
191 BC – 121 BC



Described lunar and solar motions and eclipses, created a star catalogue and stellar magnitude system (still in use).

Claudius Ptolemy
AD 89 – AD 167



Used geometric methods to create a calculatory model of planetary motions using epicycles and deferent circles that dominated western astronomy until Copernicus.

450 BC 425 BC 400 BC 375 BC 350 BC 325 BC 300 BC 275 BC 250 BC 225 BC 200 BC 175 BC 150 BC 125 BC 100 BC 75 BC 50 BC 25 BC AD 1 AD 25 AD 50 AD 75 AD 100 AD 125 AD 150 AD 175