

Geocentric

Earth is the center of the solar system

Aristotle - Greek Philosopher ~ 1000BC

Proof that Earth does not move:

1. Winds do not knock us over (600mph @ WL)
2. Things tossed in the air come back to you
3. Birds do not fly off into space

Ptolomy:

Puts Earth at center of solar system

Moon next, because you can see details it must be close

Sun next, because it's so bright

Venus next – brightest object other than moon in night sky

Jupiter – 2nd brightest to Venus

Mars next – but there is a problem, Mars goes backwards

Retrograde Motion, see video at

<http://www.bing.com/videos/search?q=Mars+Retrograde+motion&FORM=HDRSC3#view=detail&mid=79EAD940E0150890F7C779EAD940E0150890F7C7>

Heliocentric:

Sun is the center of the Solar System

Nicolas Copernicus - Polish Monk ~1400 AD

solves the problem of Mars' Retrograde Motion (backwards - see video)

Galileo - 1500s Italian Astronomer

1st True Scientists because he uses Experiments to test his ideas

Falling objects (gravity)

Clocks

Uses telescope to look into space

Observes Jupiter - finds 4 moons orbiting it, realizes Copernicus is right that earth is not the only center of revolution

Gets in trouble with Church which convicts him of Heresy & sentences him to life under house arrest, but the word is already out