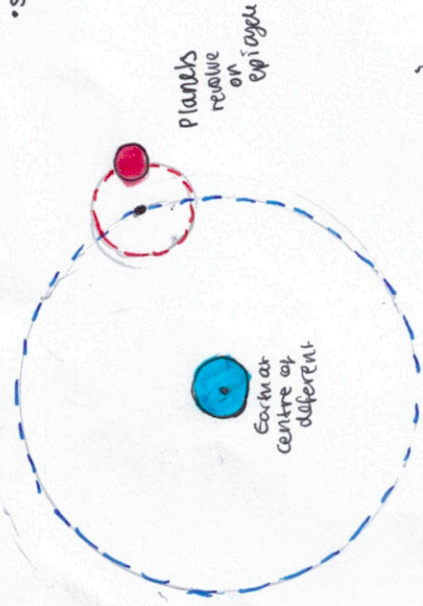


The Aristotelian Universe

Modifications

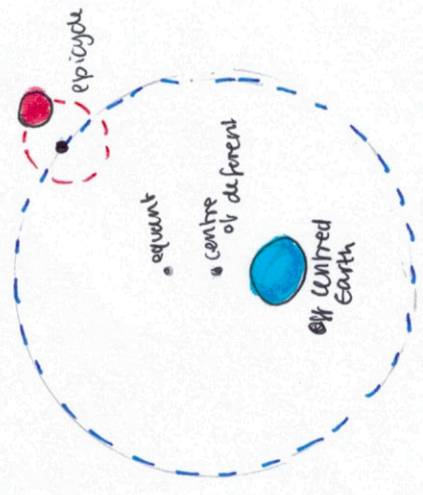
- based on 4 elements
- system of concentric crystalline spheres driven by a 'prime mover' that carried everything around Earth



This still couldn't explain exact positions and changing speeds/directions of the planets

Ptolemy

could explain retrograde motion



Ancient civilisations used solar and lunar cycles for agricultural and religious systems

Babylonians invented 60 mins 60 seconds

The Egyptians used the time at which Sirius rose after sunset to predict when the Nile would flood
 ↳ important for agriculture because river brought mud and silt which made the land fertile

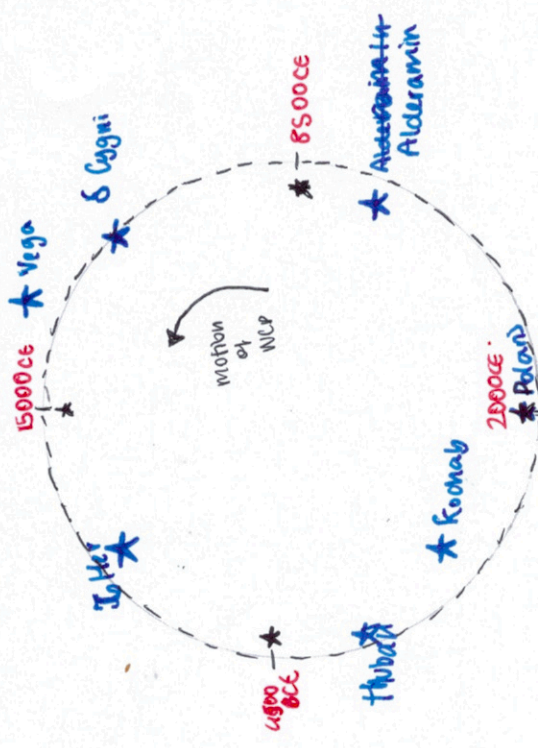
on lunar stone calendars in Ecuador

the Warren Field calendar is the oldest surviving calendar believed to be correlated to moon phases and sunrise on winter solstice

Stonehenge aligned to midsummer sunrise and midwinter sunset

Chichen Itza may have been used for astronomical observations

Many ancient monuments are now misaligned due to the precession of the Earth's axis
 this cycle lasts 26000 years



Early Models of the Solar System