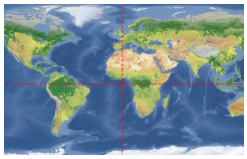
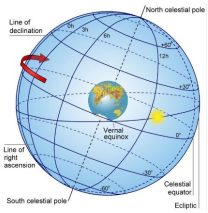
# ASTRONOMY
## Curriculum Map: Year 10

### AUTUMN TERM

- The Earth's Structure
  - Core
  - Mantle
- The Earth's atmosphere
  - Light Pollution
  - Clear skies
- Stars and constellations
  - Asterisms
  - Pointer stars
- Coordinate systems
  - Declination
  - Right ascension
- Circumpolar stars
  - Polaris
  - North celestial pole
- Surface features of the Moon
  - Craters
  - Mare
- Origin of the Moon
  - Giant impact
  - Accretion
- Exploration of the Moon
  - Apollo missions
  - Artemis
- Practical observing
  - Naked eye
  - Telescopes
- Diurnal motion
- The celestial sphere
- The night sky
  - Visible objects
  - Apparent movement
- Latitude and longitude
  - Prime meridian
  - Equator

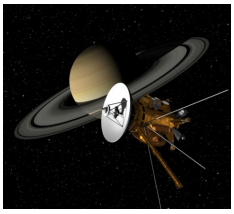





End of unit test

### SPRING TERM

- Planets and dwarf planets
  - Pluto
  - Ceres
- Comets
  - Long period
  - Short period
- Meteors and meteorites
  - Impact craters
  - Ejecta
- Size of the Solar System
  - Astronomical unit
  - The Oort cloud
- Space probes
  - Perseverance
  - Juno
- Optical telescopes
  - Refactors
  - Reflectors
- Observing planets
  - Zodiacal zone
  - Ecliptic
- Kepler's laws
  - Planetary motion
  - Orbits
- Kepler's third law



End of unit test

- Solar and lunar cycles
  - Days and years
  - Months
- Models of the Solar System
  - Ptolemy
  - Copernicus

### SUMMER TERM

- Observing the Sun
  - Solar telescope
  - Pinhole camera
- Eclipses
  - Solar eclipse
  - Lunar eclipse
- The Sun's interior
  - Convection zone
  - Radiative zone
- The Sun's atmosphere
- The solar wind
  - Aurora
  - Van Allen belt

- Tides and procession
  - Spring tide
  - Neap tide
- Diameters and distances
  - Comparing sizes
  - Eratosthenes
- The Earth, Sun and Moon
- End of unit test
- Trip - Royal Observatory Greenwich