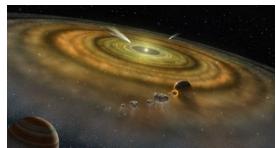


# ASTRONOMY

## Curriculum Map: Year 11



Sidereal and synodic time

### AUTUMN TERM

The equation of time

Longitude and time zones

Formation of planets and moons

- Accretion
- Bombardment

Lunar phases

- Lunar orbit
- Earth and Moon

Sundials and shadow sticks

- Shadow sticks investigation
- Local noon

Interactions



Gas giants

- Formation
- Jupiter

H-R diagram

- Main sequence
- The axis

Magnitudes

- Apparent magnitude
- Absolute magnitude

Variable stars

- Cepheid variables
- Pulsars

GCSE Mock exam



Active galaxies

- Supermassive black hole
- Accretion disc

- Hubble's classification
- Tuning fork diagram

Classification of galaxies

- The Sun's location
- Barred spiral galaxy

The Milky Way

- Supernovae
- Neutron stars

Evolution of massive stars

Radio telescopes

- Jodrell Bank
- Bernard Lovell

### SPRING TERM

Other wavelengths

- Infrared
- X-rays

End of unit test

### SUMMER TERM

Hubble's law

- Expanding Universe
- Red and blue shift



Dark matter and dark energy



Revision: Telescopic astronomy

The Big Bang

- Different models
- Supporting evidence

Revision: Naked eye astronomy

GCSE Astronomy exams