Year 11: ASK Yourself!

Subject: Physics
Unit: 8 – Space Physics

	Launching 1-2	Developing 3-4	Progressing 5-6	Mastering 7-9
Skills				
	To be able to recall that an observed increase in wavelength of light results in red-shift. To be able to recall that the Big Bang suggests the Universe started from a small dense region.	To be able to explain how red-shift provides evidence for the Big Bang. To be able to recall that more distant galaxies are travelling away faster.	To be able to explain the role of gravity in enabling objects to describe circular orbits.	To be able to explain the relationship between speed and radius in stable orbits. To be able to explain how in a stable orbit that speed is constant but that velocity is changing.
Knowledge				
	To be able to describe how planets and dwarf planets are arranged in the Solar System. To be able to compare the orbital motions of planets, moons and artificial satellites. To be able to recall what stars are formed from.	To be able to recall that stars go through a life cycle. To be able to recall that elements heavier than iron are produced in a supernova.	To be able to explain the role of gravity in star formation. To be able to describe the stages in the life cycle of a star similar in size to our Sun and of a star much larger than our Sun.	To be able to explain the balance of forces in a stable star. To be able to explain the role of fusion in the formation of elements. To be able to explain the role of fusion in the life cycle of a star.