











SP7 Astronomy





SP7a The Solar System

Step	Learning outcome	Had a look	Nearly there	Nailed it!
 4 th	Describe the different bodies that make up the Solar System.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 3 rd	Recall the names and order of the planets in the Solar System.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 4 th	Describe how ideas about the structure of the Solar System have changed over time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 7 th	Describe how methods of observing the Universe have changed over time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>




SP7b Gravity and orbits

Step	Learning outcome	Had a look	Nearly there	Nailed it!
 4 th	Recall the factors that affect the strength of the gravitational field.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 5 th	Explain why g has different values on different bodies in the Solar System.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 7 th	Describe the orbits of moons, planets, comets and artificial satellites.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 8 th	Explain why the velocity of a planet changes even if orbiting at a steady speed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 8 th	Describe how changing the speed of an orbiting body affects the radius of its orbit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 9 th	Explain how the radius of a stable orbit is affected by the orbital speed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>







SP7c Life cycles of stars

Step	Learning outcome	Had a look	Nearly there	Nailed it!
 6 th	Describe the evolution of stars of similar mass to the Sun (including nebula, main sequence star, red giant, white dwarf).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 7 th	Describe the forces acting on a star in terms of thermal expansion and gravity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 8 th	Explain how the balance of thermal expansion and gravity affects the life cycle of stars.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 6 th	Describe the evolution of stars with a mass larger than the Sun.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SP7d Red-shift

Step	Learning outcome	Had a look	Nearly there	Nailed it!
 6 th	Describe how the movement of a wave source affects the observed frequency and wavelength.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 7 th	Describe the amount of red-shift observed in galaxies at different distances from Earth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 8 th	Explain why the red-shift of galaxies provides evidence that the Universe is expanding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SP7e Origin of the Universe

Step	Learning outcome	Had a look	Nearly there	Nailed it!
 6 th	Describe the Steady State and Big Bang theories.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 8 th	Compare the Steady State and Big Bang theories.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 6 th	Describe the evidence supporting the Big Bang theory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 7 th	Explain why the Big Bang theory is the currently accepted model.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 9 th	Explain how both theories of the origin of the Universe account for red-shift.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 8 th	Explain how the discovery of the CMB radiation led to the Big Bang theory becoming the currently accepted model.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>