Glossary AQA GCSE

P8: Space

Artificial Satellites: Man-made satellites that have been sent into space for purposes such as satellite imaging and communications.

Big Bang Theory: The currently accepted model for the origin of the universe. It suggests that the universe has expanded from an initially very small, hot and dense point.

Circular Orbits: Planets and satellites travel in circular orbits. Gravity provides the required force for these orbits.

Dark Energy: A hypothesised form of energy, believed to be responsible for the universe's ever increasing rate of expansion.

Dark Mass: A hypothesised type of mass that cannot be observed by current methods. It is used to explain why some galaxies rotate faster than they should for their observed mass.

Main Sequence Star: The stable state of all stars. The gravitational forces pulling the star together, and the pressure pushing outwards, are balanced.

Milky Way Galaxy: The galaxy in which our solar system is located.

Natural Satellites: The moons that orbit planets.

Nebula: A cloud of dust and gas.

Protostar: The first stage all stars go through after forming from a nebula. In this stage the star becomes hot enough for hydrogen nuclei to fuse.

Red Giant Star: When their hydrogen is used up and larger nuclei are produced by fusion, stars of a similar magnitude to the Sun will expand to form a red giant.

Red-Shift: The observed increase in the wavelength of the light emitted by distant galaxies. The more distant the galaxy, the faster it is moving and so the bigger the observed increase in wavelength.

Star Life Cycle: The stages that a star passes through in its lifetime, dependent on the size of the star relative to the sun.

Sun: A star formed from a cloud of dust and gas being pulled together by gravitational attraction. Fusion reactions occur in the sun.

Supernova: The explosion of a massive star, that distributes the elements created by the fusion reactions in the star, throughout the universe.

White Dwarf: When the fusion reactions in stars of a similar magnitude to the sun come to an end, the star will contract under gravity and cool down to form a white dwarf.