

Nebula

A cloud of gas and dust in outer space. If massive enough, these can collapse under gravity to form a protostar.



Protostar

The early stage in the formation of a star, before nuclear fusion occurs.



Nuclear fusion

The joining together of two smaller atomic nuclei to produce a larger nucleus. Radiation is released when this happens. Nuclear fusion happens in stars like our Sun, and in hydrogen bombs.

Red-shift

The change in wavelength of light from a distant star moving away from Earth.



Galaxy

A cluster of billions of stars, held together by gravity.



Satellite

Body that orbits a planet. For example, the Moon is a natural satellite of the Earth but communication satellites are artificial satellites of the Earth.

Dwarf planet

An object orbiting a star that is massive enough to be rounded by its own gravity but has not 'cleared the neighbourhood' of other objects and is not a satellite.



Main sequence

A stable stage in the life cycle of a star. Nuclear fusion occurs, fusing hydrogen nuclei into helium nuclei. There is a balance between the outwards radiation and the force of gravity pulling inwards.



Supernova

The large explosion at the end of a large star's life, which distributes much of the elements formed in the star across space.

Electromagnetic spectrum

The different types of electromagnetic radiation, arranged in order of frequency or wavelength.



Asteroid

A rock in space. Asteroids orbit the Sun but some may cross the Earth's orbit, producing a small risk of collision.



Comet

A ball of icy rock that follows an elliptical orbit around the Sun.

Big Bang

The scientific theory that describes the early development of the Universe.



Dark matter

An unidentified form of matter that accounts for galaxies rotating faster than their visible mass should cause.



Dark energy

An unknown form of energy, put forward as a solution to the problem of why the expansion of the Universe is accelerating.