Constellation – Group of stars that forms a pattern in the sky that looks like a familiar object, animal or character.

Absolute Magnitude – Measure of the amount of light a star actually gives off.

Apparent Magnitude – Measure of the amount of light from a star that is received on Earth.

Light-Year – Unit representing the distance light travels in one year, used to record distances between stars and galaxies.

Photosphere – Lowest layer of the Sun’s atmosphere; gives off light and has temperatures of about 6,000 k.

Chromosphere – Layer of the Sun’s atmosphere above the photosphere.

Corona – Outermost, largest layer of the Sun’s atmosphere; extends millions of kilometers into space and has temperatures up to 2 million k.

Sunspot – Areas on the Sun’s surface that are cooler and less bright than surrounding areas, are caused by the Sun’s magnetic field, and occur in cycles.

Nebula – Large cloud of gas and dust that contracts under gravitational force and breaks apart into smaller pieces, each of which might collapse to form a star.

Giant – Late stage in the life of comparatively low-mass main sequence star in which hydrogen in the core is deleted, the core contracts and temperatures inside the star increase, causing its outer layers to expand and cool.

Galaxy – Large group of stars, dust and gas held together by gravity; can be elliptical, spiral or irregular.

Big Bang Theory – States that about 13.7 billion years ago the universe began with a huge, fiery explosion.

Cluster – The same way the stars are grouped together within a galaxy, galaxies are grouped together into these.

Spiral Galaxies – These galaxies have spiral arms that wind outward from the center.

Elliptical Galaxies – A common type of galaxy that is large, three dimensional and shaped like a football in most cases.

White Dwarf – Late stage in the life cycle of a comparatively low-mass main sequence star; formed when its core depletes its helium and its outer layers escape into space, leaving behind a hot, dense core.

Supergiant – Late stage in the life cycle of a massive star in which the core heats up, heavy elements form by fusion and the star expands.

Neutron Star – Collapsed core of a supernova that can shrink to about 20 km in diameter.

Black Hole – Final Stage in the evolution of a very massive star, where the core’s mass collapses to a point that it’s gravity is so strong that not even light can escape.

Fusion – This occurs in the core of stars at a temperature of at least 10,000 k and happens when two atoms combine, or fuse together.

Irregular Galaxies – These galaxies do not find into the other categories and are made up of many different shapes.

Doppler Shift – This happens when a star is moving toward the Earth, the waves are compressed together and shift to the blue end of the spectrum.

Red Shift – This happens when a star moves away from the Earth, the waves spread farther apart and shift to the red end of the spectrum.

Steady State Theory – This theory states that the Earth is the same now as it ever was.

Oscillating Model Theory – In this theory the Earth began with expansion then over time the expansion stopped and the universe contracted.