

The Sun: some vital statistics:-

The Sun is a **star**: a ball of (mainly) hydrogen gas, 700,000 km in radius (about 100 Earth radii)

It generates heat and light through **nuclear fusion**:

Surface temperature = 5800K

Central temperature = 15 million K

Balance (hydrostatic equilibrium) maintained between *pressure* and *gravity*

The Sun's outer atmosphere, or **corona**, is very hot (several million K) - heated by twisting of the Sun's magnetic field?...

Mean Earth - Sun distance = **Astronomical Unit**

149,597,870 km

1 A.U. = 107 solar diameters

The orbits of the planets are **ellipses** (see A1X Dynamical Astronomy) and lie in, or close to, a plane - the **ecliptic**.

The planets divide into two groups:-

Inner *Terrestrial* planets: small, rocky Mercury, Venus, Earth, Mars

Outer *Jovian* planets: gas giants Jupiter, Saturn, Uranus, Neptune

Pluto is a 'misfit' - Kuiper Belt object (planetesimal); together with asteroids and comets, 'debris' from formation of the Solar System.