Level 6

Stars and Constellations

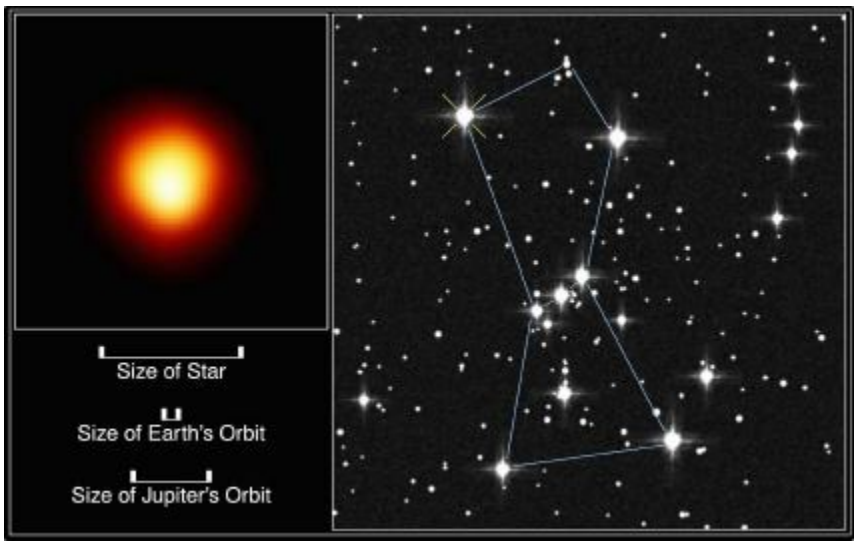
STARS:

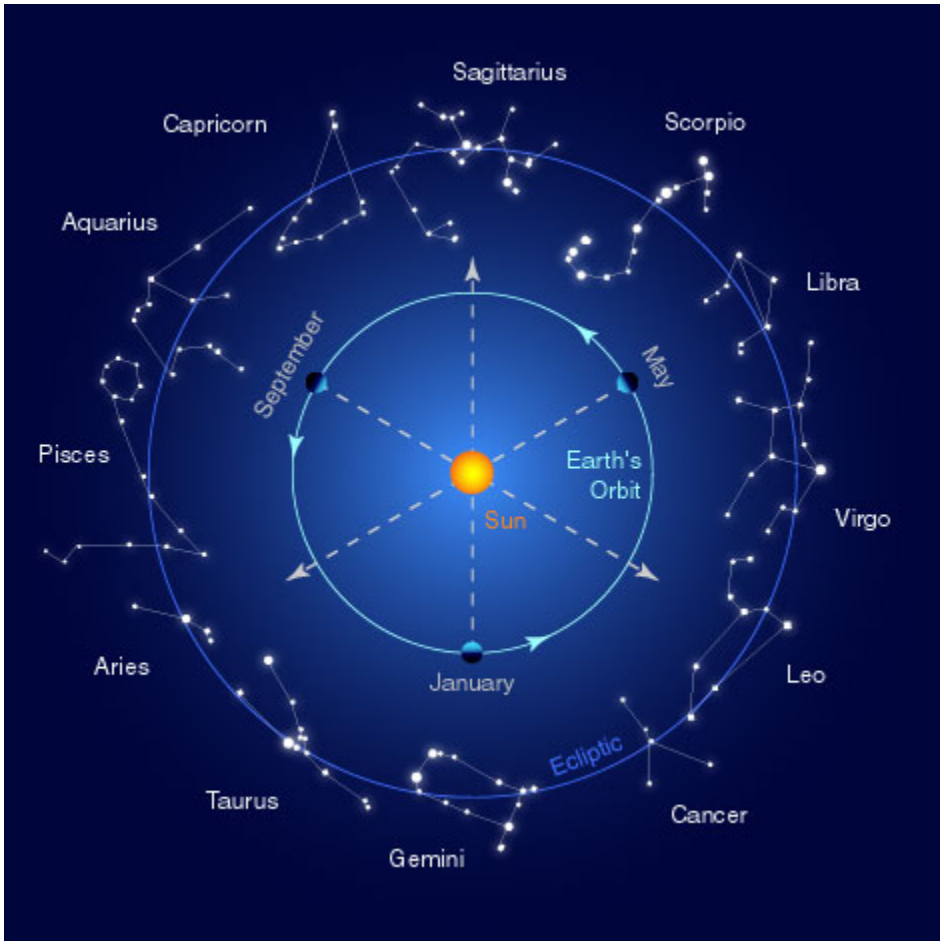
Are formed initially from gas and dust. They are composed mainly of the hydrogen gas. They are very hot and give off huge amounts of energy in the form of heat and light.

Our Sun is a medium sized star.

Stars Are very far away from Earth. The closest Star is about 23.5 trillion miles away.

Stars go through many stages in their lifetime. Some of the names for these stages are Red Giant, Planetary Nebulae, White Dwarf, Neutron and even Black Holes.





If you observe a planet, say Mars, for one complete revolution, you will see that it passes successively through 12 constellations. All planets (except Pluto at certain times) can be observed only in these 12 constellations, which form the so-called zodiac, and the Sun also moves through the zodiacal signs, though the Sun's apparent movement is actually caused by the movement of Earth.

Although the constellations are due mainly to the optical accident of line of sight and have no real significance, astronomers have retained them as reference areas. It is much easier to speak of a star in Orion than to give its geometrical position in the sky. There are 88 recognized constellations.

The 88 Recognized Constellations

In astronomical works, the Latin names of the constellations are used. The letter N or S following the Latin name indicates whether the constellation is located to the north or south of the Zodiac. The letter Z indicates that the constellation is within the Zodiac.

Latin name	Letter	English version
Andromeda	N	Andromeda
Antlia	S	Airpump
Apus	S	Bird of Paradise
Aquarius	Z	Water Bearer
Aquila	N	Eagle
Ara	S	Altar
Aries	Z	Ram
Auriga	N	Charioteer
Boötes	N	Herdsmen
Caelum	S	Sculptor's Tool
Camelopardalis	N	Giraffe
Cancer	Z	Crab
Canes Venatici	N	Hunting Dogs
Canis Major	S	Great Dog
Canis Minor	S	Little Dog
Capricornus	Z	Goat (or SeaGoat)
Carina	S	Keel (of Argo)[1]
Cassiopeia	N	Cassiopeia
Centaurus	S	Centaur
Cepheus	N	Cepheus
Cetus	S	Whale
Chameleon	S	Chameleon
Circinus	S	Compasses

Astronomy

Columba	S	Dove
Coma Berenices	N	Berenice's Hair
Corona Australis	S	Southern Crown
Corona Borealis	N	Northern Crown
Corvus	S	Crow (Raven)
Crater	S	Cup
Crux	S	Southern Cross
Cygnus	N	Swan
Delphinus	N	Dolphin
Dorado	S	Swordfish (Goldfish)
Draco	N	Dragon
Equuleus	N	Filly
Eridanus	S	Eridanus (river)
Fornax	S	Furnace
Gemini	Z	Twins
Grus	S	Crane
Hercules	N	Hercules
Horologium	S	Clock
Hydra	N	Sea Serpent
Hydrus	S	Water Snake
Indus	S	Indian
Lacerta	N	Lizard
Leo	Z	Lion
Leo Minor	N	Little Lion
Lepus	S	Hare
Libra	Z	Scales
Lupus	S	Wolf
Lynx	N	Lynx
Lyra	N	Lyre (Harp)
Mensa	S	Table (mountain)
Microscopium	S	Microscope
Monoceros	S	Unicorn

Astronomy

Musca	S	Southern Fly
Norma	S	Rule (straightedge)
Octans	S	Octant
Ophiuchus	N	Serpent-Bearer
Orion	S	Orion
Pavo	S	Peacock
Pegasus	N	Pegasus
Perseus	N	Perseus
Phoenix	S	Phoenix
Pictor	S	Painter (or his Easel)
Pisces	Z	Fishes
Piscis Austrinus	S	Southern Fish
Puppis	S	Poop (of Argo)[1]
Pyxis	S	Mariner's Compass
Reticulum	S	Net
Sagitta	N	Arrow
Sagittarius	Z	Archer
Scorpius	Z	Scorpion
Sculptor	S	Sculptor
Scutum	N	Shield
Serpens	N	Serpent
Sextans	S	Sextant
Taurus	Z	Bull
Telescopium	S	Telescope
Triangulum	N	Triangle
Triangulum Australe	S	Southern Triangle
Tucana	S	Toucan
Ursa Major	N	Big Dipper[2]
Ursa Minor	N	Little Dipper[3]
Vela	S	Sail (of Argo)[1]
Virgo	Z	Virgin
Volans	S	Flying Fish

Astronomy

Vulpecula	N	Fox

1. The original constellation Argo Navis (the Ship Argo) has been divided into Carina, Puppis, and Vela.
2. The Big Dipper is only a part of the constellation Ursa Major (Great Bear) and is not a constellation by itself.
3. The Little Dipper is called Ursa Minor (Little Bear).