

GSA

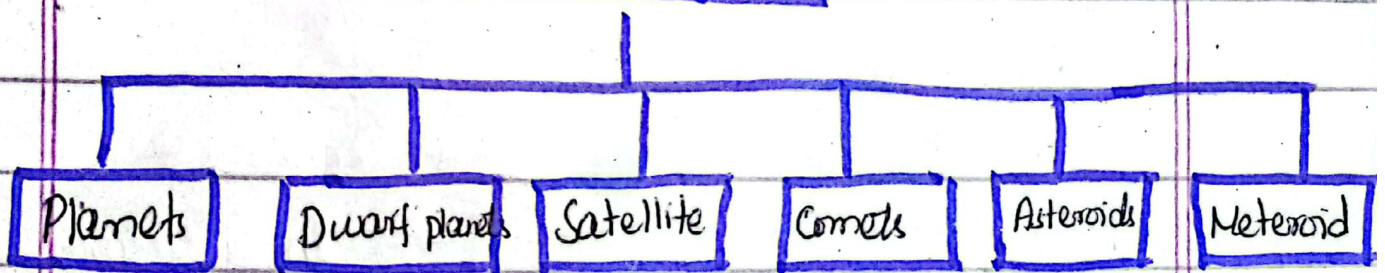
1- Write a note on solar system. 15

The solar system consists of the sun, planets, moon, comets, asteroids, and meteoroids. The sun is the centre of solar system and all other objects revolve around it.

Shape:

Our solar system is elliptical in shape, i.e. egg-like. The sun consists of 99% of solar system's mass.

Solar System



Sun:

The Sun is a star. It is a ball of gases - Helium and hydrogen. Nuclear fusion reaction takes place.

in the sun. Stars give lights to planets.

Structure of Sun:

Sun consists of three regions

1. Interior zone
2. Photo sphere
3. Outer atmosphere

1- Interior zone:

Interior zone is divided into core, radiative zone and convective area.

Core

It is the innermost part of the sun. It extends from the centre to the 25% of sun radius. Nuclear reaction occurs in this region.

Radiative zone:

Outer to core, it comes radiative zone. Heat from the core is carried through this layer. carried by photons called thermal radiation. This zone is dense and hot that heat is transferred outward.

Convective region:

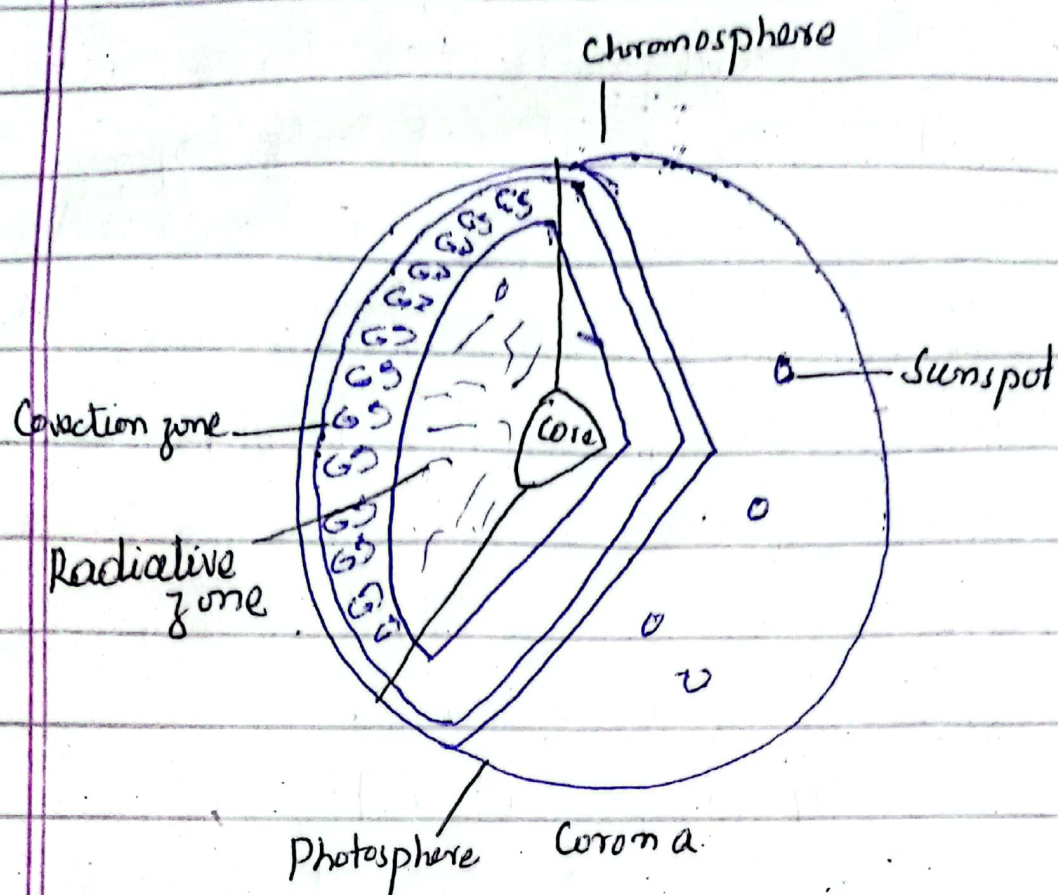
This region is not dense and hot. Once the material cools off at the surface, it plunges downward to the base of convective zone and absorbs heat from the top of radiative zone.

Photosphere:

The region present between interior zone and solar atmosphere is called photosphere. It is what 'visible' on the surface.

Solar atmosphere:

The ^{lower} upper layer is called chromosphere. A thin transition region separates it from corona - that is upper layer of atmosphere. It has high temperature than troposphere.



Important feature of Sun:

1. It is made up of 74% H_2 , 24% He, 2% other matter.
2. Density of Sun is $1.41 g/cm^3$.
3. Sun takes 250 M year to revolve around galaxy at speed of 220 km/h.
4. Mass of Sun is $1.9 \times 10^{30} kg$.
5. Diameter of the Sun is 870,000 miles.
6. Sun has large magnetic and gravitational field.
7. Sun rays take 8 minutes & 20 seconds to reach the Earth.