

28-July-2025

Q

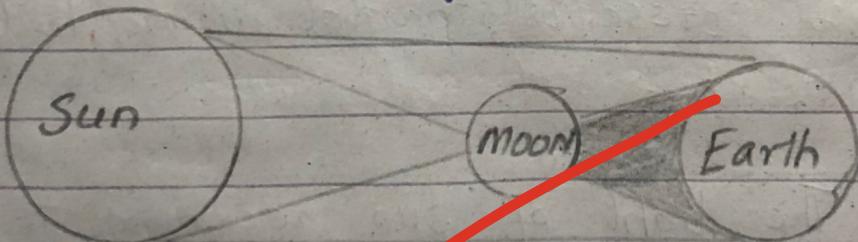
a) What is eclipse? Explain in detail.

## ECLIPSE

Eclipse is a phenomenon when a celestial body blocks the light of other celestial body. There are two eclipse that occur between the earth, moon and sun. These are - solar eclipse and lunar eclipse.

### SOLAR ECLIPSE:

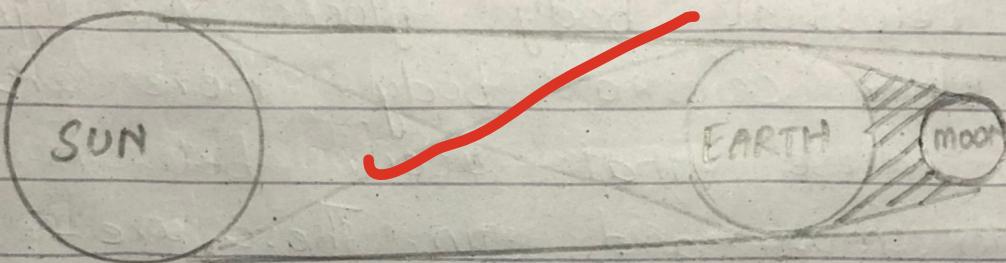
Solar eclipse is a phenomenon when the light of sun is blocked by moon, reaching to the earth.



In this way the partial part of earth could not get complete sunlight for a certain period of minutes. The event can also be witnessed by using protective glasses.

## LUNAR ECLIPSE:

Lunar eclipse occur when the sun light is blocked by the earth, reaching it to the sun.



In this way, the moon appears red and this event is also called "red moon". If the moon does not align with earth and sun, it appears different in shapes which are called crescents, partial moon, half moon, etc.

attempt these parts by giving subheadings.

The light of sun reaching to the earth and moon creates different astronomical events and it also effect the shape of the moon regularly throughout the month.

3.5

b. Are earthquake and volcano eruption interconnected? If yes, then how?

## Earthquake:

Earthquake occurs by the movement or slip of tectonic plates underneath the surface of earth. This creates seismic waves which can be felt on the ground surface of earth as a shaking movement.

## Volcano:

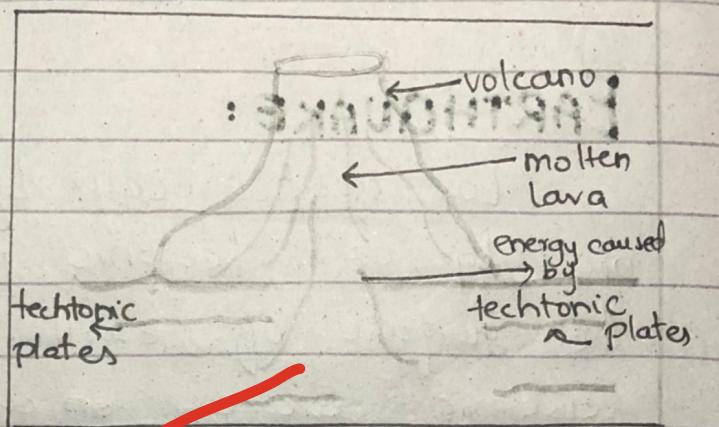
Volcanoes are the vents on the earth's surface through which the molten lava erupts. This molten lava is ~~trap~~ stored underneath the surface of earth.

The <sup>natural</sup> causes of volcano eruption are intense energy or heat generation or earthquake.

## How EARTHQUAKE MAKE VOLCANOES TO ERUPT:

When the tectonic plates move, it creates friction and energy that abrupts the

boiling of molten lava. This boiling of molten lava then erupts towards the vent of the volcano.



Therefore, the movement of tectonic plates that cause earthquake can also erupt volcanoes.

c) What is green-house gases effect ?  
Shed light on its benefits and how it contributes towards the global warming ?

### GREENHOUSE:

Greenhouse is a structure

which provides the environment as per the requirements of humans.

## GREENHOUSE EFFECT

The greenhouse effect is generally the impact of greenhouse on the plants and the environment outside the ~~greenhouse~~ of it. In greenhouse, the humidity, sunlight, temperature and other environmental factors are controlled to provide a suitable environment for plants.

## BENEFITS:

The benefits of greenhouses are:

- maximum crop yield
- yield of unseasonal crops and plants.
- Pests and ~~diseases~~ disease control
- Safe from ~~natural~~ natural disasters
- Contribute it economic and educational benefits.

## GREENHOUSE CONTRIBUTE TO CLIMATE CHANGE:

The heat ~~leaked~~ trapped in the greenhouse effects the earth's temperature and makes it warm.

On the other hand, ~~greenhouses~~ emit hazardous gases such as  $\text{CO}_2$ ,  $\text{CH}_4$ ,  $\text{HCFCs}$ ,  $\text{CFCs}$ ,  $\text{PF}_3$ ,  $\text{SO}_2$  and  $\text{NO}_x$ . These gases are the main contributors to global warming.

d. Explain the structure of sun.

### **SUN:**

The sun is a giant star in the solar system that provides heat, light, and ~~go~~ orbit through gravitational force.

### **STRUCTURE OF SUN:**

The sun is comprised of few layers and each layer has its function. ~~to~~ These layers are:

#### **CORE:**

It is the most inner and

center part of the sun. The hydrogen in the core changes into helium through nuclear fusion.

## RADIATION ZONE:

The radiations of nuclear fusion occurs in this part. ~~It may~~ This process of radiation ~~may~~ may take thousands of years.

## CONVECTION ZONE:

This part of sun ~~ent~~ is a transmission zone of radiations to the sun's surface.

## PHOTOSPHERE:

Photosphere is the part of the sun where the light and heat is generated. ~~This~~ ~~ent~~ also reaches to the earth as heat and sunlight.

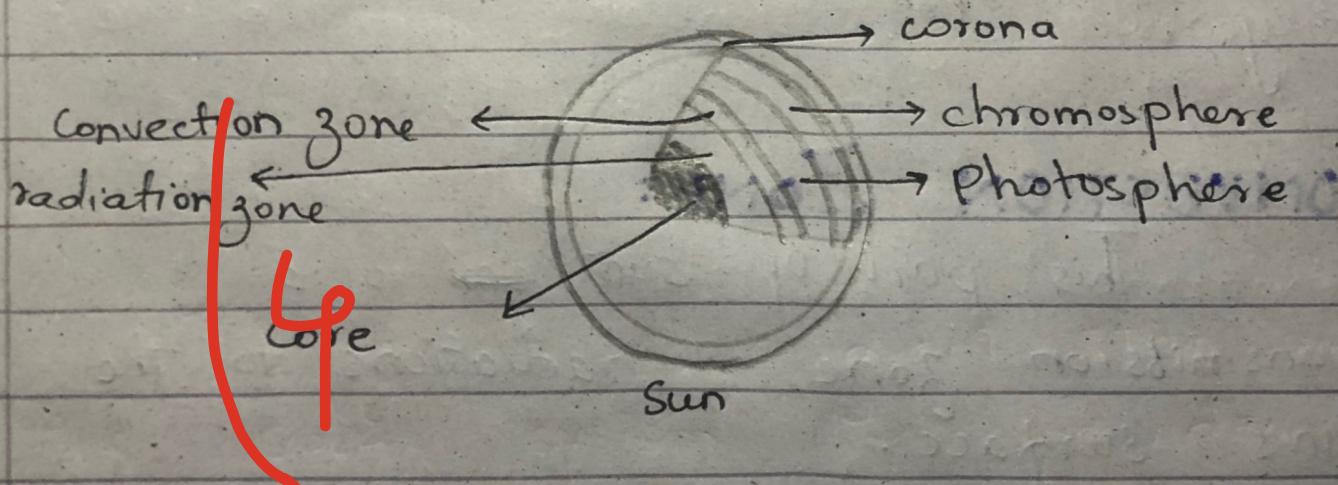
## CHROMOSPHERE:

It the reddish part of sun that is witnessed in full solar

eclipse.

## CORONA:

Corona is where solar winds occurs and this part of sun creates solar storms and auroras on the earth's magnetic fields.



good answers!!!!