

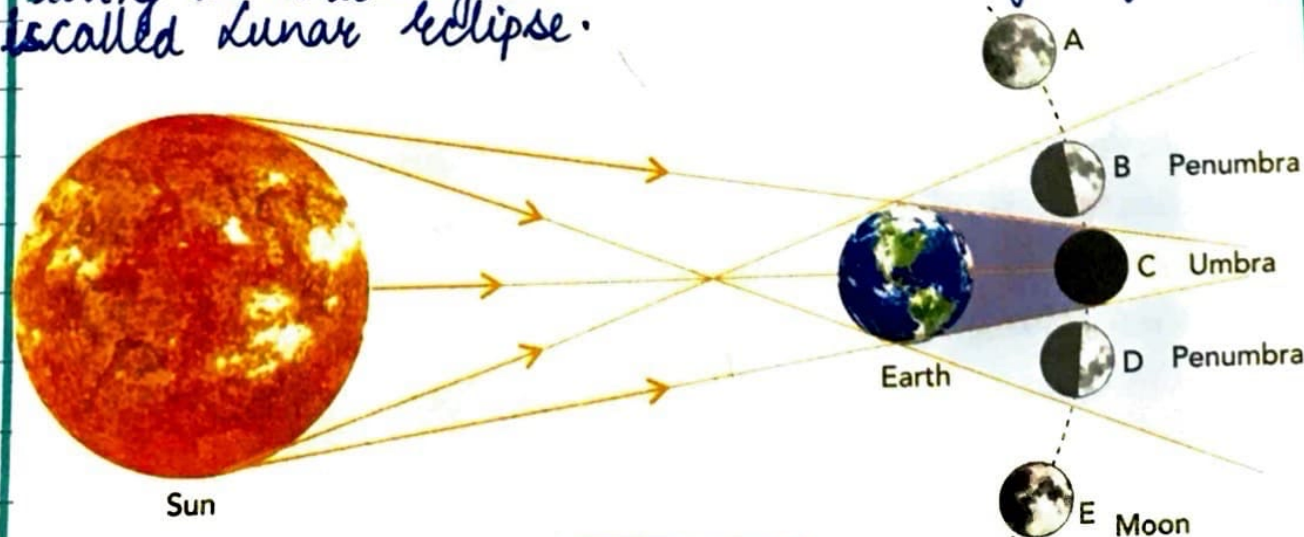
Topic- "Solar and Lunar Eclipse"

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Good Morning Students,

This lesson is of Class-V for the subject of Geography in which Chapter-10 "Solar and Lunar Eclipse" is continued with the explanation of the topic- "Lunar Eclipse". Students we have already discussed "Solar Eclipse" in the previous week. This week we will be discussing the topic- "Lunar Eclipse". So all the students may please keep their Geography notebooks ready as we are going to start our today's topic.

Lunar Eclipse:- Earth revolves around the Sun and Moon revolves around Earth. As they revolve around each other, at times Earth comes between the Sun and the Moon in a straight line on the same plane. Earth blocks the light of Sun and casts its shadow on Moon. Hence people living in that region cannot see the light of Moon, it is called Lunar Eclipse.



Lunar eclipse

Lunar eclipses are of three types:-

- 1) Total Lunar eclipse
- 2) Partial lunar eclipse
- 3) Penumbral lunar eclipse.

1) TOTAL LUNAR ECLIPSE :-

A Total lunar eclipse occurs when the earth comes in between the sun and the moon. In this type, the



Total lunar eclipse

earth's shadow entirely covers the moon. When the sunlight passes through the earth's atmosphere, the earth's atmosphere filters out most of the blue light. Due to this, the Moon appears red in colour.

So, now ^{we} will revise what we have learnt till now. I will read out the questions and you may pause the audio/video lesson for 3-minutes and try to write the answers in your geography notebooks.

- 1) Define Lunar Eclipse.
- 2) Write the different types of Lunar eclipses.
- 3) What is Total lunar eclipse?

Ans-1. A lunar eclipse occurs when the Earth appears between the Sun and the Moon.

Ans-2. Three types of Lunar Eclipses are-
1) Total 2) Partial and 3) penumbral

Ans-3. Total lunar eclipse occurs when the earth comes in between the sun and the moon and earth's shadow entirely covers the moon.

Let us proceed further:-

2) PARTIAL LUNAR ECLIPSE:-

It occurs when earth's umbral shadow covers only a part of the Moon. (As you know Umbra means the darkest central portion of a shadow cast by the Earth or Moon during the eclipse). The shadowed part of the lunar surface can be dark red or rust or charcoal grey in colour.



Partial lunar eclipse

3. PENUMBRAL LUNAR ECLIPSE :-

It occurs when the Moon moves through Earth's penumbral shadow (means penumbra is the outer portion of a shadow and it is



Penumbral Lunar Eclipse

lighter as compared to the umbra). In this type, the Earth's umbra, does not entirely shade any of the lunar surface. The penumbral lunar eclipse can be viewed only when at least the half of the Moon enters the penumbra.

So, students occurrence of an eclipse is a beautiful natural phenomenon. The researchers and scientists study eclipses to learn about the surface of planets. Sometimes, due to bad weather or pollution, you cannot see eclipses.

That's all for today students. Please go through the assignments carefully for better understanding of the concepts.

Thank you.