

Assignment : Social Studies
Topic: Solar and Lunar Eclipses
Class V ABC
Date: 12th October 2020

Instructions: Please do your work neatly and carefully

A. Fill in the blanks:

1. An eclipse happens when the light of the sun or the moon is hidden.
2. When light falls on an opaque object, the shadow falls on the opposite side.
3. In a solar eclipse ,the moon is between the sun and the earth.
4. During a total solar eclipse, it becomes very dark and birds stop singing.
5. In a lunar eclipse, the earth is between the sun and the moon.

B. Write true or false:

1. 'Sol' means the moon and 'Lunar' means the sun. **False**
2. During a total solar or lunar eclipse, the three heavenly bodies -the sun,the moon and the earth- are in a straight line. **True**
3. It is not safe to look at a solar eclipse even with dark glasses. **True**
4. Solar and lunar eclipses both last for the same amount of time. **False**
5. The word opaque means something we can see through . **False**

C. Choose the correct answer:

1. In ancient times people[understood why solar eclipse happened/**thought the sun was being eaten by a monster.**]
2. A solar eclipse is when the [**sun** /moon] is completely or partially hidden.
3. A lunar eclipse is when the [sun/**moon**] is completely or partially hidden.
4. It is[unsafe/**safe**] to look at a lunar eclipse.
5. The moon looks reddish in a[partial/**total**]eclipse.

D. Match the following:

- | A | B |
|-------------|---------------------------------|
| 1. Sol | the sun |
| 2. Luna | the moon |
| 3. Umbra | the darkest part of a shadow |
| 4. Penumbra | shadow during a partial eclipse |

E. Answer the following questions:

1. How do we know the real reasons why eclipses happen?
Ans: We know the real reasons why eclipses happen because of the observations and scientific research done by astronomers and scientists.

2. Give three reasons why eclipses happen.

Ans: The three reasons why eclipses happen are due to :

- a. The orbit of the moon around the earth
- b. The orbit of the earth around the sun
- c. The shadow that is formed when sunlight falls on an opaque object.

3. What kind of solar eclipse will people see if they are standing in (a) the umbra and (b) the penumbra?

Ans: The people standing in the umbra will see a total solar eclipse while the people standing in the penumbra will see a partial solar eclipse.

4. Why should we not look at the sun directly during a solar eclipse?

Ans: We should not look directly at the sun during a solar eclipse as it can damage the eyes permanently.

5. In a sentence describe what happens during a partial lunar eclipse.

Ans: In a partial lunar eclipse only a part of the moon moves into the earth's shadow and the earth's shadow appears very dark.

6. Sometimes we are not able to see eclipses that occur . Why is this?

Ans: Sometimes we are not able to see eclipses that occur due to cloudy weather or pollution .
