

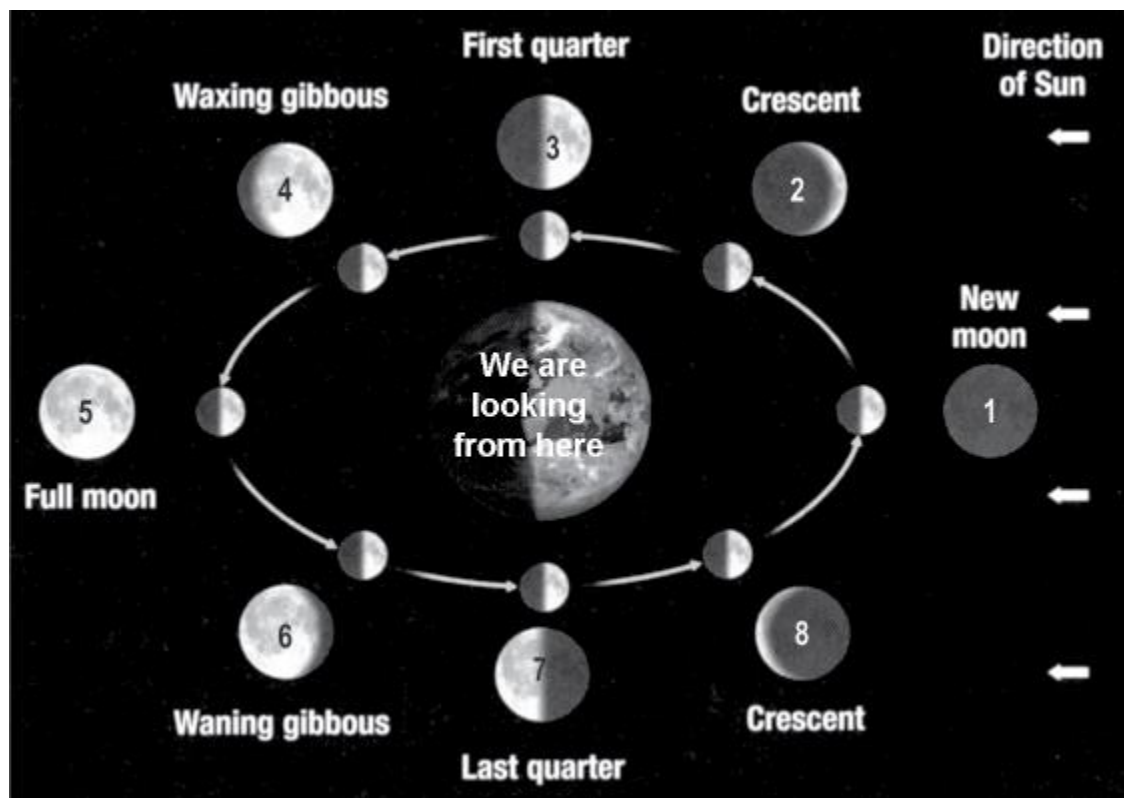
## Long Answer Questions

**Q. 1. Suppose the distance between earth and sun becomes half of its present distance. What is likely to happen to life? [NCERT Exemplar]**

**Ans.** Life may no longer exist because some special environmental conditions are needed for the existence and continuation of life on the earth. The right distance of earth from the Sun is necessary so that it has right temperature range, the presence of water and suitable atmosphere and a blanket of ozone.

**Q. 2. How do phases of moon occur? Support your answer with a diagram.**

**Ans.** The phases occur because the Sun lights up different parts of the moon as it circles around the Earth. The phase visible to us depends on the position of moon, in relation to the Sun and the Earth.



When the moon is directly between the Sun and the Earth, we cannot see it at all because no sunlight falls on the side facing us. This is the new moon phase. It takes the moon about three and half days to move from one position to the next. In position 1, we cannot see the bright side of the moon. This is a new moon which is very difficult to see. We see a half moon in position 3, since we can see equal parts of the dark and bright sides of the moon. In position 5, we see the whole bright side of it. This is a full moon.

**Q. 3. How does Earth provide ideal conditions for all forms of life including human beings?**

**Ans. (a)** There is abundance of water in all its three states liquid, solid and gaseous. Because of the presence of water in oceans, the Earth is also known as the Blue Planet.

**(b)** The Earth is at an optimum distance from the Sun. It is, therefore, neither too hot nor too cold.

**(c)** There are seasons, weather conditions and climate on Earth best suited for the present life-forms. The axis of the Earth is tilted and this tilt and the revolution of the Earth is responsible for seasons.

**(d)** It has normal gravity which allows easy movement of living forms.

**(e)** It has a layer of atmosphere which protects the Earth from harmful celestial bodies and ultraviolet rays of the Sun.