



# KALPAVRUKSHA MODEL SCHOOL

## Online class Assignments

**Class: VII**

**Sub: Chemistry**

**Date: 28.07.2021**

**Topic: Climate and Adaptation**

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### **I. Answers for the following questions:**

1. Define angle of inclination.

**Ans:** The angle that the Earth's axis of rotation makes with the direction perpendicular to the plane of the Earth's orbit around the sun is called Angle of Inclination.

2. Explain factors affecting the climate on the earth.

**Ans:** The climate of the earth has not remained the same through the ages. There have been periods when it has been extremely cold, as in the Ice age. Some of the factors that affect the climate of planet Earth as a whole are the distance from the sun and the Earth's Tilt.

**Distance from the Sun:** If you move closer to a lit stove you will feel warmer than when you are away from it. Similarly, the planet closest to the sun is hotter than the planet further away from it. The distance of the Earth from the sun plays a major role in determining the temperature on the surface of the Earth and therefore, its climate.

**Earth's Tilt:** The Earth rotates about its axis. The axis about which the Earth rotates is at angle with the plane of its orbit around the sun. The angle that the Earth's axis of rotation makes with the direction perpendicular to the plane of the Earth's orbit around the sun is called

Angle of Inclination. This about  $23.5^{\circ}$ . It is this tilt of the Earth's axis as well as the revolution of the Earth around the sun causes the occurrence of seasons on the Earth. From 21<sup>st</sup> March to 23<sup>rd</sup> September, the northern hemisphere is closer to the sun. So, it is hotter than the southern hemisphere, which is farther away from the sun. The reverse happens in the next half of the orbit.

3. Which is the longest day on the earth?

**Ans:** The longest day of the year is around 22<sup>nd</sup> June.

4. Which is the shortest day on the earth?

**Ans:** The shortest day is around 22<sup>nd</sup> December.