

Chapter – 7

Weather Climate and Adaptations to Climate

- **Weather:** Weather is the day-to-day condition of the atmosphere at a place influenced by factors like humidity, temperature, wind speed, etc.
- **Humidity** is the amount of water vapour present in the atmosphere and is measured by a hygrometer.
- Sun causes all weather changes.
- **Climate:** It is the average weather conditions at a specific place over a much longer period of time.
- **Factor affecting climate:**
 - (i) Amount of sunshine
 - (ii) Whether the region is hilly or a plain
 - (iii) Distance from the sea
 - (iv) Direction of prevailing winds from the sea side brings rain to coastal areas and dry weather to inland areas.
 - (v) Ocean currents.
 - (vi) Distance from the equator.
- **Adaptations to Climate:** The features and habits that help animals to live in a habitat are called adaptations.
- **Three regions are classified according to adaptation:**
 - (i) **Polar Regions:** Polar regions have extreme climate. Sun does not rise at poles for 6 months and does not set for the other 6 months.
 - (ii) **Tropical Rainforest:** Have hot summers and plenty of rainfall. Days and nights are almost equal in length throughout the year.
 - (iii) **Desert:** Have extreme climate. Receive less rainfall and large amount of sunlight.
- **Migration:**
 - (i) It is the mass movement of animals, mostly birds, from colder places to warmer regions to escape the cold, to breed or due to shortage of food.
 - (ii) Birds are guided by the sun during the day and the stars at night.
 - (iii) Example: Siberian crane comes to India from Siberia every year.