

- **Earthquake**

- It is the sudden shaking or trembling of the earth's surface because of disturbance deep inside the earth's crust.
- It cannot be predicted.

- **Causes**

- The uppermost layer of the earth is called crust. Crust is fragmented and each fragment is called plate. Movements of earth's plates (there may be collision or a brushing pass between two plates along their boundary). Plate boundaries are called seismic zones or fault zones.
- Earthquake may occur because of volcanic eruption.
- Kashmir, Western and central Himalayas, North-East India, Rann of Kutch, Gangetic plains, and some parts of South India are earthquake prone.

- Power of earthquake is measured on Richter scale.
- The Richter scale is not a linear scale.
- The Richter scale is a logarithmic scale i.e. earthquake with magnitude 5 is ten times more destructive than an earthquake of magnitude 4.
- Earthquakes of intensities more than 7 on the Richter scale are very destructive.

- Seismograph is an instrument used to record the vibrations produced by an earthquake.
- The seismograph consists of a vibrating rod or pendulum, which starts to vibrate as soon as an earthquake occurs.
- The focus of an earthquake is the point in the Earth's crust from where the shock waves of the earthquake originate.
- Epicenter is the point on the surface of the Earth directly above the focus.

- Precautions to minimize the destruction caused by an earthquake:
 - Buildings constructed in seismic zones should be strong enough to withstand earthquakes of high magnitudes.
 - Specialist engineers and architects should be consulted to make quality buildings in these areas.
 - Roofs of houses must be made as light as possible, so that if they fall the damages incurred are not huge.
 - Heavy objects such as wall clocks, photo frames, decoration pieces etc. must be hanged in such a way that they do not fall on anyone during an earthquake.
 - Fire fighting equipment must be installed properly in the buildings.
- Inside house → One should take shelter under a table. The head should be protected.
- Outside house → One should stay away from tall structures. One of the safe places is inside a car.