8th Standard- Science

Some Natural Phenomena

Some objects can be charged by rubbing with other objects.

Static Electricity: The chemical charge generated by rubbing is called static electricity because these charges do not transmit.

There are two types of charges-positive charge and negative charge.

When we rub two objects, made of different substances, together the charge they acquire are opposite to each other.

Electric Current: When charges move they constitute an electric current.

Earthing: The process of transfer of charges from a charged object to the Earth is called earthing.

Earthing is provided in electrical wiring in building to protect us from electrical shocks, in case of any leakage of electrical current.

The process of electric discharge between clouds and the earth or between different clouds causes lightning.

Lightning strike could destroy life and property.

Lightning conductors cam protect buildings from the effects of lightning.

An earthquake is a sudden shaking or trembling of the Earth.

Earthquake is caused by a disturbance deep inside the Earth's crust.

It is not possible to predict the occurrence of an earthquake.

Earthquakes tend to occur at the boundaries of Earth's plates. These boundaries are known as fault zones.

Destructive energy of an earthquake is measured on the Richter scale. The earthquake measuring 7 or more on Richter scale can cause severe damage to life and property.

Crust: Crust is the uppermost layer of Earth's surface (8 km – 32 km).

Electric discharge: When negative charges from the clouds and positive charges on the ground meet, a huge amount of energy is produced as bright light and sound, which we see as lightning. The process is called electric discharge.

Earth's Plates: The outermost layer of the earth is not in one piece. It is fragmented. Each fragment is called a plate.

Earthquake: An earthquake is a sudden shaking or trembling of the Earth. It is caused by a disturbance deep inside the earth's crust (i.e., by the movement of Earth's plates).

Electroscope: Electroscope is a device used to test whether an object is carrying charge or not.

Lightning: The process of electric discharge between clouds and the Earth or between different clouds causes lightning.

Lightning Rod: Lightning rod is a device used to secure tall buildings from the effect of lightning conductor. A metallic rod taller than the height of the building is installed in the walls of the building during its construction to protect it from the effect of lightning.

Negative Charge: When the charge of an object is due to the excess of electrons, it is called a negative charge.

Positive Charge: When the charge of an object is due to the loss of electrons, it is called a positive charge.

Richter Scale: The power of an earthquake is expressed in terms of magnitudes on a scale called the Richter Scale.

Seismograph: The seismic waves are recorded by an instrument in the form of a graph called the seismograph.

Thunder: The loud noise which accompanies lightning.

Thunderstorm: A storm accompanied by thunder and lightning.

Transfer of Charge: Electrical charge can be transferred from a charged object to another through a metal conductor.

Tsunami: Earthquakes may cause tsunamis in oceans, resulting in huge damage in coastal areas.

Tremor: Trembling or shaking of the Earth.