

Lightning

November 11, 2024 • vajiramandravi.com



About Lightning:

- It strikes are possible because **electrical charges can build up in a cloud** beyond the ability of air to keep resisting their movement.
- It is an electrical discharge between charged particles in a cloud and the ground.
- It can **occur between opposite charges** within the thunderstorm cloud (intra-cloud lightning) or **between opposite charges in the cloud** and on the ground (cloud-to-ground lightning).
- It is one of the oldest observed natural phenomena on earth. It can be seen in volcanic eruptions, extremely intense forest fires, surface nuclear detonations, heavy snowstorms, in large hurricanes, and obviously, thunderstorms.
- While a lightning strike occurs between a cloud and an object on or near the ground, it **takes the path of least resistance**, which means it moves towards the closest object with the highest electric potential.

What is a lightning rod?

- It is a **metallic rod** (usually copper) that protects a structure from lightning damage by intercepting flashes and guiding their currents into the ground.
- Lightning rods are **pointy and pointed things** create stronger electric fields near them.

- These are pointy and pointed things create stronger electric fields near them.
 - The lightning rod is connected to a wire that drops through the length of the building into the ground, where it dissipates its electric charges into its surroundings.
-

Q1: What are hurricanes?

Hurricanes are powerful tropical storms that form over warm ocean waters and can cause significant damage due to their strong winds, heavy rainfall, and storm surges. They are known by different names depending on their location: “hurricanes” in the Atlantic and Northeast Pacific, “typhoons” in the Northwest Pacific, and “cyclones” in the South Pacific and Indian Ocean.

News: [How do lightning rods prevent lightning strikes from reaching people?](#)

Source: <https://vajiramandravi.com/current-affairs/lightning/>

© Vajiram & Ravi. For personal use only.