



## Lightning Rods and Lightning Strikes

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The **frequency and intensity** of [lightning strikes](#) are rising globally, driven by [climate change](#)- induced increases in **temperatures** and **atmospheric moisture**, as warm air and moisture promote cloud formation and **charge separation**.

- **About Lightning Strikes:** Lightning is a **natural electrical discharge** that occurs during [storms](#) due to a buildup of **static electricity** in the atmosphere.
  - This buildup happens when **water droplets in clouds freeze into ice crystals**, which **rub against each other**, generating a static charge that ultimately results in lightning strikes.
- **About Lightning Rod:** A [lightning rod](#) is a **conductive object** installed at the **highest point of a structure** to attract lightning and provide a **controlled path for its discharge**.
  - Lightning moves towards the object with the **highest electric potential**.
  - The shape of the **rod** creates a **stronger electric field**, ionising the air around it and providing a **route for the current to flow**. The rod directs lightning into the ground, where the earth safely absorbs and dissipates the charge.

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