



G.D.GOENKA PUBLIC SCHOOL

Subject: Science (8<sup>th</sup>)

Friday, 17th September 2021

Topic: Thunderstorms

**This material is not to be printed.**

LEARNING OBJECTIVE: To understand thunderstorms.

SKILL FOCUS: Observation of safety measures to be taken during calamities.

## What is Thunderstorm?

A thunderstorm is a storm with lightning and thunder. It's produced by a cumulonimbus cloud, usually producing gusty winds, heavy rain and sometimes hail.

## Lightning Safety: Before the Calamity

- In order to avoid lightning threats, we must follow a safety plan. This includes finding a shelter house and estimating the time required to reach there.
- One must check the weather forecast for a thunderstorm before going out. Outdoor activities must be postponed if there are signs of a developing thunderstorm such as darkening skies, flashes, or strong winds. This will help us to avoid being caught in dangerous situations.
- One must get to a safe place immediately if thunder or distant rumble is heard such as a fully enclosed building. Sheds, tents or covered porches must be avoided.

## Safety Measures During the Calamity

In this section, we will learn about the measures to be taken during the calamity. These measures significantly help us to reduce the risk of becoming a lightning casualty.

- One must avoid open areas and stay away from isolated trees, towers, or electrical poles as lightning tends to strike the tallest object in an area.
- One must stay away from conductors such as fences and wires. These objects act as a conductor to the lightning to distant areas.
- In a situation where a sturdy building is difficult to locate nearby, a hard-topped metal vehicle with closed windows must be used as a shelter.
- One must stand away from electrical equipment and wiring. Also, corded phones must not be used during a thunderstorm.
- Water pipes also conduct electricity, so taking a shower or using the plumbing must be avoided during a storm.
- One must avoid being stuck in a crowd and must spread out. This would help to avoid multiple casualties in case of a lightning strike.
- If someone is struck by lightning, urgent medical attention must be provided. Cardiac arrest is the immediate cause of death in most of these situations. Hence, the victim must be moved quickly to a safer place.



- Lightning conductors must be installed in buildings or any other elevated structures. Lightning conductors are metal rods or metallic objects mounted on the top of an elevated structure (a building, a ship or even a tree). This is electrically bonded using an electrical conductor that is interfaced with the ground through an electrode. During an event of a lightning strike, the flashes strike the rod and get conducted through the wire to the ground, instead of passing through the structure. Thus, these conductors protect the structure

GDGPS