

UNDERSTANDING STORMS

Learn more about storms then, answer the questions below.

Tornadoes, cyclones, typhoons, and hurricanes are all powerful atmospheric phenomena, but they differ significantly in their formation, size, duration, and impact. A tornado is a rapidly rotating column of air connected to a cumulonimbus cloud, typically forming under severe thunderstorms. They are narrow and short-lived but can produce the most intense winds on Earth, causing localised and severe damage.

A cyclone refers to any spinning storm system around a low-pressure centre and includes hurricanes and typhoons based on their location and strength. Cyclones form over warm ocean waters from the heat released when moist air rises and condenses. These storms are larger and longer-lasting than tornadoes and can cause extensive damage through high winds, heavy rain, and flooding, especially in coastal areas.

A hurricane is a type of tropical cyclone that forms over the Atlantic Ocean or eastern Pacific Ocean. In contrast, a typhoon is essentially the same type of storm but occurs in the western Pacific Ocean. Both hurricanes and typhoons have a minimum wind speed of 74 miles per hour to qualify as such and can have devastating impacts on extensive areas due to their size and power.

1. What is the primary condition necessary for the formation of a tornado?

2. How do cyclones differ from tornadoes in terms of their formation?

3. What common feature defines hurricanes and typhoons?

4. Which type of storm is associated with the highest wind speeds?

5. Why are coastal areas particularly vulnerable during cyclones?

Uses comprehension strategies to expand content knowledge.

