

Weather Extremes



Name:

Date:

Test your knowledge: Match the words with the descriptions.

Tornado

Blizzard

Hurricane

Heatwave

Flood

Drought

Typhoon

Hailstorm

a prolonged period of excessively hot weather, often accompanied by high humidity

a rapidly rotating column of air extending from a thunderstorm to the ground

a large tropical storm system with strong winds and heavy rain

a mature tropical cyclone that develops in the western part of the North Pacific Ocean

a severe snowstorm characterized by strong winds and low visibility

an overflow of water that submerges land which is usually dry

a weather condition where balls or lumps of ice fall from the sky

a prolonged period of abnormally low rainfall, leading to a shortage of water

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Weather extremes in detail

Now take a closer look at a weather extreme and answer the related questions.

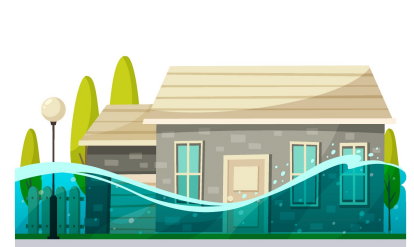
Hurricane

A hurricane is a powerful tropical cyclone that occurs in the Atlantic Ocean and northeastern Pacific Ocean. These storms develop over warm ocean waters and are characterized by a low-pressure area, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain. Hurricanes are fueled by the evaporation of water from the ocean surface, which condenses into clouds and rain when moist air rises and cools.

Hurricanes occur frequently, with around 80 to 90 named tropical cyclones forming each year worldwide, over half of which develop hurricane-force winds. The Atlantic hurricane season runs from June 1 to November 30, peaking in late summer when the temperature difference between the sea surface and the atmosphere above is greatest. The most hurricane-prone regions include the Caribbean Sea, Gulf of Mexico, and the southeastern coasts of the United States.

These storms pose significant dangers to humans, animals, and the environment. Hurricanes can cause catastrophic damage with their intense winds, heavy rainfall, and storm surges, leading to flooding and destruction of infrastructure. The strong winds can uproot trees, destroy homes, and turn debris into deadly projectiles. Flooding can lead to loss of life and displacement, while storm surges can inundate coastal areas. Animals may be displaced or perish due to habitat destruction.

To protect oneself from a hurricane, it is crucial to have a preparedness plan. People should stay informed by listening to weather updates and alerts. In the event of a hurricane warning, moving to a safe location such as a sturdy building away from the coast is advised. Having an emergency kit with essentials like water, food, medications, and supplies for at least 72 hours is vital. It is also important to secure property by boarding up windows and securing outdoor items to prevent damage during the storm.



For each statement, choose if it is true or false.

Hurricanes can only form in the Atlantic Ocean.

True False

The evaporation of water from the ocean surface fuels hurricanes.

True False

Hurricanes are characterized by a high-pressure area and weak winds.

True False

The Atlantic hurricane season peaks in late summer.

True False

Hurricanes can cause catastrophic damage with their intense winds and heavy rainfall.

True False

It is advised to move to a safe location away from the coast during a hurricane warning.

True False

An emergency kit for a hurricane should contain supplies for at least 24 hours.

True False

The southeastern coasts of the United States are among the most hurricane-prone regions.

True False

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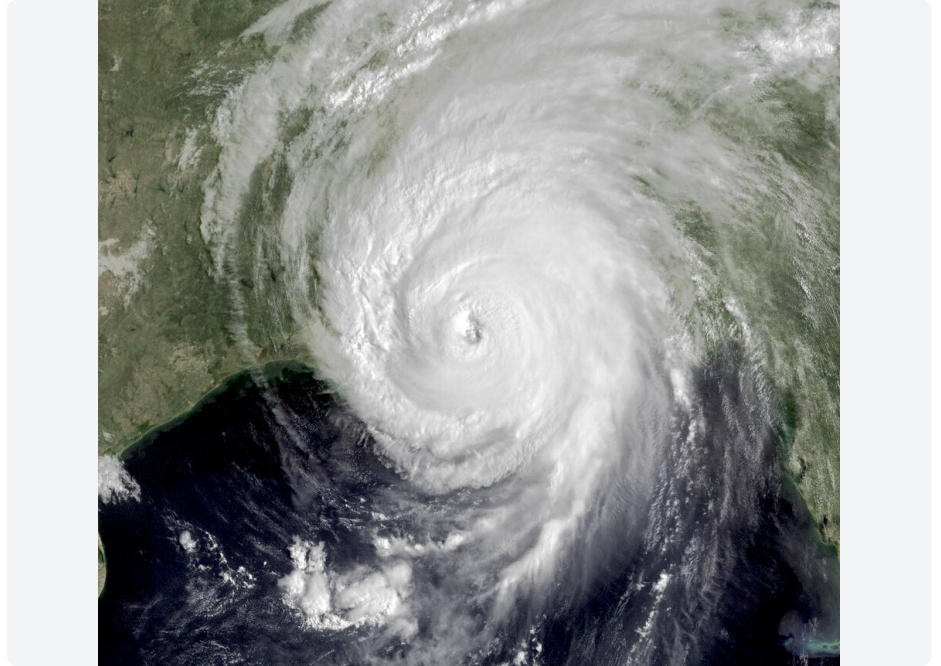
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The Aftermath of Hurricane Katrina: A Decade of Transformation

On August 29, 2005, Hurricane Katrina violently struck the Gulf Coast, leaving a trail of devastation in its wake. The tragedy unfolded in New Orleans, as levees failed and the city submerged under water, marking one of the most catastrophic engineering failures in U.S. history. The economic repercussions were immense, with damages soaring to \$125 billion. The storm exposed glaring flaws in the flood control system, prompting a nationwide debate on infrastructure and emergency preparedness.

The social fabric of New Orleans was profoundly altered, as the disaster displaced over a million residents, leading to a significant demographic shift. The African American community, which bore the brunt of the storm's impact, faced challenges in returning home, exacerbating racial disparities in employment and housing. The political landscape shifted as well, with a new wave of leadership emerging to tackle reconstruction and reform.



NASA - Public domain - [File:Katrina 2005-08-29 1445Z.jpg](#)

Economically, Katrina's impact reverberated through the decade, reshaping industries and labor markets. The construction sector boomed as rebuilding efforts commenced, yet other sectors struggled to regain their footing. The catastrophe sparked a renewed focus on environmental sustainability, with debates on restoring wetlands to serve as natural storm barriers.

Reflecting on Katrina's legacy, historians recognize its role in highlighting the necessity for robust infrastructure and equitable recovery efforts. The lessons learned continue to inform disaster preparedness and resilience strategies nationwide, ensuring that such a calamity will not be repeated.

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Weather extremes in the news

Carefully read the newspaper article about the extreme weather event on the previous page. Then conduct your own research: Can you find a similar event with the same weather extreme? This page can help you with your research: <https://www.loveexploring.com/gallerylist/84422/dramatic-weather-events-from-1900-to-today>

Then note the similarities and differences between the two events in the table.

Similarities	Differences

What do you notice when looking at the list of weather extremes? What do you think the future development will look like?
