Wild Weather

Thunderstorms

What is a 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.

What causes a thunderstorm?

The basic ingredients used to make a thunderstorm are moisture, unstable air and lift. You need moisture to form clouds and rain. You need unstable air that is relatively warm and can rise rapidly. Finally, you need lift. This can form from fronts, sea breezes or mountains.

Hurricanes

What is a hurricane?

A hurricane is a huge storm! It can be up to 600 miles across and have strong winds spiraling inward and upward at speeds of 75 to 200 mph. Each hurricane usually lasts for over a week, moving 10-20 miles per hour over the open ocean. Hurricanes gather heat and energy through contact with warm ocean waters. Evaporation from the seawater increases their power. Hurricanes rotate in a counter-clockwise direction around an "eye." The center of the storm or "eye" is the calmest part. It has only light winds and fair weather. When hurricanes come

onto land, the heavy rain, strong winds and large waves can damage anything in its way.

What causes a hurricane?

The two essential ingredients in every hurricane are warm water and moist warm air. That's why hurricanes begin in the tropics.

Blizzards

What is a blizzard?

A blizzard is a long-lasting snowstorm with very strong winds and intense snowfall.

What causes a blizzard?

You need three things to have a blizzard; cold air at the surface, lots of moisture, and lift. Warm air must rise over cold air.

Tornadoes

What is a tornado?

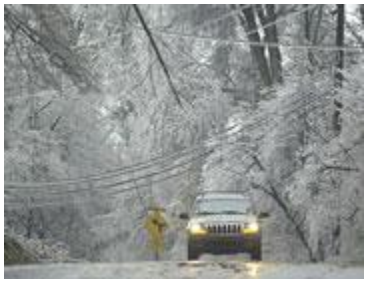
A tornado is a violent rotating column of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of up to 300 mph. They can destroy large buildings, uproot trees and hurl vehicles hundreds of yards.

How do tornadoes form?

Most tornadoes form from thunderstorms. You need warm, moist air from the Gulf of Mexico and cool, dry air from Canada. When these two air masses meet, they create instability in the atmosphere. A change in wind direction and an increase in wind speed with increasing height creates an invisible, horizontal

spinning effect in the lower atmosphere. Rising air within the updraft tilts the rotating air from horizontal to vertical. An area of rotation, 2-6 miles wide, now extends through much of the storm. Most strong and violent tornadoes form within this area of strong rotation.

Ice Storms



What is an ice storm?

An ice storm is a type of winter storm caused by freezing rain. The U.S. National Weather Service defines an ice storm as a storm which results in the accumulation of at least 0.25-inch of ice on exposed surfaces.

How do ice storms form?

Ice storms form when a layer of warm air is between two layers of cold air. Frozen precipitation melts while falling into the warm air layer, and then proceeds to refreeze in the cold layer above the ground. This creates freezing rain or a glaze of ice.