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Extreme Weather

by Katie Clark

Weather is a normal thing all people experience. Weather might mean extreme heat and no wind. It might be heavy rains and storms. It might mean a snow storm, or it might mean a beautiful, sunny day.

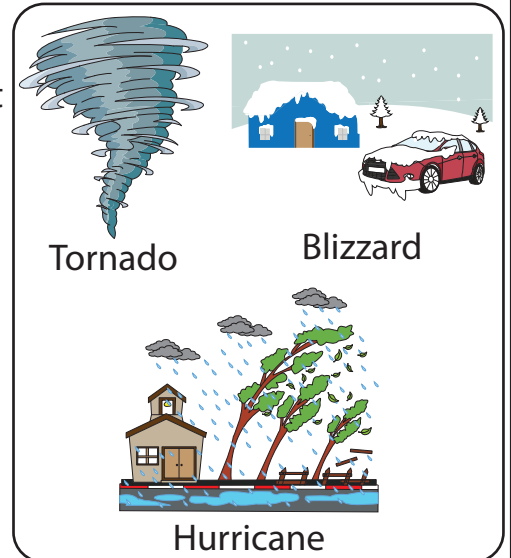
At times, weather can become extreme, or dangerous. This is the case when there are tornadoes, blizzards, hurricanes, or dust storms. Each of these weather dangers differ from the others. However, their causes are similar.

You might be wondering what causes weather. Why is it sunny one week and rainy the next? How can the weather be safe one day and dangerous the next?

All weather can be traced back to the Sun and its heat. As the Sun warms the Earth, that heat spreads. It spreads to areas that are farther from the Sun. Remember, the Earth is always rotating. That means some areas of the Earth are closer to the Sun and some areas are farther away.

When the air that has been warmed by the Sun reaches the cooler air that is farther away, it causes shifts in the air. When the differences between the two temperatures are extreme it can lead to extreme weather events. These extreme weather events can also happen when the shifts in the air have been building for quite some time.

What happens during extreme weather? That depends on each event. A tornado typically occurs during a severe thunderstorm. There can be wind, rain, hail, and lightning. Tornadoes are most common in the spring and summer, but they can happen all year round.



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Hurricanes are similar to tornadoes, but they develop over the ocean. The shifts in the air build to create a massive cyclone. When a hurricane blows over the land, it becomes dangerous for the people who live there.

Blizzards and ice storms typically happen when the shifting air currents happen in the winter months or the colder climates. There can be strong winds and lightning, which are similar to thunderstorms.

Dust storms are most common in the desert climates. There is very little precipitation, or rain, in the desert. This means there isn't much moisture in the air, and thunderstorms are not common. However, there are still shifts in the way the air moves. This creates large dust storms that can cause damage to the people and buildings in the storm's path.

There are a few other factors that can affect weather. These include Earth's atmosphere and a shifting climate. The atmosphere is the blanket of gasses that separate Earth from outer space. The atmosphere keeps out dangerous materials from space. It also keeps the heat of the Sun inside the atmosphere so that the heat cannot escape. If the heat were to escape the Earth would be too cold.

The climate is the pattern of weather over many years. Patterns can change, and this is known as climate change.

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- 1) What is the author's purpose in writing the 3rd paragraph?
 - a) To distinguish between the safe and dangerous weather
 - b) To explain the causes of rain
 - c) To attract readers' attention to the core idea of the text
 - d) To clarify various factors affecting the weather

- 2) How is extreme weather caused?

- 3) Write the definitions for the weather dangers listed below.

Weather dangers	Attributes
Tornado	
Blizzard	
Hurricane	
Dust storm	

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When the warm air reaches the cooler air, it causes shifts in the air. When the differences between the two temperatures are extreme it can lead to extreme weather events. These extreme weather events can also happen when the shifts in the air have been building for quite some time.

- 3) Write the definitions for the weather dangers listed below.

Weather dangers	Attributes
Tornado	Develops over the ocean to create a destructive cyclone
Blizzard	Happens in desert climates causing serious damage to people and buildings
Hurricane	Happens during the shifting air currents in winter or colder months
Dust storm	Occurs during a severe thunderstorm accompanied by heavy wind and lightning

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- 4) What are the two factors, which affect weather, according to the passage?

The Earth's atmosphere and a shifting climate are the two factors that affect weather.

- 5) Have you experienced a weather extreme? Pen down your experience.

Answers may vary.