Apr. 26-30 Station 5: Explore Tornados

What is a tornado?

A tornado is a destructive, rotating column of air that has very high wind speeds and that is sometimes visible as a funnel-shaped cloud.

How does a tornado form?

A tornado forms when a thunderstorm meets horizontal winds at a high altitude. These winds cause the warm air rising in the thunderstorm to spin. A storm cloud may form a thin funnel shape that has a very low pressure center. As the funnel reaches the ground, the higher-pressure air rushes into the low-pressure area. The result is high-speed winds, which cause the damage associated with tornadoes.

Follow Up Questions:

What is a tornado?

Describe the atmospheric conditions that cause the formation of a tornado.

Where do you find tornados?

Tornadoes happen in many places, but they are most common in the United States in Tornado Alley. Tornado Alley reaches from Texas up through the midwestern United States, including Iowa, Kansas, Nebraska, and Ohio. Many tornadoes form in the spring and early summer, typically along a front between cool, dry air and warm, humid air.

Damage caused by tornadoes

The danger of a tornado is mainly due to the high speed of its winds. Winds in a tornado's funnel may have speeds of more than 400 km/h. Most injuries and deaths caused by tornadoes happen when people are struck by objects blown by the winds or when they are trapped in buildings that collapse.

Imagine that you are a weather detective and you are shown this photo. You must determine what weather event caused this damage. Justify your answer.

What weather event caused this destruction?

How do you know?

Why are some houses destroyed while other houses look completely fine?