Tornado Twisters

By Sharon Fabian

¹ A tornado is one of the most violent storms on Earth. It is a twisting, spinning mass of air that stretches from a thundercloud to the ground. A tornado can last anywhere from a few minutes to an hour or more. It can travel across the ground for less than a mile or over one hundred miles. The most violent tornadoes cause massive damage and the loss of many lives.

² A tornado often occurs when warm, moist air meets cool, dry air. Many times, it begins in a thunderstorm cloud, often in the kind called a supercell. A supercell is a giant storm cloud that contains strong updrafts of wind and tremendous amounts of energy. When conditions are just right, these updrafts begin to spin. Then, if one of these spinning air masses tilts into a vertical direction, it is on its way to becoming a tornado. In this stage, the rotating air mass is called a mesocyclone. A mesocyclone can be two to six miles wide, and it has a good chance of escalating into a tornado.



³ To become a tornado, the air mass must stretch down from the

thunderstorm cloud. When it does this, it becomes a funnel cloud. Once it touches the ground, it is a tornado. On the ground, the tornado continues to spin and also moves forward in the direction that the thunderstorm cloud is moving.

⁴ Some tornadoes appear as an ominous black twister and others appear to be bright white. At first, some tornadoes may be difficult to see, but once they begin to pick up dust and debris, they become much more visible.

⁵ Tornadoes have been spotted on all continents of the world except Antarctica. Almost no place is completely safe from tornadoes, but certain places are especially plagued by these dangerous twisters. The most common place for tornadoes to occur is in the United States on the large flat plains between the Rocky Mountains and the Appalachian Mountains. The geography of this area is just right for the colliding masses of warm and cool air to produce a tornado. In fact, so many tornadoes occur in this part of the United States that it has become known as Tornado Alley.

⁶ Most tornadoes, but not all, move from the southwest toward the northeast or from the west to the east. In the northern hemisphere, tornadoes usually spin in a counterclockwise direction. In the southern hemisphere, they spin in a clockwise direction.

⁷ Tornadoes are categorized according to their wind speed and the amount of damage they do. The Enhanced Fujita Scale number, ranging from EF0 to EF5, tells how severe a tornado is. EF0 means the tornado caused only light damage, while EF5 means that it was the most damaging. In the past, an earlier Fujita scale was used with numbers ranging from F0 to F5.

⁸ Tornadoes can appear suddenly; they don't give much warning. So it's a good idea to have a plan of where to go for safety in case of a tornado. If you do hear or see signs of a tornado, move quickly to the safest possible place.

⁹ One sign of an approaching tornado is a dark, greenish color in the sky. Another sign often reported by people who have survived a tornado is a loud noise that sounds like a freight train.

¹⁰ Not everyone is lucky enough to get away from a tornado in time. In 1925, an F5 tornado known as the Tristate Twister cut a path over two hundred miles long across parts of Missouri, Illinois, and Indiana. An estimated seven hundred people died from this one twister, proving just how violent a tornado can be.

¹¹ There have been many large tornadoes and many more small ones, but any tornado has the strength to cause damage and injury. As some of the strongest and fiercest forces of nature, tornadoes demand our attention whenever and wherever they appear.

Copyright © 2013 edHelper

Science Pd _____

1.	How long does a tornado last? A few minutes More than an hour Either a few minutes or more than an hour Anywhere from a few minutes to more than an hour	2.	Tornadoes occur when warm, moist air meets Cool, dry air Fast moving air Warm, dry air Cool, wet air
3.	One type of large thunderstorm cloud is called a Image: Supercell	4.	A rotating air mass in a thunderstorm cloud is called a
5.	To be considered a real tornado, a funnel cloud must touch the ground. False True	6.	The Enhanced Fujita scale tells the of a tornado. A Severity B Location C Height Size
7.	How is the strength of a tornado measured?	8.	Why are tornadoes most likely to occur in the central part of the United States?

Tornado Twisters