

Name \_\_\_\_\_

## How A Tornado Forms

**Directions:** Read the passage below carefully. Then answer the questions that follow using complete sentences.



### *The Birth of a Tornado*

Tornadoes are among the most powerful and destructive storms on Earth. They usually form inside a special type of thunderstorm called a supercell. A supercell develops when warm, moist air near the ground collides with cold, dry air high above. This clash of air masses creates instability and causes the storm to rotate.

Inside the supercell, strong winds at different heights blow in different directions. This condition is called wind shear. Wind shear causes the air to spin horizontally, like a rolling tube. Rising warm air can tilt this rolling motion into a vertical position, forming a rotating updraft. When the rotation intensifies, a funnel cloud may develop.

If the funnel cloud extends downward and touches the ground, a tornado is born. Once on the ground, tornadoes can cause severe damage to buildings, trees, and vehicles. Meteorologists track these storms carefully and send out warnings to help people find shelter in time.

1. What type of thunderstorm is most likely to produce tornadoes?
2. What two kinds of air masses collide to create instability for tornado formation?
3. What is wind shear, and how does it contribute to tornadoes?
4. What happens when a funnel cloud touches the ground?
5. Why is it important for meteorologists to track tornadoes and send out warnings?