

Objective

By the end of this lesson on tornados, the student will be able to explain the formation of tornados, understand their impact on the environment and communities, and identify safety measures to take during a tornado warning.

Materials and Prep

- Notebook and pen/pencil for note-taking
- Access to a computer or smartphone for research (if available)
- Open space for outdoor activity (if possible)
- Preparation: Familiarize yourself with the basic science of tornados, including how they form and the Fujita scale.

Activities

- **Research and Presentation:**

The student will research tornados, focusing on their formation, characteristics, and effects. After gathering information, they will create a short presentation to share their findings.

- **Tornado Simulation:**

Using a simple method, the student will simulate a tornado using a bottle and water to understand the vortex formation. This hands-on activity will help visualize how tornados develop.

- **Safety Plan Creation:**

The student will create a personal tornado safety plan, including steps to take before, during, and after a tornado. This plan will help reinforce the importance of preparedness.

- **Creative Storytelling:**

The student will write a short story from the perspective of a tornado, describing its journey and the impact it has on the environment and people. This activity encourages creativity while reinforcing learning.

Talking Points

- "Tornados form from severe thunderstorms, particularly supercells, when warm, moist air meets cool, dry air."
- "The Fujita scale measures tornado intensity based on damage caused, ranging from EF0 (weak) to EF5 (incredible)."
- "Tornados can travel at speeds of up to 300 mph, making them one of the most violent weather phenomena."
- "It's crucial to have a safety plan because tornados can strike with little warning, often giving only a few minutes to prepare."
- "Understanding the science behind tornados helps us better prepare and respond to these natural disasters."