

Winds of Destruction

4th Grade

Jeremy White, Brent Greene, & Kathleen Waugaman

1. References:

- “Water Affects the Weather” lesson plan from 4th grade curriculum guide

2. Benchmarks:

ES-4 & ES-6 (Benchmark D): Describe weather by measurable quantities such as temperature, direction, wind speed, precipitation, and barometric pressure. Trace how weather patterns generally move from west to east in the United States.

3. Objectives:

Learn how severe weather can affect and devastate the people of all nations. The students should also have knowledge about how severe weather such as hurricanes and tornadoes can develop.

4. Materials:

- Severe Weather Video
- Television and VCR
- Science Journals

5. Initial Demonstration:

Discuss the problems that have arisen from the latest string of hurricanes and tsunamis. Ask for volunteers to share with the class what types of things they have seen on television and heard on the radio about those that have survived severe weather. Also explain to them that not only does severe weather affect the lives of those who live in the direct path of a storm, but also the entire country due to the loss of jobs and increasing fuel costs.

6. Target Observations:

- Hurricanes are destructive storms with high winds and water, which cause structural damages and flooding.
- Severe weather leaves people without homes, jobs, and food.

7. Target Model:

- Weather in Ohio is quite different from coastal regions that are subject to hurricanes and tsunamis, as well as the central states that are more prone to

tornadoes. When these severe storms strike, they can be deadly and costly to a nation in multiple ways.

8. Procedure:

The students will remain at their desks while they watch a 30-minute video about severe weather. Following the film, the students will take out a clean sheet of paper and write four facts that they learned about severe weather, emphasizing that each sentence should be written as complete thought. These film observations will be collected to end this particular lesson.

9. Target Observations:

- Hurricanes form only over water, while tornadoes can form over land and water.
- Severe weather can tear down and destroy the best built buildings and structures.
- Severe flooding can occur as a result of high waves, strong rains, and poorly built containment walls.

10. Revised Target Model:

- Columbus, Ohio will only feel small effects from hurricanes because we are so far inland. It is possible for a hurricane to hit Texas and the storm could reach Ohio, bringing wind and rain.

11. Summary:

Students have been introduced to the severity of several types of storms. They have seen the types of destruction and devastation that such storms can cause. Storms can be deadly and leave an entire nation in ruins for years.