

Name\_\_

### Activity A. Tornado Tube

#### **Observations and Results**

- 1. Describe what occurs when the Pet Tornado is shaken.
- 2. Once Activities A and B have been completed, compare and contrast the vortexes formed in each device.
- 3. Describe the principles of the Fujita Scale.
- 4. How does the Enhanced Fujita Scale (EF) differ from the Fujita Scale?

## Activity B. Pet Tornado and the Fujita Scale

#### **Observations and Results**

- 1. Describe what occurs when the Pet Tornado is shaken.
- 2. Once Activities A and B have been completed, compare and contrast the vortexes formed in each device.
- 3. Describe the principles of the Fujita Scale.
- 4. How does the Enhanced Fujita Scale (EF) differ from the Fujita Scale?

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# Activity C. Relative Humidity and Dew Point

#### **Observations and Results**

Air temperature (°F)	
Dry-bulb temperature after spinning (°F)	
Wet-bulb temperature after spinning (°F)	
Difference between dry- and wet-bulb temperature values (°F)	
Relative humidity (%)	
Dew point (°F)	

1. Define the terms relative humidity and dew point.

- 2. Given your results, how do relative humidity and dew point compare?
- 3. Compare your relative humidity and dew point values with your local weather station or Internet weather site. How do your values compare to the actual or reported values?

# Activity D. A Cloud in the Hand

#### **Observations and Results**

1. What does the smoke from the match represent?

- 2. What causes the cloud to form in the bottle?
- 3. What would happen if the smoke from the match was not present? Why?

### Activity E. PolySnow<sup>™</sup>

#### **Observations and Results**

1. Explain why the artificial "snow" forms when the water is added to the PolySnow powder.

- 2. Compare and contrast PolySnow to real snow.
- 3. What happens when salt is added to the PolySnow? Give an example of how this process is commonly used.