

Name _____



Making a Vortex Demo

Purpose: to create a model of a vortex.

1. Draw a labeled diagram of the vortex chamber, label the **vortex**, **areas of high pressure**, **areas of low pressure**, **arrows demonstrating wind movement**.

2. What two types of severe weather contain a vortex?

3. Severe weather forms under what type of pressure systems?

4. What causes strong winds?

5. Why did we add smoke to the chamber?

6. Where are there areas of high pressure?

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7. Where are there areas of low pressure?

8. As the air rises into the chimney stack what happens to pressure of the air? Which heat transfer is being demonstrated?

9. Where do most hurricanes form?

10. What would happen to a hurricane if there was no water or heat source? Why?

11. Where do most tornadoes form? Why?

12. How do tornadoes form?

13. Explain how the vortex chamber works. Be sure to include the following terms; **vortex, low pressure, high pressure, convection, wind, water, and heat.**



