**Station 2: Tornadoes!**

**Content Objective:** (E4.3A, E4.3B, E4.3C, E4.3D)

* I can explore the formation, damage associated with, mitigation, and seasonal variations of tornadoes.
* I can create a scientific model of a tornado.

**Writing Language Objectives:**

* I can restate questions while answering in complete sentences.
* I can listen to the ideas and opinions of my group members.
* I can write answers to comprehension questions using complete sentences.

**Homework:**

Complete the comprehension questions if necessary

**These are the steps you will follow:**

1. Read your content objectives, writing language objectives, and homework for your station.

2. Complete Part 1: “Make your own storm”

3. After completing Part 1 move on and complete Part 2 “Interactive Website” If your access is blocked leave as is and raise your hand so Ms. Murphy can enter her log in.

4. After completing Part 2 move on to Part 3 Comprehension questions.

5. If you finish your station early you may

- Work on assignments from previous stations

-Raise your hand and ask Ms. Murphy to check over your work

-Read silently - Work on missing work or homework quietly

 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Station 2: Tornadoes!** Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Interactive Website** Hour \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions:** Tornado Research! Follow the step-by- step directions below to learn more about tornadoes.

1. Using the Chrome Books go to [www.sciencespot.net](http://www.sciencespot.net/) (If it does not work try two more times and triple check your web address, then raise your hand for assistance)
2. Click on “Kid Zone” in the upper right hand corner.
3. Look for the **Earth Science** Column
4. Click on the Weather link
5. Look under “Special Topics”
6. Click on the link: NOVA-Hunt for the Supertwister
7. Click on the “launch interactive” button under the title “Rate Tornado Damage”
8. Once you launch the interactive, you'll determine what you think the Fujita Scale rating should be for the picture shown. You might have to read the descriptions and make a few guesses before you arrive at the correct answer! Fill in the chart below as you go through the photographs of tornado damage.
9. Go to <http://whyfiles.org/2013/control-a-tornado/>
10. Play with the interactive diagram to create tornadoes with different intensities and ratings. Keep track of the funnel width, pressure differential, and rotating speed in the chart below. You'll “create” five different tornadoes; record the rating assigned to each vortex you've created.

 **T-Station**

**Part 1: Make Your Own Storm!**

**What you will need**:

* Your table partner, you will be working in pairs.
* 8 oz. Jar with lid
* Water
* Vinegar
* Dish soap
* A pinch of glitter

**Make it happen!**

1. Fill the jar ¾ full of water.
2. Put in one teaspoon of vinegar and one small squeeze of dish soap.
3. Sprinkle in a pinch of glitter
4. Close the lid, shake it up vigorously; then twist the jar to swirl the water and see a vortex like a tornado form in the center of the jar.
5. Raise your hand to demonstrate and explain your model to Ms. Murphy

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1. What happened?
2. What force is being applied?
3. What force is being modeled?
4. What storm is being modeled?

Textual evidence that supports your claim:

1. Describe how your vortex in a jar is a scientific model of an actual tornado. How is this model a good representation and how is it a bad representation.

 **T-Station**

**Part 3: Comprehension questions**

**Directions**: Using your textbook, group members and what you learned from this station to complete the following questions using complete sentences. (p. 352-354)

1. Define all vocabulary words in your own words.

- Downbursts

-supercells

-tornado

-hygrometer

-Fujita tornado intensity scale

2. Describe how a tornado forms.

3. Explain the Fujita tornado intensity scale and how it classifies tornadoes.

4. Describe the difference between a stationary front and warm front (322)

5. List the signs of an approaching or developing tornado. What should you do when a tornado watch or warning is issued.