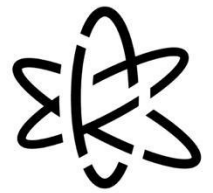




Sixth Grade Science

6th Grade Science: Summer Activity 4

Hurricane Strength



Directions: This handout goes with a KCS Teacher Video. If you have access to the video, watch the video before doing this activity. You can find the videos here <https://www.knoxschools.org/Page/21816>

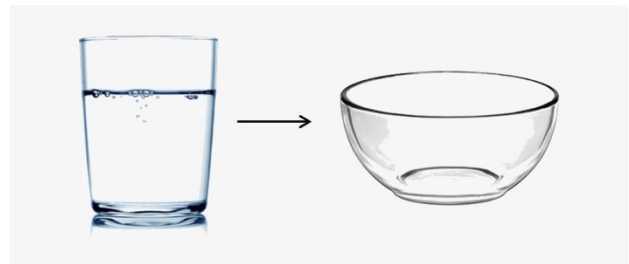
Hurricane Strength:

Materials Needed:

- Large Bowl
- Water
- Paper Clip
- 12 inches of string
- Spoon
- a helper (parent, sibling, friend)

Directions:

1. Fill a large bowl of water a little over half full.



2. Tie a paper clip on the end of the foot-long string.

3. Swirl the contents of the bowl counterclockwise with a spoon to get a moving rotation.



4. The helper places the paper clip end of the string into the water, holding the string up.
5. Now observe where the most motion of the paper clip occurs by its placement from the center or "eye" on outward to the *edge* of the bowl.

6. What did you notice?

7. How is the model bowl of water like a hurricane? You may draw or write your answer.

8. How is it not like a hurricane?

Make a Thunderstorm


Materials Needed:

- Clear, plastic container (size of plastic shoebox)
- Red food coloring
- Ice cubes made with blue food coloring

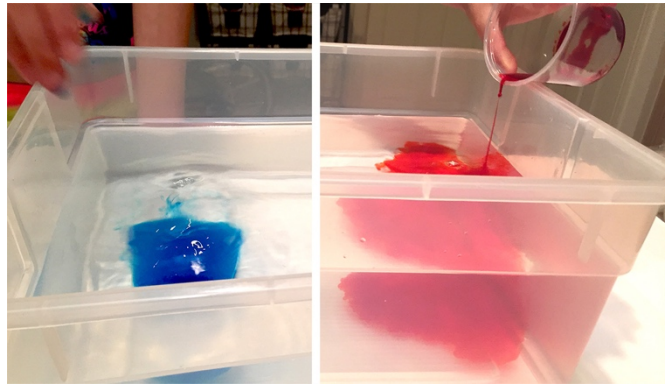


Directions:

1. Fill the plastic container two-thirds full of lukewarm water

6th grade Science Activity 4- *Share what you learned by tweeting @KCSScience.* 

2. Let the water sit for one minute.
3. Place a blue ice cube at one end of the plastic container.
4. Add three drops of red food coloring to the water at the other end of the plastic container.
5. Watch what happens.



EXPLANATION:

The blue and cold water sinks while the red and warm water rises. This happens because of convection. The blue water represents the cold air mass and the red water represents the warm, unstable air mass. A thunderstorm is caused by unstable air and convection plays an important part. A body of warm air is forced to rise by an approaching cold front therefore thunderstorm's form.

Severe Weather Brain Busters

Directions: This handout goes with a KCS Teacher Video. If you have access to the video, watch the video before doing this activity. You can find the videos here <https://www.knoxschools.org/Page/21816>

Severe Weather Brain Busters: Pick TWO of the following to answer on a separate sheet of paper.

| | |
|---|---|
| <p>If you were in a protective bubble and nothing could hurt you, which of the following would you like to observe up close as they were happening and why? Thunderstorm, Tornado or Hurricane.</p> | <p>Hurricanes and tornadoes both have very devastating effects on the areas they hit. In your opinion, which one causes the most damage and why?</p> |
| <p>Thunderstorms are most likely to happen in the spring and summer months and during the afternoon and evening hours. Why do you think this is true? Hint-Connect what you have learned about convection currents to how storms form.)</p> | <p>You have been given the opportunity to ride along with a "Storm Chaser" group. From what you know about tornadoes, would you go with them? Why or why not?</p> |



Severe Weather




Directions: This handout goes with a KCS Teacher Video. If you have access to the video, watch the video before doing this activity. Read below with your child.

Severe Weather Card Sort

Directions:

1. Print paper. Cut each box out.
2. On a piece of notebook or printer paper, make three columns. Label columns Thunderstorm, Tornado and Hurricane.

If you don't have a printer, create the columns on a piece of paper, then write the correct facts under the correct column. Add a drawing that represents each form of severe weather here.

| | | |
|---|--|---|
| <p>Winds can reach 75-200 mph</p> |  <p>Photo by Brad</p> | <p>Forms over warm tropical ocean water, not on land</p> |
|  | <p>Forms when a cold air mass pushes a warm air mass upward</p> |  |
| <p>Forms as a funnel shaped cloud which rotates as it moves over the land.</p> | <p>Develops from Thunderstorms and moves across land.</p> | <p>Lots of lightning and thunder is a basic part of this storm.</p> |