



Wind can carry smoke, dust, and gases hundreds of miles in only a few days. Satellite pictures of dust storms in the Sahara Desert show that some of the dust actually travels across the Atlantic Ocean and falls onto the southeastern United States. Because we can't see air, we can't really tell where it is going unless we feel it on our skin or see a cloud drift by. In this activity, you will drop colored candies into warm water to imitate the way that smoke, dust, and gases move in air.

Materials

Disposable square plastic container (sandwich-size)
Warm tap water (not hot water)
Candies with a hard, colored shell



SAFETY: Be sure to follow Milli's Safety Tips and do this activity

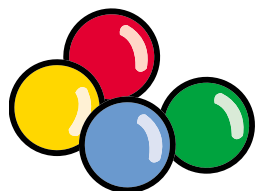
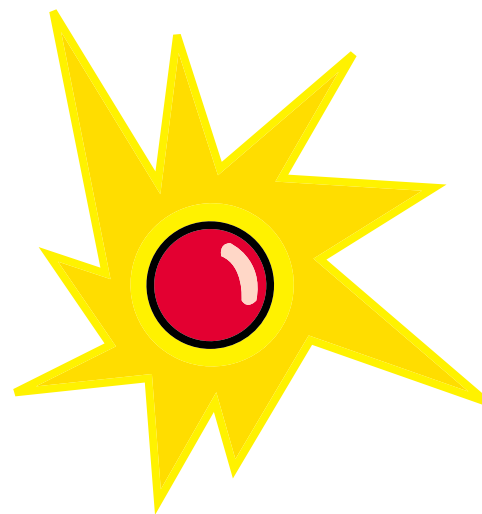
only with adult supervision! Do not eat the candy or drink the water used in this activity. Eye protection must be worn by everyone doing this activity.

Procedure

1. Ask your adult partner to help you partially fill the plastic container with warm water. The water in the container should be about 2 cm (a little less than 1 inch) deep.
2. Select three pieces each of four different colors of candy. For example, you could have three red, three yellow, three blue, and three green pieces for a total of 12 pieces of candy.
3. Separate the candies by color. Put the candies into the water-filled container so that each corner has a different color. Be careful not to stir the water.
4. Watch carefully as the candies begin to dissolve. Write what you saw in the "What Did You Observe?" section.
5. Pour the water down the drain, and throw the candy and plastic container in the trash. Thoroughly clean the work area, and wash your hands.

Where's the Chemistry?

Air is constantly moving from one place to the other. Sometimes we can tell that it is moving, and sometimes we cannot. One of the ways that early scientists tracked how fast winds were blowing was by watching clouds. In this activity, you made clouds of color in the water. The clouds moved, even though you did not mix the water. Clouds in the sky do the same thing. Today, satellites give us a view from above that tells which way the wind is blowing. We can also use Doppler radar to find out wind speed and direction. By combining these two techniques, weather forecasters are able to warn us of storms, so that we can take cover before trouble hits.



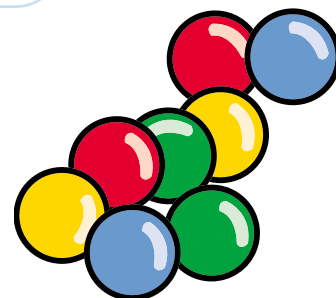


What Did You Observe?

What four colors of candy did you choose?
_____, _____, _____, and _____

What happened to the candy colors when you added the candies to the water?

Draw a picture of what you observed.

A large, empty rectangular box with a black border, intended for drawing the observed results of the experiment.

The American Chemical Society develops materials for elementary school age children to spark their interest in science and teach developmentally appropriate chemistry concepts. The *Activities for Children* collection includes hands-on activities, articles, puzzles, and games on topics related to children's everyday experiences.

The collection can be used to supplement the science curriculum, celebrate National Chemistry Week, develop Chemists Celebrate Earth Day events, invite children to give science a try at a large event, or to explore just for fun at home.

Find more activities, articles, puzzles and games at www.acs.org/kids.

Safety Tips

This activity is intended for elementary school children under the direct supervision of an adult. The American Chemical Society cannot be responsible for any accidents or injuries that may result from conducting the activities without proper supervision, from not specifically following directions, or from ignoring the cautions contained in the text.

Always:

- Work with an adult.
- Read and follow all directions for the activity.
- Read all warning labels on all materials being used.
- Wear eye protection.
- Follow safety warnings or precautions, such as wearing gloves or tying back long hair.
- Use all materials carefully, following the directions given.
- Be sure to clean up and dispose of materials properly when you are finished with an activity.
- Wash your hands well after every activity.

Never eat or drink while conducting an experiment, and be careful to keep all of the materials used away from your mouth, nose, and eyes!

Never experiment on your own!

For more detailed information on safety go to www.acs.org/education and click on "Safety Guidelines".

