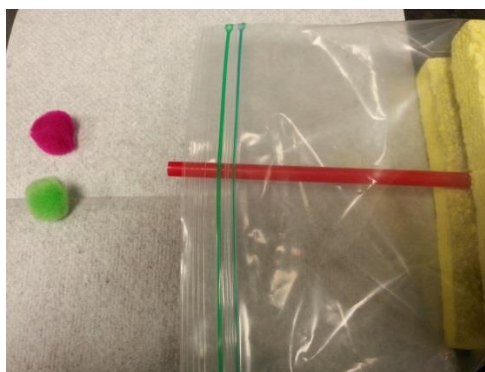




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Air Pressure Sponge



Standards:

K.PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.

K.PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.

Introduction:

Air is everywhere. It can be hard to understand that spaces are filled with air and that air has a force that can move objects of different sizes. However, this force is limited so some objects may move and others may not.

Materials:

- 2 small kitchen sponges
- 1 quart size Ziploc bag
- 1 straw
- Hot glue gun
- 2 pom poms
- Any other fun objects you would like to see move with air pressure

Safety:

- Always have an adult with you to help you during your experiment.
- Always wear eye protection and gloves when doing chemistry experiments.

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Procedure:

1. Place the two damp sponges one on top of the other, inside the plastic Ziploc bag.
2. Place the straw between the two sponges so that one end of the straw is inside the bag and the other end is sitting outside the bag.
3. Seal the Ziploc bag (you may want to hot glue/tape the opening so it doesn't burst open)
4. Place a pom pom on a flat surface and place the bag behind them so that the straw is positioned to blow the pom pom. (For more momentum blow air into the straw, filling the bag as much as you can.)
5. Press down hard on the sponges and watch the pom pom roll away. (You can also use a hot wheel car or other small objects.)

Data and Observations:

1. Record your observations in this space.

Questions:

2. Which objects moved? Why?

3. Did any objects not move? Why?

References:

1. Kids Activities Blog. <http://kidsactivitiesblog.com/47096/air-pressure-experiment-for-kids-2>
(Accessed: July 16, 2014).

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