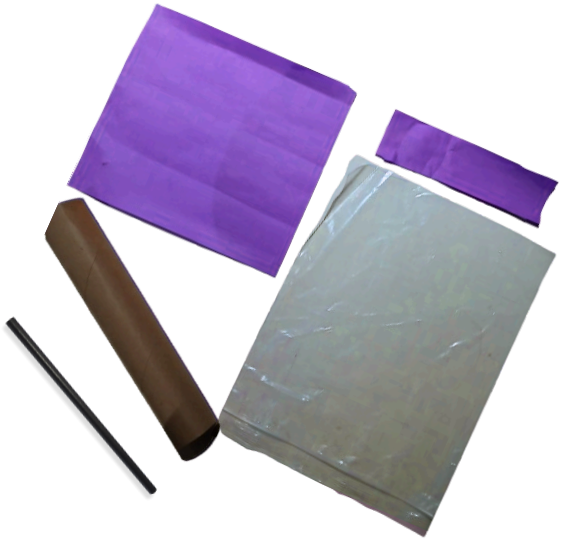
ZIPLOCK ROCKETS ACTIVITY

MATERIALS

- Gallon size ziplock bags
- Paper towel roll
- Tape
- 9X12 inch piece of construction paper
- Strip of paper (around 3 inches)
- Straw



RESEARCH QUESTION

How does air pressure affect the speed and distance a paper rocket can travel?

DIRECTIONS

Step 1. Cut across one corner of the ziplock bag.

Step 2. Insert paper towel roll into hole, making sure it sticks out on the outside of bag.

Step 3. Tape around the roll attaching it to the ziplock bag.

Step 4. Wrap large paper around roll, attaching the paper with tape to make a loose tube (be careful not to tape the paper directly to the roll).

Step 1

Step 2

Step 3

Step 4

This activity is intended for use by adults and children who can read and follow directions and warnings. One can choke or suffocate on uninflated or broken ziplock bags. Adult supervision advised.

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Step 5. Attach the 3 inch strip of paper across the top hole of the paper towel roll to cover it. Tape down the sides of the small paper onto the large paper.

Step 6. Insert straw in bag, zip up the bag and blow through the straw to fill the bag with air

Step 7. Seal the bag once it is filled with air and press down firmly to watch your rocket fly!

STOP & THINK!

- How far did your paper rocket travel?
- Predict what would happen if you inflated your ziplock bag more, would your paper rocket travel farther?
- What would happen to your paper rocket if the top of the rocket was open? Would the rocket still travel? Why or why not?

SCIENCE CONCEPT

The **air** (which is a mixture of gases) around you has weight and presses against anything ittouches. When scientists measure this, they are measuring **air pressure** (or atmospheric pressure). When you blew into the ziplock bag, your breath was inflating the bag. Your breath (which is also a mixture of gases) was pushing on the sides of the ziplock bag. Now, when you pushed down on the ziplock bag, the air that was inside of the bag (your breath) moved and pushed against the paper rocket. Remember that pushes and pulls are called **force**. So, even if you cannot “see” air, we can still explore how air pressure works!

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