Raven Hill DISCOVERY CENTER
WHERE SCIENCE, HISTORY AND ART CONNECT

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Raven Hill Discovery Center is a 501(c)(3) tax-exempt corporation.

Mission: Raven Hill provides a place that enhances hands-on and lifelong learning for all ages by connecting science, history & the arts.

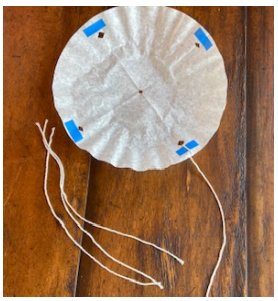
Parachutes

Air resistance helps parachutes work! The goal is to design a parachute that will fall slowly to the ground. You will need a coffee filter, plastic Ziploc bag or light material, tape, scissors, string, paper clip and a washer or other small object to use as a weight. Open up the coffee filter or cut a circle from a single layer of the plastic bag. Fold twice into quarters. Cut a small hole near the edge at each of the folds and cut a small hole at the top to control the air. Add small pieces of tape under the holes to reinforce them. Cut and attach 4 pieces of string, all the same length. Tie the strings together at the bottom and add a paperclip at the knot. Hang your weight from the paper clip. CAREFULLY, use a step ladder or chair or find a high spot to drop your parachute. Drop it and see how it works. Remember, you want it to drop slowly and be stable. When you drop or release the parachute the weight pulls down on the strings and opens up the large surface area of the parachute material, which catches the air and uses the air resistance to slow the parachute down. The larger the surface area the more air resistance and the slower the parachute will drop. The small hole in the middle of the parachute helps air slowly pass through instead of spilling out on a side. It helps the parachute fall straighter. Make modifications to your parachute and try again. Different weights, more strings, different parachute material? Figure out the best combination for your parachute. Can you make your parachute land on a target on the floor? Be a scientist—experiment!


1 Supplies


2 Fold in quarters, cut holes


3 Reinforce holes


4 Attach strings


5 Ready to launch


6 Release to test