

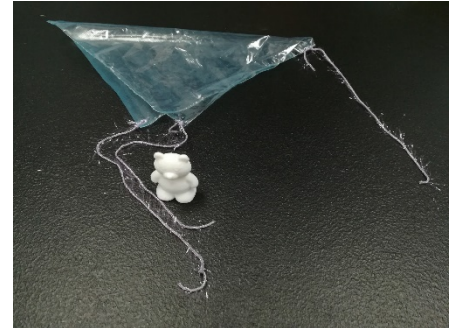


Make Your Own Parachute!

(Suggested Ages: 5+)

Gather

- A plastic bag or light material, like thin cloth
- Scissors
- String
- A small object to act as the weight, such as an action figure or plastic toy



Let's Experiment!

1. Cut out a large square from your plastic bag or material. (10"x10")
2. Cut a small whole near the edge of each corner.
3. Attach a piece of string of the same length to each of the holes.
4. Tie the pieces of string to the object you are using as a weight.
5. Use a chair or find a high spot to drop your parachute and test how well it worked, remember that you want it to drop as slow as possible.

How Does it Work?

Hopefully your parachute will descend slowly to the ground, giving your weight a comfortable landing. When you release the parachute the weight pulls down on the strings and opens up a large **surface area** of material that uses **air resistance** to slow it down. The larger the surface area, the more air resistance and the slower the parachute will drop.

Cutting a small hole in the middle of the parachute will allow air to slowly pass through it rather than spilling out over one side, this should help the parachute fall straighter.



Take it Further!

How could you change your design to improve your parachute? Create several different shapes or sizes of your parachutes. You can test them by recording how long it takes for each to drop from the same height - you can use a clock with a second hand, or an electronic timer. For more information, visit:

https://www.youtube.com/watch?v=Ab_g5sLoXoY