Parachute design

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| **Design and Test a Parachute**  Learn about air resistance while making an awesome parachute! Design one that can fall slowly to the ground before putting it to the test, making modifications as you go. |  |  |

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| **What you'll need:**   * A plastic bag or light material * Scissors * String * A small object to act as the weight, a little action figure would be perfect     **Instructions:**   1. Cut out a large square from your plastic bag or material. 2. Trim the edges so it looks like an octagon (an eight sided shape). 3. Cut a small whole near the edge of each side. 4. Attach 8 pieces of string of the same length to each of the holes. 5. Tie the pieces of string to the object you are using as a weight. 6. 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.     **What's happening?**  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. |