## Zedua Experiments

Title: Make your own Parachute

What is air resistance?

Air resistance is the frictional force air exerts aginst a moving object. As an object moves, air resistance slows it down. The faster the object's motion, the greater the air resistance exerted against it.

In this experiment, we would be learning the application of air resistance by making our own parachute.

## **Materials Required:**

- 1. A plastic bag or light plastic sheet
- 2. Scissors
- 3. String
- 4. A small object to act as the weight.
- 5. Needle

## **Procedure:**

- 1. Cut out a large square from your plastic bag or sheet.
- 2. cut out the edges to make an octagon (an eight sided shape).
- 3. Pierce a small hole near the edge of each side with a needle.
- 4. Insert 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 (an action figurine would look nice).
- 6. 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?

Your parachute will descend slowly to the ground, giving your action figurine a comfortable landing. When you release the parachute the weight pulls down on the strings and opens up a large surface area of plastic sheet that uses air resistance to slow it down. Surface area of the sheet is directly

proportional to air resistance. So, the larger the surface area the more air resistance and the slower the parachute will drop.

If you want the parachute to fall straight, cut a small hole in the middle of the parachute. This will allow air to slowly pass through it rather than spilling out over one side.



Source: pintrest