

## Polygon Parachute Challenge

Supplies: Four plastic grocery bags (check for holes), scissors, tape, a hole punch (or something to make a hole), a ruler, string and an action figure (If you have 4, one for each shape that will be easier ~ you can test a couple shapes at a time or all of them if you have help.)

Procedure:

1. Draw 4 different polygons ~ one on each of the four bags. Ask for help to hold the bag smooth. I traced a roasting pan for my rectangle, and used that as the basis for my trapezoid and parallelogram. (I tried to make my polygons as even in size as possible so the experiment is about shape rather than size.)
2. Cut the shapes out of the bags
3. Strengthen the corners with tape as in the video
4. Cut for 12" pieces of string
5. Tie them to the corner of each shape
6. Tie your action figure to the strings.
7. Write down your hypothesis ~ What shape do you think will make the best parachute and why?
8. Conduct your experiment.
9. Write your conclusion

### Hypothesis ~

What shape do you think will make the best parachute?

Explain why you think this.

### Procedure ~

How did you do the experiment?

Explain what happened.

### Conclusion ~

What did you find out when you completed the experiment? Did it go as you expected or not?

Explain why you think this happened.