## **Toy Parachute**

## **Supplies:**

- Small plastic trash bag
- Permanent marker
- Scissors
- Hole punch
- String
- Tape
- Plastic Cup
- Ruler
- Penny



## **Instructions**

- 1. Fold your trash bag in quarters. Use the permanent marker to draw a line cutting off the corners (so that you will end up with a circle). Cut along the line. You actually have TWO circles, one from each side of the trash bag.
- 2. Measure eight pieces of string 12" long. Place eight small pieces of tape around the edge of the circle. Use the hole punch to pierce eight holes through the tape.
- 3. Tie a piece of thread through each hole.
- 4. Use the hole punch to pierce 4 holes around the edge of the cup. Tie two of the threads from the parachute into each hole in the cup. The cup should hand like a hot-air balloon basket.
- 5. Tape the penny to the bottom of the cup.
- 6. Take your parachute to a safe place and drop it!

## The Science Of It

Objects accelerate when the forces pushing or pulling in one direction are stronger than the forces pushing or pulling in the other direction. When you drop the cup, gravity pulls it down towards the ground, while air resistance pushes up against it. A parachute increases the area that the air pushes against. This increases the force of the air resistance and stops the cup from speeding up as much, giving it a gentle landing.