FAMILY ACTIVITY: TOY PARACHUTE

Create a parachute that lets your favorite hero fall safely down to the ground! Learn about principles of gravity and air resistance.

MATERIALS AND INSTRUCTIONS

Materials
- Plastic bag or paper napkin
- Tape
- String
- Small Paper/plastic cup
- Small toys

Instructions
1. Create a large flat square of thin material. This could be cut out from a plastic shopping bag or unfold a paper dinner napkin.
2. Place a small piece of tape at each of the corners of the square. Using a pen/pencil or other sharp object, carefully poke a hole through the center of each piece of tape in the corners.
3. Cut four lengths of string that are about the same length as the sides of your square of material. Tie one end of each string to each of the four corners of your square material where you poked holes. (Instead of tying the strings you may also tape the strings to your square at each corner)
4. Poke four holes near the top rim of your small paper/plastic cup. Tie the free ends of each piece of string to each of the four holes in your small cup. (Instead of tying the strings you may also tape the strings to your cup)
5. Fill your cup with items of your choosing and then toss your parachute! To toss your parachute you can toss the cup upward or if you are allowed you may climb onto a higher surface like a chair to drop the parachute and watch it float down. You can send your favorite toy on a parachuting adventure!
6. You can test different objects in your cup to see how they fall differently such as testing heavy or light toys. You can build more parachutes from different materials or build larger or smaller versions and see how they might fall differently!

QUESTIONS TO EXPLORE

1. What causes things to fall down towards the ground?
   a. (Gravity)
2. Why does a parachute help things fall slower?
   a. (The parachute increases the wind resistance of the falling object. The parachute has to move through the air as gravity pulls it down.)
3. What would happen if we made the parachute bigger?
   a. (It would slow down the falling more)
4. What would happen if we made the parachute smaller?
   a. (It wouldn't slow down the falling as much)
5. Why are parachutes made out of thin materials like plastic and fabric?
   a. (If parachutes are too heavy then they will not work as well. If parachutes are heavy then they fall through the air without much resistance.)
6. Who uses parachutes in normal life? Are they heros? How do we know who is a hero?
Once the parachute is made, invite younger children to observe the play with you. Describe how it floats in the air. Does it move quickly? Slowly? Does it cast a shadow on the floor/ground? Shared attention and bringing language to what you observe builds important vocabulary and experiences that children draw from once they start reading and writing.