

# OH WOW! WOW On Wheels:

## Aeronautics!

Children are challenged to consider what characteristics are required for flying and or gliding

**Intro:** Ask student/child to share some of their ideas about flying. Ask the questions:

- What are some animals that you can think of that fly?
- Can you think of some other things that fly?
- Ask students to act out some of the verbs including *swoops* and *soars*, *crawl*, *glide*...
- Can people fly?

### Materials:

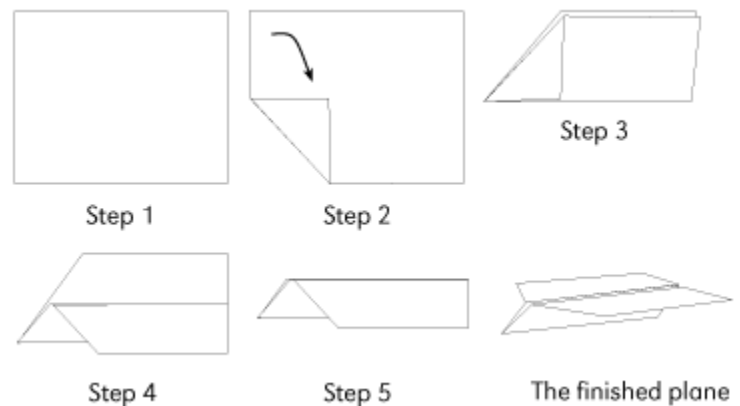
- A few pieces of paper
- Electric fan

### Procedure:

1. Take one piece of paper and roll it up into a ball. Then take another piece and hold them up side by side. Ask students to make a PREDICTION. Which one do they think will take longer to fall? Release them one at a time. Then ask: which one took the longest amount of time to fall? Why do you think that is? Use this opportunity to introduce the term SURFACE AREA as the amount of space an object occupies. The more surface area (the flat piece of paper), the more air resistance an object has.

### Paper Airplane Demo

1. Using a colored marker or pencil, draw a fold line approx. 1 inch from the main fold on half of the airplanes, and at 2 inches for the other half of the planes
2. Turn the fan on and put a plane in front of it, one at a time.
3. Observe the planes
4. Keep surface area in mind



Which plane seems to glide better?  
Which plane seems more “wobbly”?  
Why do you think this is so?