

# Lift Off

Children will learn the effect of a kite's tail.

## What You Need:

Notebook paper

Scissors

Cellophane tape

String

Ruler

## What You Do:

Measure and cut a 2 x 12 inch strip from a sheet of notebook paper. Use tape to attach an 18 inch length of string to one end of the strip. Hold the free end of the string and whip the paper back and forth in front of you. Cut a  $\frac{1}{4}$  x 12 inch strip from the paper and attach it with tape to the free end of the wider strip.

Again, move the strip back and forth in front of you.

## What Happened?

The paper twirls around, but when the small strip is attached, the movement is smoother.

## Why?

The paper moves forward at an angle, causing the air to flow faster over the top side.

Fast-moving air has a lower pressure around the moving stream. The angle of the paper is not constant, causing changes in the pressure along with a turbulent air flow across the strip. The changes make the strip twist and rotate. The paper tail makes the angle more constant.