Let's Fly (Air)

LENGTH: 60 Minutes
CURRICULUM: Science, Critical Thinking
OBJECTIVES: Student will see if different wing shapes and designs have an effect on how planes fly.
EDUCATIONAL LEVEL: Grades 3 - 4

MATERIALS:
1. ***Amazing Flying Machines*** by Robin Kerrod, ***Eyewitness Juniors No. 18***
2. ***How Things Work: Flight*** by E. Cameron, Booksales Inc., 1993
3. Pictures of various types of planes
4. Several sheets of paper for each student
5. Paper clips
6. Scissors

PROCEDURE:
1. Have the students look through reference materials and pictures of planes or flying machines, observing similarities and differences. Discuss with class, using terms such as aerodynamics and drag.
2. Compare wing designs of high speed jets to small single engine airplanes.
3. Have students make paper airplanes with various wing designs.
4. Students should predict how far their airplanes will fly. Record predictions on a chart.
5. Fly the airplanes and record on the chart how far they actually flew.
6. Make changes in the designs or add paper clips to various parts of the airplane. Fly the airplanes again and record the new flight distances on the chart.

POINTS TO DISCUSS:
1. Summarize how the different wing designs affected the flight of the plane.
2. How would you use what you learned today in designing your airplane?

Pictures continued on next page---

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Let's Fly pictures continued:

Boeing 747

Biplane

Bonanza

Tri-hull

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