



Aviation Resource Package

Creation Station Activity Ideas

Area 1: Activity Ideas

This is a sampling of ideas; additional activity ideas are available with the teacher tools included with individual videos in this resource package.

- ❖ Paper Airplanes--Design four paper airplanes. vFly each one and describe the changes you made and how they affected the flights of each plane.
- ❖ Have the students define the terms aviation, pioneer, and hall of fame. Use the aviation videos, print and/or online sources to research information about pioneers in aviation. Write short biographies about pioneers in aviation and draw pictures to match.
- ❖ Make a Helicopter--For this activity you're going to need the following: paper or card, a ruler, a pencil, scissors, stopwatch, paper clips and a container for the "bulls eye." Have your students cut out a piece of paper or card that has dimensions of around 2cm by 20cm. Fold the piece of paper in half before bending over the ends to form a T shape. Attach a paper clip to the bottom of the paper helicopter so it keeps its form while falling to the ground. Drop it from above your head or while standing on a chair (carefully of course) and it should spiral to the ground. If you made a good a good helicopter then the blades should spin rapidly, creating lift and allowing the helicopter to fall to the ground slowly. Try making paper helicopters with slight variations to see how this affects the speed at which its blades spin and how quickly it falls to the ground. What happens if you shorten the helicopter blades?
- ❖ Levitating Lips--Hold a piece of paper between your thumb and forefinger. Now take a deep breath and blow over the paper. What happens? So why did the paper lift up when you blew over it? How did that change the air pressure? Did you change the push of air on the top or bottom of the paper? When you blew over the top, the moving air had to squeeze between the paper and the air above it. As the air squeezed through, it sped up, lost pressure, and stopped pushing as hard. The still air below the paper had greater pressure and pushed the paper up.

- ❖ Build 3 different types of paper airplanes and test them for farthest, straightest, longest time in flight.
- ❖ Create a model of a bird's and an insect's wings.
- ❖ Design a poster explaining and showing the four forces that affect a successful flight: lift, weight, drag, and thrust.

Area 2: Lesson Plans

A sampling of lesson plans will be added to this document soon. You can also check out activity lesson plans available with the teacher tools included with individual videos in this resource package.