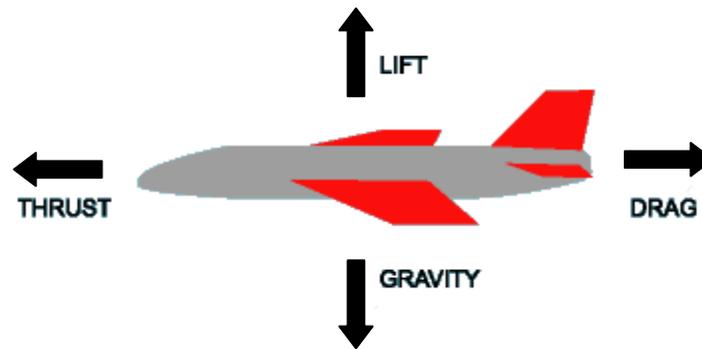


Forces of Aerodynamics

How your paper airplane flies



Lift: This force occurs when air flows underneath a curved surface, like an airplane wing. Look closely at the wings of an airplane and you will notice that they are curved and not flat!

Thrust: This force makes the airplane move forward. Thrust is created by engines and, in the case of your paper airplane, thrust is created when you throw the plane.

Gravity: This force pulls the airplane to the ground. Gravity works against lift.

Drag: This force slows the airplane down. Drag is produced when air creates friction against the airplane. Next time you are riding in the car, stick your hand out the window. The air pushes your hand back. This is drag.

Try these tips to help your paper airplane fly its best using the forces of aerodynamics:

1. Fold neatly and crisply on the lines. Use your thumb nail and press down on the fold to make the tightest fold possible.
2. Adjust, Adjust, and Adjust. Small variations in the way you fold your airplane affect its flight. If your plane isn't flying the way you want it to, you may need to adjust the folds or re-fold. Adding elevators, which are small cuts in the back of the wings, or moving the rudder on the tail are two more ways to adjust your airplane.

Check out the Airplane Discovery Box in the Hands-on Gallery to learn more about airplanes!

