

Paper Airplane Physics

AERODYNAMICS— Have you ever held your hand out of the car window on the freeway? If you hold your palm out with your fingertips toward the sky, the wind fights your hand. This is called *air resistance*. If you hold your hand flat with your finger tips facing the direction that the car is moving, the wind travels smoothly over your hand. That is *aerodynamic*.

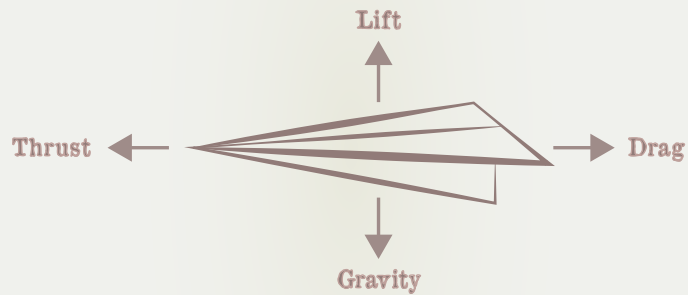
DRAG— For a far and fast flight, less drag is better! Drag is the pull you feel when the air resists your open palm.

GRAVITY— The plane is constantly being pulled down by gravity. The lighter the plane, the better the flight.

THRUST— This is the forward movement of the plane, as you launch it.

LIFT— This is the upward movement of the plane, which comes from the airplane's wings. If the air below the wing is pushing up harder than the air above the wing, the plane will have more lift!

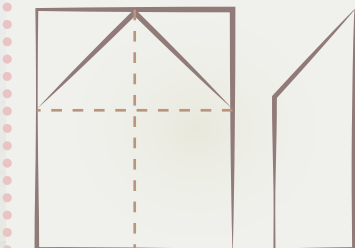
THE FOUR FORCES IN BALANCE



NOW IT'S YOUR TURN

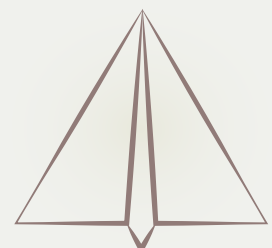
Basic Paper Glider

1. Fold the two upper corners down.



2. Fold paper in half-length wise.

3. Take the two outer corners and fold like this:



4. Your glider should look like this!

