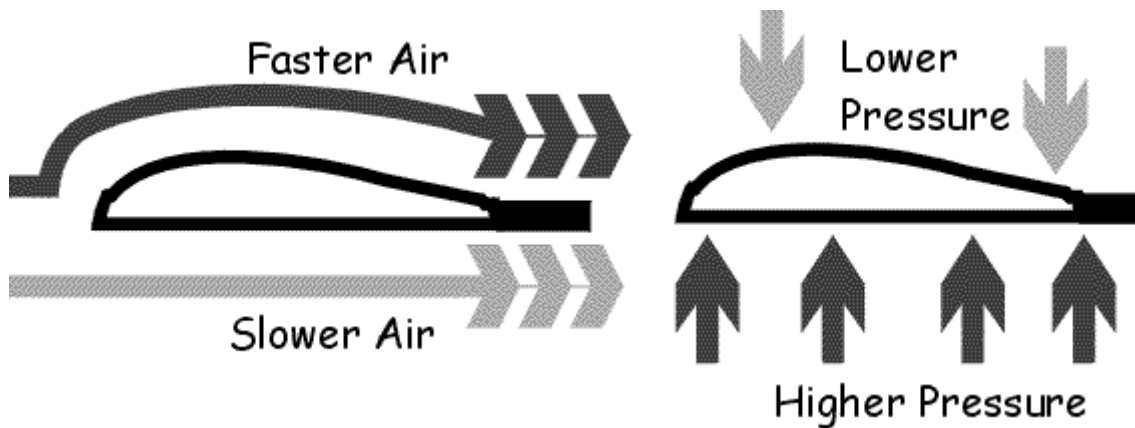


Flight

How does an airplane take off?

When an aircraft moves into the wind, the wings cut the airflow in half. Some air travels above the wing, some air travels below the wing as shown in the picture on the left.



Plane wings are built to be curved on top and flat on the bottom. The wind, or air stream, flowing over the wing travels a different path from air traveling under the wing. This difference in the path of the wind, creates lower air pressure above the wing as shown in the picture on the right. The higher air pressure under the wing lifts the plane into the air creating lift. When there is enough lift to overcome gravity, the plane takes off.

All the time, the plane is being slowed down by having to push through the air. This is called drag, and the engines have to overcome it. As long as the plane continues to move forward at a fast enough speed, the plane continues to fly.

Planes use engines to move quickly down the runway to create the lift for take off. Helicopters rotate their wings (or blades). The rotating motion forces air past the wings creating lift.