

Forces of Flight

Lift, drag, gravity, and thrust—these four forces work together to keep a heavy plane up in the air. Find out how each force works and how it helps keep a plane in flight.

Lift

THINK & PREDICT

?	? How does lift affect flight?	
?	? How does gravity affect flight?	
?	? How does drag affect flight?	
2	2 How does thrust affect flight?	

Drag		
OBSERVE & EXPERIMENT Read the diagram at right and the		
2 Think about the role each force plays in flight.	ravity	Thrust

LIFT is the force created as air rushes over the top of the wings and pushes from below the wings, raising the plane skyward.

DRAG slows a plane down. It's caused by air friction on the plane.

GRAVITY pulls the plane's mass (like it does everything else) down toward Earth.

THRUST is the engine-powered force that pushes the plane forward through the air.