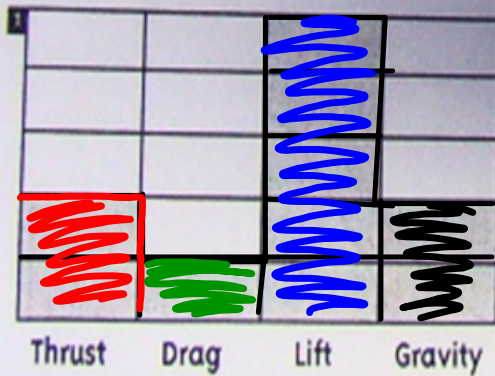
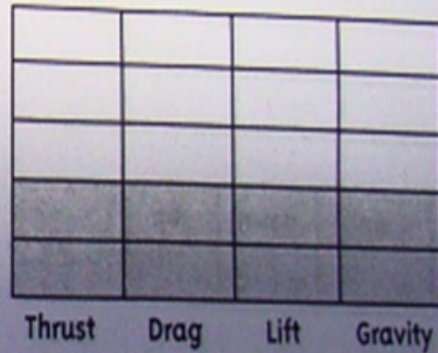


What's Happening Sheet

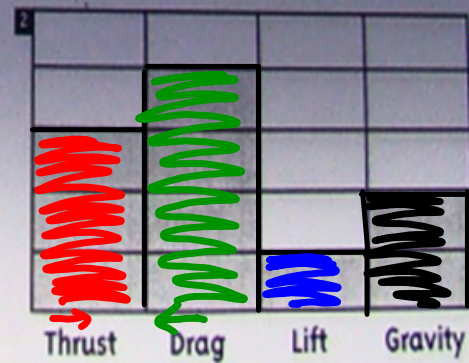
These graphs show how the four forces relate to each other in different flight situations: stopped on the ground, going up, flying level, and going down. You know, for example, that when a plane is flying level, the four forces are balanced. That means that lift is exerting the same amount of force as gravity is, and thrust is as strong as drag. The graph on the right shows those relationships.

Beside each graph below, put the letter of the indicated flight situation:

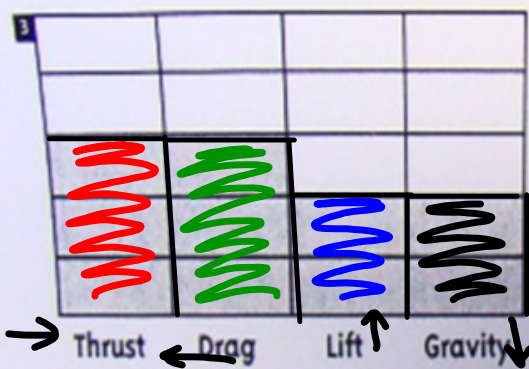
- (a) on the ground
- (b) going up
- (c) flying level
- (d) going down



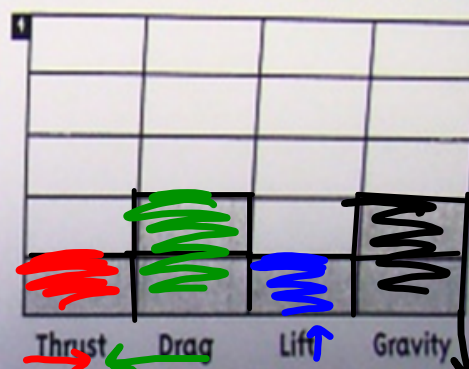
B



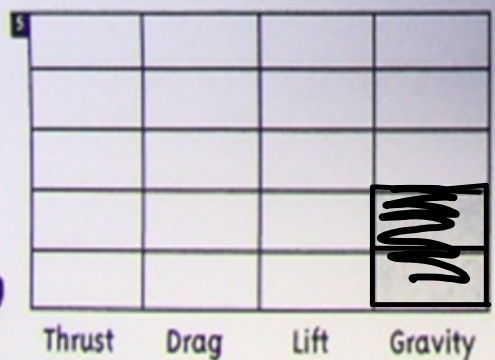
D



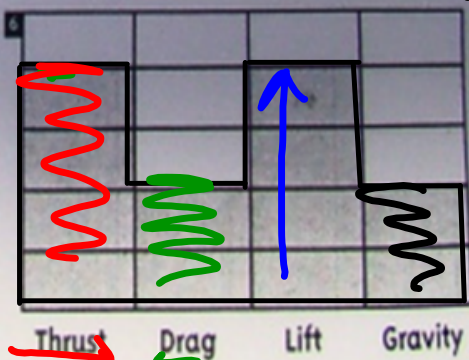
C



D

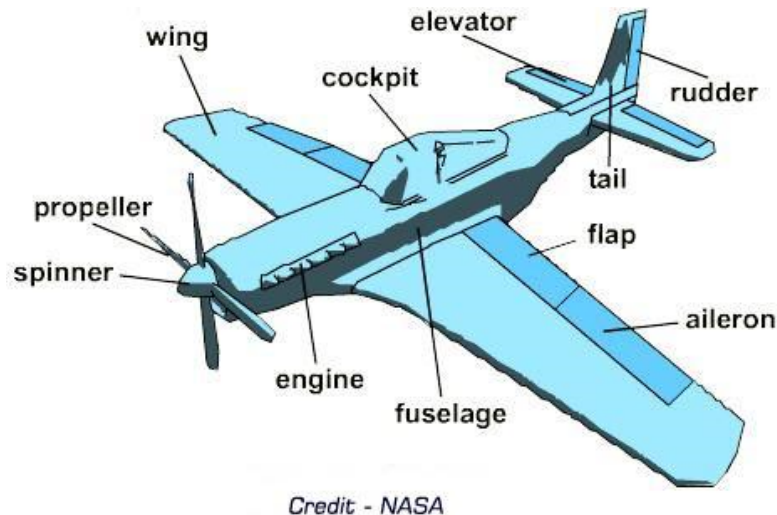


A



B

Parts of a Plane



Ailerons - These are the small surfaces located at the ends of the wings. If they are angled in opposite directions to each other (ie. the left aileron is lowered and the right aileron is raised), the plane will roll in the direction of the aileron.

Elevator - The elevator can be controlled in an up and down motion. When angled up, the nose of the plane rises and when the elevator is lowered, the nose drops.

Flaps - Flaps are surfaces on the wings which can be raised or lowered to create additional lift or drag. They are used mainly during landing and takeoff.

Fuselage - The fuselage is the main body of the airplane. It can be used to carry cargo or passengers.

Propeller - The propeller creates the forward thrust to increase lift.

Rudder - The rudder is a flap which can be moved right or left. The nose of the plane will move in the direction of the turned rudder.

Wing - The wings permit lift to occur. This allows the plane to fly.