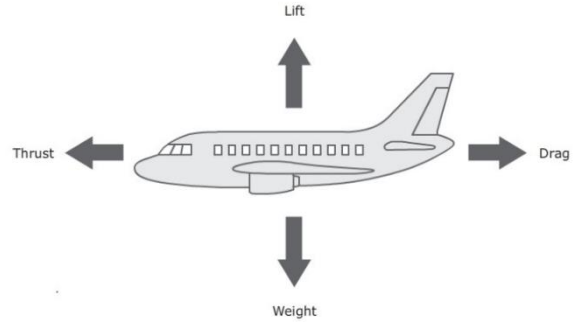


FORCES OF FLIGHT – GLIDER TESTING

Fill in the blanks as the vocabulary words are discussed.

- Airplanes fly because they are able to generate a force called _____.
 - It moves the airplane upward.
 - The wings create most of the lift.
 - It is the force that holds an airplane in the air.



- _____

The force that moves an aircraft in the direction of the motion.

 - It is created with a propeller, jet engine, or rocket.
 - Air is pulled in and then pushed out in an opposite direction.

- _____

The force produced by the resistance of the air to the forward motion of the airplane.

 - It is the force that acts opposite to the direction of motion caused by the thrust, so it tends to slow an object down.

LIFT
THRUST
DRAG
WEIGHT

- _____

The force that acts in a downward direction.

 - It is the force created by the pull of gravity toward the center of the earth.

- _____

This happens by moving the wings up and down.

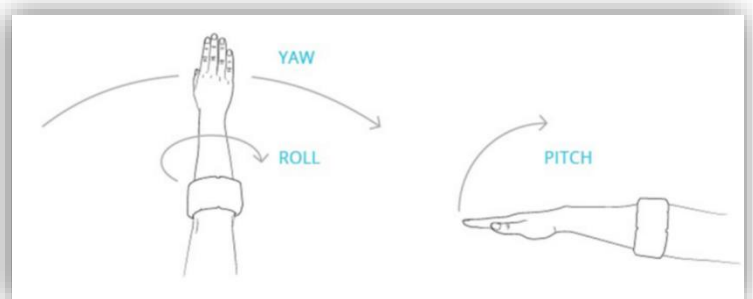
- _____

This happens when the nose of the plane moves up and down.

ROLL
PITCH
YAW

- _____

This is when the nose of the plane moves from side to side.



8. _____

They are shaped with smooth surfaces that are slightly curved.

- Air moving around the wing produces the upward lift for the airplane.

The _____ are hinged on the wings and move downward to push the air down and make the wing tilt up. This moves the plane to the side and helps it turn.

- The shape of the wings determines how fast and high the plane can fly.

9. _____

The body of the plane.

- It is generally a long tube shape.

- The wheels/landing gear are attached to the fuselage.

10. _____

This provides the airplane's stability.

- There's a vertical stabilizer – the _____

that affects the plane turning right or left (yaw).

- And there's a horizontal stabilizer – the _____, used to move the plane up or down (pitch).

WINGS

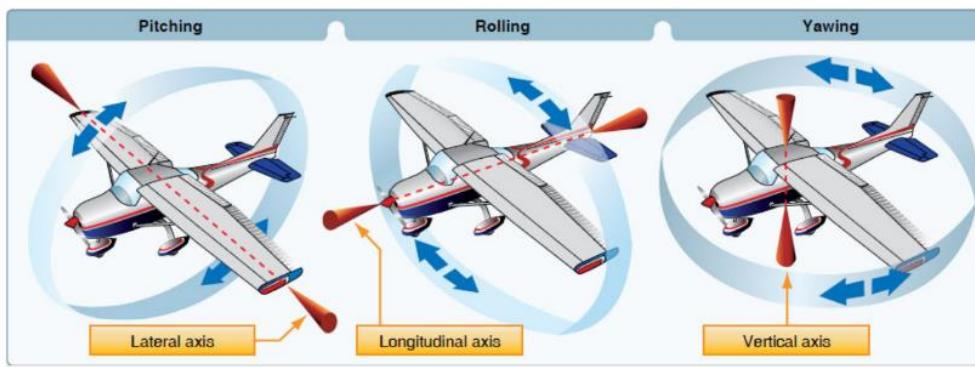
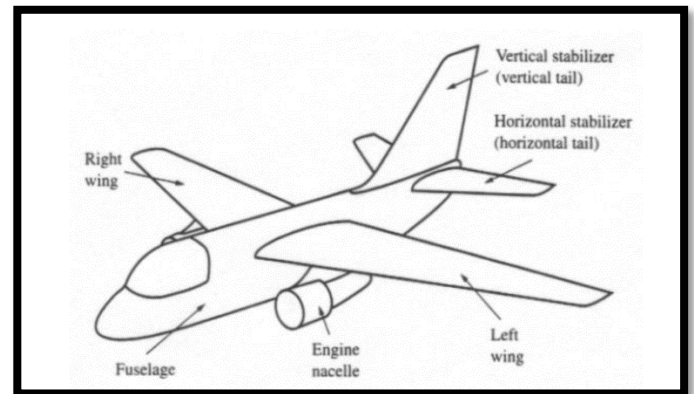
AILERONS

FUSELAGE

TAIL

RUDDER

ELEVATOR



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