

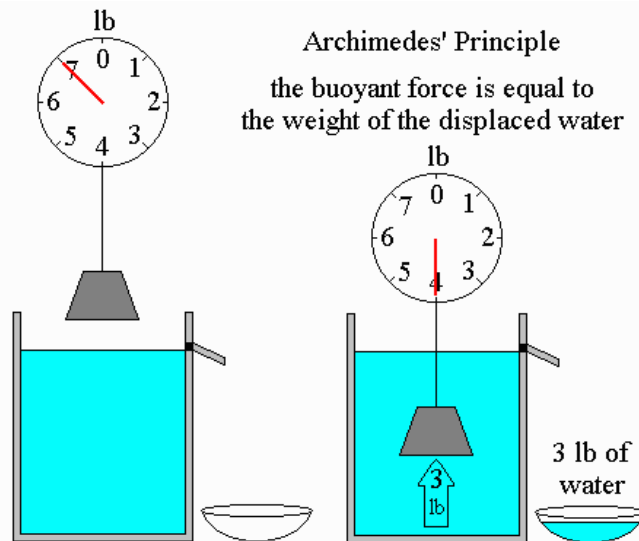
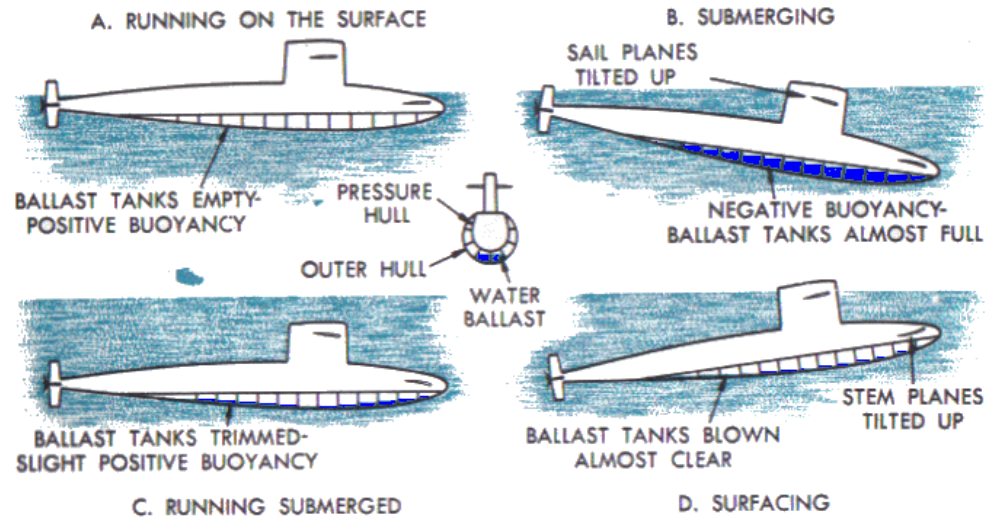
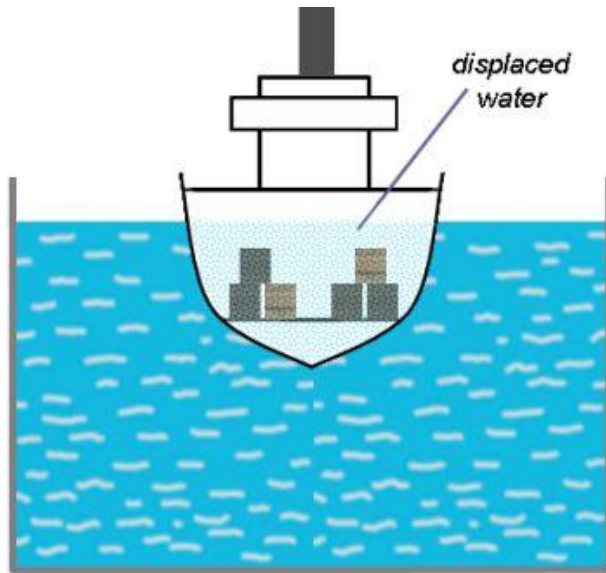
Archimedes' Principle

- The buoyant force acting on a submerged object is equal to the weight of the volume of fluid displaced by the object.

Archimedes' Principle

- Submarines sink when its weight is greater than the buoyant force.
- It rises when its weight is less than the buoyant force.

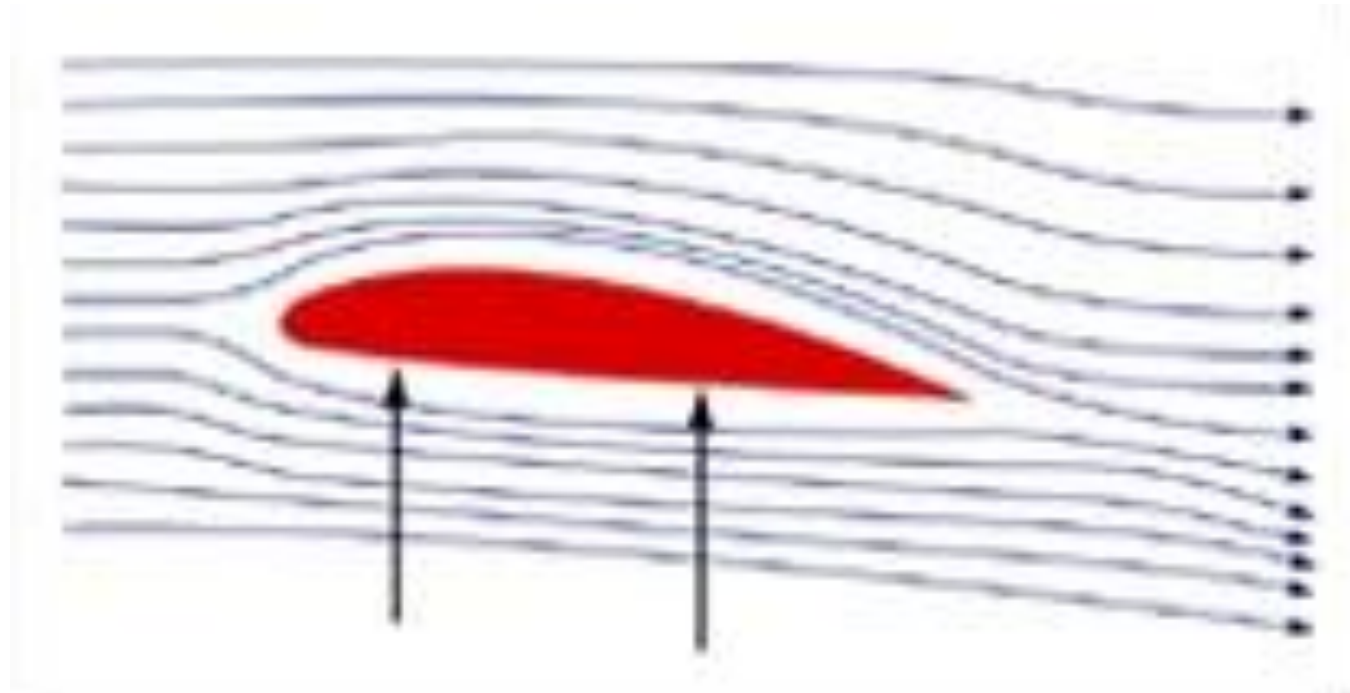
Archimedes' Principle



Bernoulli's Principle

- The faster a fluid moves, the less pressure the fluid exerts.

Airplane Wing



Cross section of an airplane wing. Air flows faster over the top than underneath, so exerts less pressure. Higher pressure air underneath the wing pushes it up.

Bernoulli's Principle



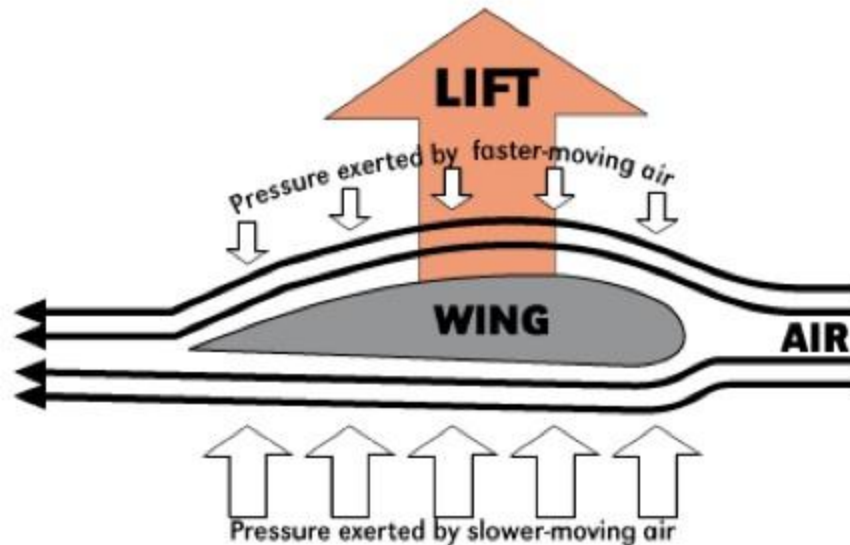
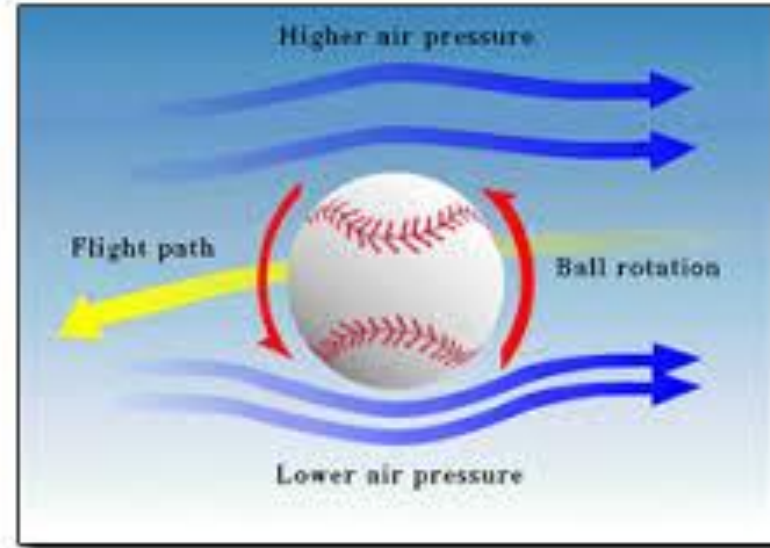
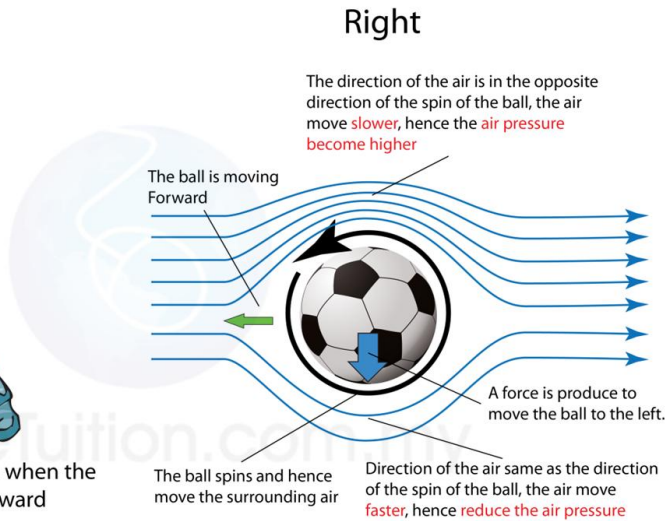
Key:



Air movement when the ball moves forward



Air movement due to the spinning of the ball



Pascal's Principle

- When force is applied to a confined fluid, the change in pressure is transmitted equally to all parts of the fluid.

Pascal's Principle

- When you squeezed the bottle with the Cartesian Diver, the added pressure was equally distributed through the bottle.

Pascal's Principle

