

### THEORY

When a body is placed in a liquid, it experiences an upward force called upthrust or buoyant force. This force is equal to the weight of the liquid displaced by the body. This is known as Archimedes' principle. If the weight of the body is greater than the upthrust, it will sink. If the weight is less than the upthrust, it will float. If the weight is equal to the upthrust, it will be suspended in the liquid.

Material	Volume (cm <sup>3</sup> )	Weight in air (N)	Weight in water (N)	Upthrust (N)
Block A	100	1.0	0.7	0.3
Block B	200	2.0	1.4	0.6
Block C	300	3.0	2.1	0.9

### EXPERIMENT



Block	Weight in air (N)	Weight in water (N)	Upthrust (N)
A	1.0	0.7	0.3
B	2.0	1.4	0.6
C	3.0	2.1	0.9