

### 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 equal to the upthrust, it will float. If the weight is less than the upthrust, it will rise to the surface and float.

Material	Volume (cm <sup>3</sup> )	Weight (N)	Upthrust (N)
Block A	100	1.0	0.8
Block B	100	1.0	1.0
Block C	100	1.0	1.2

### EXPERIMENT



Weight (W)	Weight in liquid (W')	Upthrust (U)
1.0	0.8	0.2
1.0	1.0	0.0
1.0	0.8	0.2