

PHYSICS – YEAR 9 – FORCES

A	FORCE KEYWORDS	
1	Force	A push or pull on an object measured in Newtons
2	Resultant force	The overall force acting on an object
3	Vector	A quantity with both a size and a direction
4	Scalar	A quantity with a size only
5	Contact force	A force between two objects that touch
6	Non- contact force	A force between two objects that are not touching
7	Mass	The amount of matter in an object in kilograms
8	Weight	The downwards force on an object's mass caused by a gravitational field

B	MOTION KEYWORDS	
1	Distance	How far an object moves Scalar quantity
2	Speed	The distance an object moved in a certain time (e.g. in a second) Scalar quantity
3	Velocity	Speed in a certain direction (e.g. left, up) Vector quantity
4	Acceleration	How quickly speed changes

C	FORCE EQUATIONS	
1	Weight	weight = mass x gravitational field strength (N) (kg) (N/kg)
2	Speed	speed = distance ÷ time (m/s) (m) (s)
3	Resultant force	resultant force = mass x acceleration (N) (kg) (m/s ²)