

PHYSICS DEFINITIONS GRADE 12 - FILL IN THE MISSING TERM

NEWTON AND VERTICAL PROJECTILE MOTION

NEWTON:

Normal force – the force or component of a force which a object with which it is in contact, and which is exerted on an object to the surface

Frictional force – the force that acts to the surface

Static frictional force – the force that
relative to a

Kinetic frictional force – the force that opposes the motion of a moving object

Newton's first law of motion – a body will remain in its state of rest or at rest unless a net force acts on it.

Inertia – the resistance of an object to any change in its state of motion

Newton's second law of motion – when a **net force** acts on an object, the object will **accelerate** in the direction of the net force at an **acceleration** proportional to the force and **inversely proportional** to the **mass** of the object

Newton's third law of motion – when one body exerts a force on a second body, the second body exerts a force of equal magnitude in the opposite direction on the first body

Newton's law of universal gravitation – in the universe attracts every other with a force that is proportional to the product of their and proportional to the of the between their centres

Weight – the force the exerts on any object on or near its surface

Mass – the amount of matter an object is made up of

Weightlessness – when there are no forces acting on an object

VERTICAL PROJECTILE MOTION:

Projectile – an object upon which the only force acting is the force of

Free fall -when the only force acting upon an object is force