

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 _____ exerts on an object with which it is in contact, and which is _____ to the surface

Frictional force – the force that _____ the motion of an object and which acts _____ to the surface

Static frictional force – the force that _____ the motion of a _____ object relative to a _____

Kinetic frictional force – the force that _____ the motion of a _____ object relative to a _____

Newtons first law of motion – a body will remain in its state of _____ or at _____ unless a _____ /net force acts on it

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

Newtons second law of motion – when a _____ /net force acts on an object, the object will _____ in the direction of the net force at an _____ proportional to the force and _____ proportional to the _____ of the object

Newtons third law of motion – when one body exerts a _____ on a second body, the second body exerts a _____ of _____ magnitude in the _____ direction on the first body

Newtons 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 _____ 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