

## Qualification Unit

This unit forms part of a regulated qualification.

**Unit Title:** Forces

**Unit Reference Number:** H/618/3227

**Level:** Level Two

**Credit Value:** Three (3)

**Minimum Guided Learning Hours:** 24

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Know about forces	1.1 Describe forces in terms of pushes/pulls, stretching/squashing, friction and resistance. Identify and name a variety of forces including: a) Friction b) Drag c) Upthrust d) Gravity e) Weight
	1.2 Demonstrate using force arrows in diagrams including showing unbalanced forces
	1.3 Predict the movement/lack of movement in terms of balanced and unbalanced forces.
	1.4 Give examples of non-contact forces/fields, including; Describe the difference between contact and non-contact forces including examples. a) Gravity b) Magnetic c) Electrostatic
	1.5 Use the idea of balanced and unbalanced forces to explain terminal velocity

<p>2. Understand the effect of gravity on masses</p>	<p>2.1 Distinguish between mass and weight</p> <hr/> <p>2.2 Use the SI units of weight</p> <hr/> <p>2.3 Use the SI units of mass</p> <hr/> <p>2.4 Use energy conservation arguments to explain the forms of energy involved when an object falls to earth</p> <hr/> <p>2.5 Outline the effects of air resistance on a falling object</p>
<p>3. Understand forces and motion</p>	<p>3.1 Describe the effect of forces on the velocity of an object</p> <hr/> <p>3.2 Draw and interpret simple distance time graphs</p> <hr/> <p>3.3 Illustrate the difference between velocity and speed</p> <hr/> <p>3.4 Describe acceleration in terms of rate of change of velocity</p> <hr/> <p>3.5 Give examples of factors that may affect braking distance and deceleration</p> <hr/> <p>3.6 Define these terms:  a) Inertia  b) Momentum</p>
<p>4. Know about pressure in solids, liquids and gases</p>	<p>4.1 Explain the effect of these factors on pressure in solids, liquids and gases:  a) Temperature  b) Surface area</p> <hr/> <p>4.2 Explain atmospheric pressure and depth</p>