Balanced Force

300 N   300 N

Vocabulary Dozen	
Force	A force is a push or a pull or a combination of these, such as a twist. A force can cause an object to speed up, slow down or change shape. Forces cannot be seen, but the effects of forces can be. Examples of forces include gravity, friction and magnetism.
Gravity	The force that pulls objects together and makes objects fall to the ground. Every object is affected by gravity. The greater the mass of an object, the greater its gravitational pull.
Friction	The resistance that one surface or object encounters when moving over another.
Air resistance	A force that acts between a moving object and the air molecules around it, slowing the object down. Parachutes create lots of air resistance, slowing down the parachutist as they fall through the air.
Water resistance	A friction force that acts on a moving object as it travels through water, slowing the object down.
Lever	A rigid bar resting on a pivot that is used to move a heavy or firmly fixed load.
Pulley	A wheel with a grooved rim around which a rope or chain passes. Pulleys are simple machines used to move large objects up or down, with a small amount of force.
Gear	A toothed wheel that works with others to alter the relation between the speed of a driving mechanism (e.g. engine) and the speed of the driven parts (e.g. the wheels).
Upthrust	The upward force that a liquid or gas exerts on a body floating in it.
Balance	An even distribution of weight enabling someone or something to remain upright and steady.
Weight	Weight is a force due to the pull of gravity on an object. Weight is a force and so is measured in newtons (N).
Mass	Mass is a measure of the amount of matter in an object. Mass is usually measured in grams (g) or kilograms (kg).

Sir Isaac Newton

An English physicist and mathematician. He is considered one of the most important scientists in history.

During his lifetime Newton developed the theory of gravity, the laws of motion (which became the basis for physics) and a new type of mathematics called calculus.

Newton Meter