

### **Year 8 – Forces Glossary (Part 2: Pressure)**

<b>Key term</b>	<b>Definition</b>
atmospheric pressure	The pressure caused by the weight of the air above a surface.
centre of gravity	The point in an object where the force of gravity seems to act.
centre of mass	The point in an object where all the mass of an object seems to act.
compression	Force squashing or pushing together, which changes the shape of an object.
contact force	A force that acts when an object is in contact with a surface, air, or water.
deformation	Changing shape due to a force.
drag force	The force acting on an object moving through air or water that causes it to slow down.
elastic limit	The point beyond which a spring will not return to its original length when the force is removed.
equilibrium	State of an object when opposing forces are balanced.
extension	The difference between the original length of an object and the length when you apply a force.
fluid	A substance with no fixed shape (a gas or a liquid).
friction	Force opposing motion which is caused by the interaction of surfaces moving over one another. It is called 'drag' if one is a fluid.
gas pressure	The force exerted by air particles when they collide with a surface.
Hooke's Law	A law that says that if you double the force on an object, the extension will double.
incompressible	Cannot be compressed (squashed).
law of moments	An object is in equilibrium if the clockwise moments equal the anticlockwise moments.
linear relationship	When two variables are graphed and show a straight line which goes through the origin, and they can be called proportional.

liquid pressure	The pressure produced by collisions of particles in a liquid.
lubrication	A substance that reduces friction between surfaces when they rub together.
moment	A measure of the ability of a force to rotate an object about a pivot.
newton	Unit for measuring forces (N).
newton metres	The unit of moment.
newtons per metre squared	A unit of pressure.
pivot	The point about which a lever or see-saw balances or rotates.
pressure	The ratio of force to surface area, in $\text{N/m}^2$ , and how it causes stresses in solids.
reaction	The support force provided by a solid surface like a floor.
streamlined	Shaped to reduce resistance to motion from air or water.
stress	The effect of a force applied to a solid, found using $\text{stress} = \text{force/area}$ .
tension	Force extending or pulling apart.
upthrust	The upward force that a liquid or gas exerts on a body floating in it produced by the collisions of the particles in the liquid or gas.
water resistance	The force on an object moving through water that causes it to slow down, also known as drag.