

9La – Dam it!/Spreading the load

Word	Pronunciation	Meaning
dam		A wall built to hold back water.
hydroelectricity	<i>hy-drO-elek-tris-it-ee</i>	Electricity generated by letting falling water (usually from a reservoir) turn turbines and generators.
pascal		A unit of pressure. $1 \text{ Pa} = 1 \text{ N/m}^2$.
pressure		The force on a certain area, measured in newtons per square metre (N/m^2), newtons per square centimetre (N/m^2), or pascals (Pa).
reservoir	<i>rez-er-vwar</i>	The lake formed when a dam blocks a river.

9Lb – Under pressure

Word	Pronunciation	Meaning
atmospheric pressure	<i>at-mos-ferr-ik</i>	The pressure of the air around us.
compress		Squeeze together.
fluid		A liquid or a gas.
pneumatic tyre	<i>new-mat-ick</i>	A tyre that contains air or a gas under pressure.

9Lb – Focus on: Humans and pressure

Word	Pronunciation	Meaning
bends		Another name for decompression sickness.
caisson	<i>kay-son</i>	A box sunk to the bottom of a river and filled with compressed air, to allow people to work on the river bed.
caisson sickness	<i>kay-son</i>	The old name for decompression sickness.
decompression sickness		Bubbles of gas in the blood caused if divers come to the surface too quickly. It can be fatal.

9Lc – Using pressure

Word	Pronunciation	Meaning
distance multiplier		A machine such as a lever or hydraulic system that increases the distance moved by a force. The force is smaller than the original force.
force multiplier		A machine such as a lever or hydraulic system that increases the size of a force. The increased force moves through a shorter distance than the original force.
hydraulic press		A hydraulic system that increases a force.
hydraulic system	<i>hi-draw-lick</i>	A system that works by transmitting pressure through pipes containing a liquid.

9Ld – Moment by moment/Dam consequences

Word	Pronunciation	Meaning
counterweights		Weights that help to balance something.
in equilibrium	<i>eck-will-ib-ree-um</i>	In balance.
moment		The turning effect of a force. It is calculated using: moment = force × distance of force from pivot.
newton metre (Nm)		The unit for the moment of a force.
pivot		A point about which something turns. Sometimes called a fulcrum.
turning effect		The moment of a force. The way in which a force turns something around a pivot.