

# Forces – Year 5

## Real-life examples of forces in action



A skydiver falls fast until they open their parachute.



Dolphins have a streamlined shape.



A non-slip mat uses friction.



Seeds fall to the ground because of gravity.

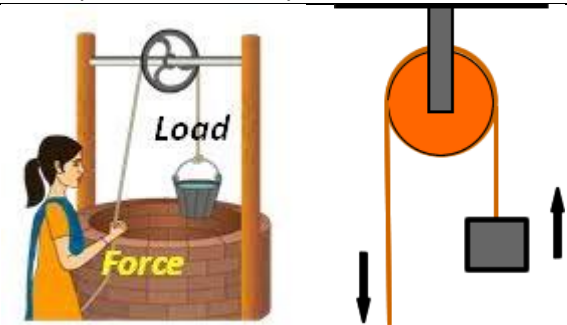
## Simple machines

These are used to make tasks easier. This means you need to use less force.



Force Pivot

A **lever** tilts on a pivot which is nearer to the end of the pivot with a heavy load.



**Pulleys** have a rope or cable which goes over a wheel. This is pulled to lift, lower or move heavy objects.



**Gears** are toothed wheels which lock together and turn each other to form simple machines.

Key vocabulary	
<b>force</b>	A force is a push or a pull. Forces make objects start moving, stop moving, speed up, slow down or change direction.
<b>gravity</b>	A force which pulls things down towards the centre of the Earth.
<b>forcemeter</b>	Piece of equipment used to measure the size of a force.
<b>Newton (N)</b>	The unit for measuring force.
<b>air resistance</b>	The force that slows down objects that move through air.
<b>water resistance</b>	A force that slows down objects moving through water.
<b>friction</b>	When one surface moves against another, the rubbing force that tries to stop them is called friction. It gives us grip.
<b>mechanisms</b>	A device that allows a small force to be increased to a larger force.
<b>simple machines</b>	Levers, pulleys and gears are all types of simple machines.