



The planets and the Sun do not touch, yet the planets stay in orbit around the Sun due to the force of gravity.



## Tier Three Vocabulary

- attract - to pull towards
- contact - when objects touch
- distance - the length between two objects
- force - a push or pull that acts upon an object that can cause it to move, change shape or change direction
- friction - the force that acts upon one surface when it moves against another
- gravity - a pull force that acts at a distance
- pull - to move something towards
- push - to move something away
- repel - to push away
- balanced forces - equal forces that cause an object to remain stationary or travel at the same continuous speed.
- weight - the downward force caused by gravity on an object (measured in Newtons (N)).
- mass - how much matter there is in an object (measured in g or kg)
- mechanism - a system of parts working together in a machine
- pulley - a wheel that carries a flexible rope, cord, cable, chain, or belt on its rim.

Water resistance is the force responsible for making it difficult for us to move through the water. It acts between a moving object and the water molecules around it, slowing the object down.



Gravity is a force which acts at a distance. It is a pull force that pulls objects towards the centre of the Earth.



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