

Science knowledge organiser - Forces

Key Vocabulary

Force - A push or pull upon an object resulting from its interaction with another object.

Gravity - The force that attracts an object towards the centre of a planet or other celestial body (e.g. Earth).

Mass - The amount of matter contained in an object.

Weight - The measurement of the force of gravity on an object.

Pull force - To draw or haul towards a point.

Push force - To move something away from a point.

Friction - The resistance that one surface or object encounters when moving over another.

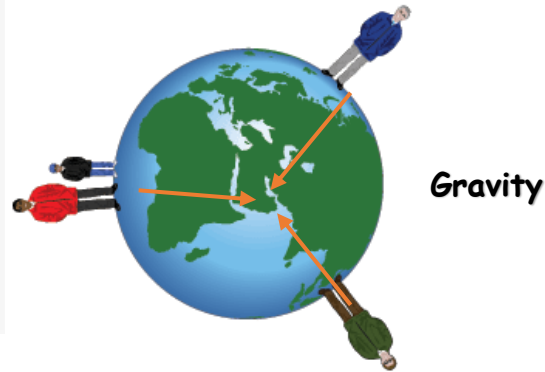
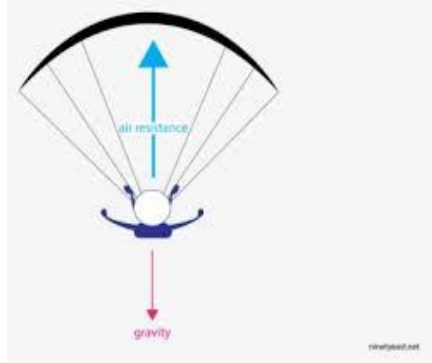
Air resistance (drag) - A force that is caused by air, with the force acting in the opposite direction to an object moving through the air.

Water resistance - A force that is caused by water, with the force acting in the opposite direction to an object moving through the water.

Gears - A toothed wheel that works with others to change the relation between the speed of a driving mechanism (e.g. engine) and the speed of the driven parts (e.g. the wheels).

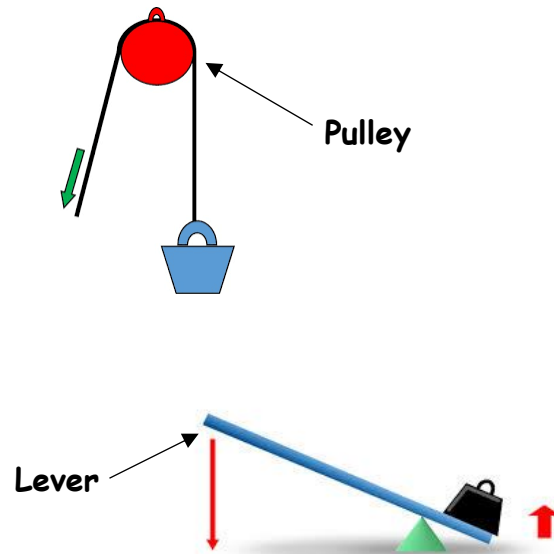
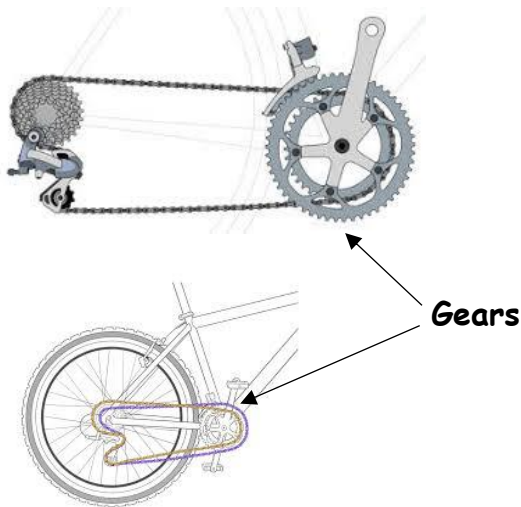
Lever - A rigid bar resting on a pivot that is used to move a heavy load.

Pulleys - A wheel with a grooved rim that changes the direction of a force applied to a cord.



Balanced Force

Unbalanced Force



PUSH



PULL