



# Year 5 Forces: Sticky Knowledge Mat Spring 1

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## Sticky Knowledge about Forces

Any kind of force is either a push or a pull.

Friction is when two objects rub against each other and one can slow down the other.

Gravity is the pulling force acting between Earth and a falling object.

Air resistance is the force on an object moving through the air. It can affect how fast or slow an object moves.

Water resistance is the force on objects floating on or moving through the water.

Levers, gears and pulleys are mechanisms that allow a smaller force to have a greater effect.

## Subject Specific Vocabulary

<b>friction</b>	A force between two surfaces sliding over each other
<b>gravity</b>	A force which tries to pull two objects towards each other
<b>air resistance</b>	Friction between air and another material.
<b>water resistance</b>	Friction between water and another material
<b>mechanism</b>	A piece of machinery which has moving parts that perform a function.
<b>lever</b>	A long rigid body which can move larger objects.
<b>gear</b>	Wheels with teeth that mesh together to turn another wheel.
<b>pulley</b>	A simple machine - a wheel on a fixed axle with a groove on the edge to guide a cable to lift heavy objects
<b>Galileo Galilei</b> <b>Isaac Newton</b>	Scientists who helped develop the theory of gravity.



**Prior Learning:**

To notice that some forces need contact between two objects by identifying the different forces acting on objects.

To compare how things can move on different surfaces.

To notice that magnetic forces can act as a distance and attracts some materials, but not others by sorting materials.

To compare and group materials according to whether they are magnetic.

To observe how magnets may attract or repel each other and attract some materials and not others.

To describe magnets as having two poles and to predict whether two magnets will attract or repel each other, depending on which poles are facing.