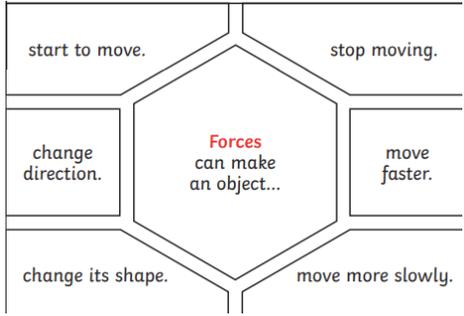


Science - how do forces affect us?

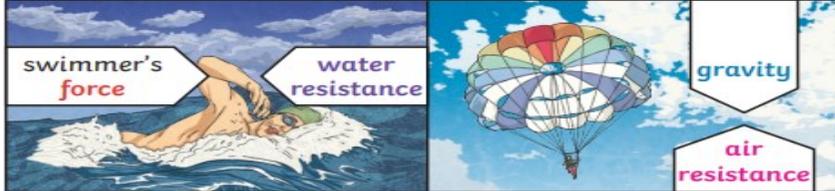
Vocabulary	Definition
forces	Pushes or pulls that act on an object that can change its speed, shape or direction.
gravity	A pulling force exerted by the Earth (or anything else which has a mass).
air resistance	A force that acts on an object when it moves through the air, causing it to slow down.
water resistance	A force that acts on an object when it moves through water, causing it to slow down.
weight	The measure of the force of gravity acting on an object.
mass	A measure of how much matter is inside an object. Our mass is the same anywhere in the universe.
friction	A force that acts between two surfaces or moving objects.
velocity	An objects speed in a particular direction.
acceleration	How much an objects velocity changes.

What are forces and what can forces do?

- Gravity
- Air resistance
- Water resistance
- Friction



Air resistance and water resistance



- Air and water resistance are forms of friction.
- Air resistance- air particles hit an object and slow it down.
- Water resistance- water particles hit an object and slow it down.
- Streamlined objects cause less resistance. and move quicker through air or water.

What is gravity?

- Invisible pulling force
- Pulls all objects with a mass towards the centre of Earth
- More mass = stronger gravitational pull
- Exists everywhere on Earth



What are pulleys, gears and levers?

Pulleys	Gears/Cogs	Levers
<p>Pulleys can be used to make a small force lift a heavier load. The more wheels in a pulley, the less force is needed to lift a weight.</p>	<p>Gears or cogs can be used to change the speed, force or direction of a motion. When two gears are connected, they always turn in the opposite direction to each other.</p>	<p>Levers can be used to make a small force lift a heavier load. A lever always rests on a pivot.</p>