

Forces

Recap:

- Forces are pushes and pulls
- Forces act in opposite directions to each other.
- Forces change the motion/movement of an object.

Crucial Knowledge:

- Gravity the force which pulls objects to the earth's core
- Friction is the force that holds back a moving object.
- Air resistance is a type of friction caused by air pushing on an object.
- Water resistance is a type of friction caused by water pushing on an object.
- They allow objects to move, get faster or slow down.

Extended Knowledge:

- Unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- Friction, air resistance and water resistance all act as a force between surfaces.
- Some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect (breaks on a bike/car etc).
- Isaac Newton helped to develop the theory of Gravitation.
- Animals and objects can be streamlined so water resistance, air resistance and friction do not affect them as much (i.e. sharks).

