

Sticky Knowledge

Subject Specific Vocabulary

Friction

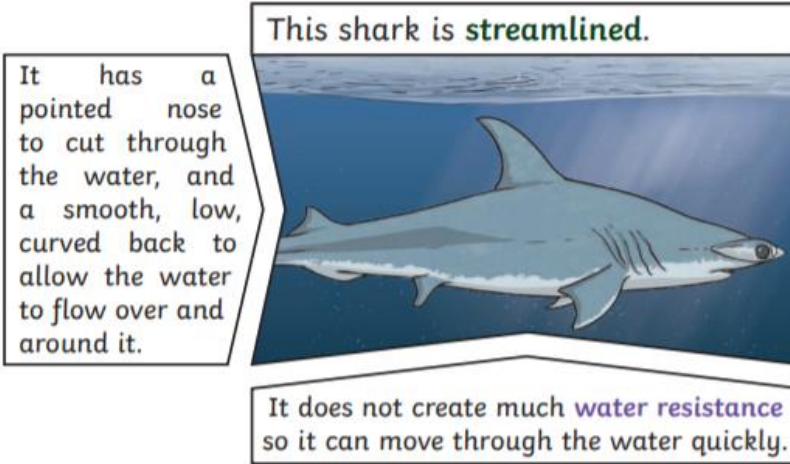
A **force** that acts between two surfaces that are moving, or trying to move across each other.

Types of friction:

- **air resistance** - a type of friction caused by air pushing against a moving object
- **water resistance** - a type of friction caused by water pushing against a moving object

Streamlining

When an object is shaped to minimise the effects of **air** or **water resistance**.



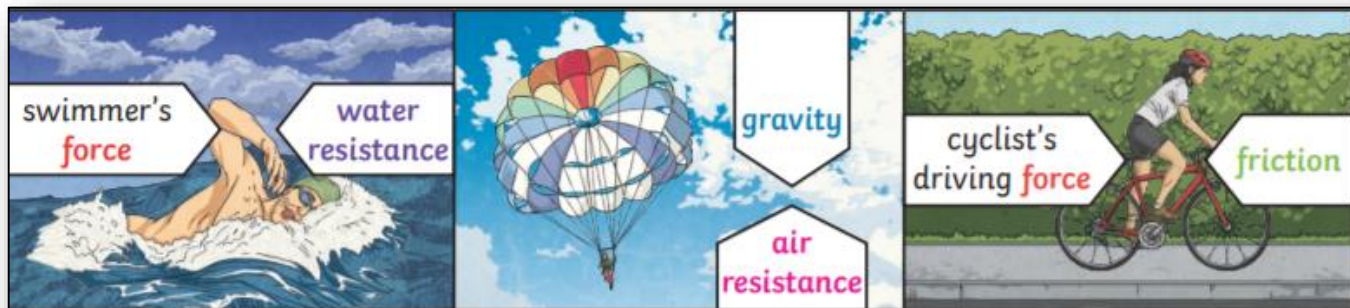
Gravity

A pulling **force** from the Earth (or anything else that has **mass**)

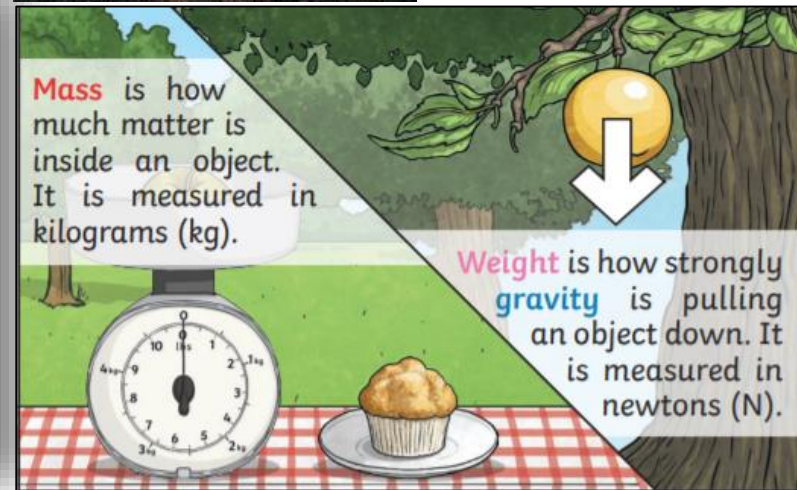


Isaac Newton is thought to have developed the theory of **gravity** when an apple fell on his head.

forces	Pushes or pulls.
gravity	A pulling force exerted by the Earth (or anything else which has mass).
Earth's gravitational pull	The pull that Earth exerts on an object, pulling it towards Earth's centre. It is the Earth's gravitational pull which keeps us on the ground.
weight	The measure of the force of gravity on an object.
mass	A measure of how much matter (or 'stuff') is inside an object.



Water resistance and **air resistance** are forms of **friction**. **Friction** is sometimes helpful and sometimes unhelpful. For example, **air resistance** is helpful as it stops the skydiver hitting the ground at high speed. **Friction** on a bike chain can make the bike harder to pedal so it is unhelpful.



Pulleys



Pulleys can be used to make a small **force** lift a lighter load. The more wheels in a pulley, the less **force** is needed to lift a **weight**.