

Science : Forces in Action!

Vocabulary:

friction	A force that acts between two surfaces or objects that are moving, or trying to move, across each other.
force	a force is an influence that causes the motion
balanced	an even distribution of weight enabling some-
unbalanced	make something unsteady so that they move.
push	the force that is responsible for an object mov-
pull	a force in which an object moves towards the
gravity	an invisible force that keeps you on the ground
reaction force	A reaction force is a force that acts in the
air resistance	a kind of friction that occurs between air and
water resistance	a type of force that uses friction to slow things
newton	the amount of force required to make a mass
streamlined	An object that is shaped to travel through air or

What we need to know...



Newton meters measure the force acting against any given object. The greater the force, the larger the number of newtons shown on the newton meter.

Key Questions:

Can I identify and explain balanced and unbalanced forces?

Can I accurately measure the force of gravity pulling on objects?

Can I explain what air resistance is?

Can I investigate and explain how air resistance affects moving objects?

Can I explain and investigate the effect of resistance on moving objects?

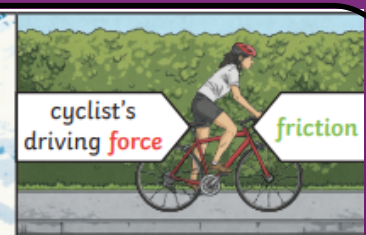
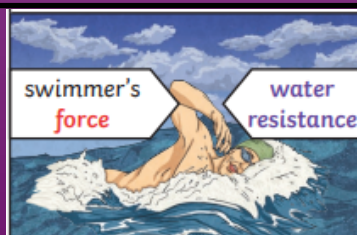
It has a pointed nose to cut through the water, and a smooth, low, curved back to allow the water to flow over and around it.

This shark is **streamlined**.



It does not create much **water resistance** so it can move through the water quickly.

Here are some examples of forces in action:



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.