



How you can help at home:

Can you identify any forces at work in your home?
Talk to your child about what they have learnt at school.
Follow this link to make a balloon-powered car: <https://www.rigb.org/families/experimental/balloon-car-racers>

Sticky Knowledge:

- Explain that unsupported objects fall towards the Earth because of gravity.
- Identify the effects of air resistance, water resistance and friction.
- Recognise that some mechanisms including lever, gears and pulleys allow a smaller force to have a greater effect.

Prior Learning

Future Learning



Y1—Understand how applying force can alter an object (squashing/twisting etc)

Y3— how do objects move in relation to each other and how many need to be in contact to do so.

KS3 – further knowledge on the nature of forces including: balanced, imbalanced, deforming forces and the ability to measure and record forces. All taught as part of the Physics curriculum.

Key Vocabulary

Word	Definition
force	physical strength or energy accompanying action or movement
friction	the force which acts to oppose the movement of two touching surfaces over each other
air resistance	friction between air and another material
gravity	force that attracts a body towards the centre of the earth or towards any other physical body
water resistance	friction that slows things down through water
mechanism	a system of parts or steps that work together to make something happen
pulley	a mechanism made of a wheel with a grooved rim that holds a rope, cable or chain to lift heavy objects or change the direction of a force
gear	a toothed wheel that locks with other wheels to affect speed, power and direction
lever	a bar or handle that pivots on a fixed point to help lift or move heavy objects with less effort