

Directing force



Background knowledge

A force is a push or pull. Forces can start or stop an object from moving. They can increase or decrease the speed of a moving object. The force that opposes motion is called friction. Forces can also make things change their direction of motion. For example, the force of the wind can blow a boat off course. A force acts in one direction. This direction is shown in the diagrams by using arrows. A longer arrow is used to show a bigger force.



A gentle kick



A hard kick

Science activity

Examine the diagrams below. On each diagram, draw an arrow to show the direction of each force mentioned.

The pull of gravity on the spring



The force of friction slowing the rolling car



The force of the hammer



The force exerted by each team (two arrows)



Science investigation

Using the spring balance that you made in the last investigation or a store-purchased spring balance, investigate the amount of force needed to lift a cookie, lift a cup, break your teeth, write with a pen or pencil, or any other activity of your choice.

