

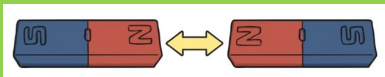


Explore Curriculum: Forces

Remember-Know - Explore

Let's Remember

Objects move differently on a range of surfaces. Some forces need contact between objects but magnetic forces can act at a distance without making contact. Magnets attract or repel each other and attract some materials and not others. Not all metals are magnetic. Magnets have two poles. Two magnets will attract



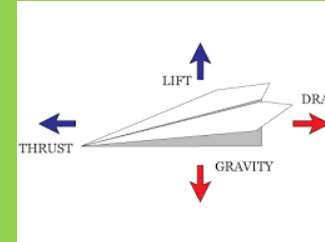
or repel each other, depending on which poles are facing each other.

Year 5 & 6 Science

Autumn 2

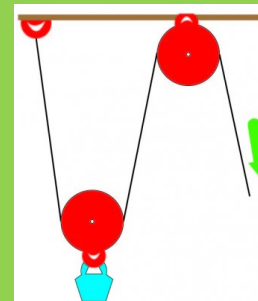
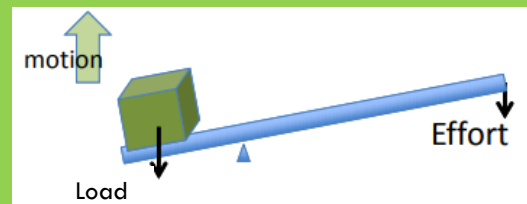
I Need to Know that...

Unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.



Movement is effected by different forces such as air resistance, water resistance and friction.

Some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.



With these skills you could be a...

Engineer: someone who creates or fixes machines to make life easier. They are really good at problem solving.

Glossary

buoyancy: an object's ability to float in water or air.

dependent variable: what will be measured in an experiment.

exert: to put force on something.

force: a push, pull or twist.

gravity: a force which pulls things towards the centre of Earth.

independent variable: the part which will be changed in an experiment.

mass: the amount of matter an object contains.

resistance: a force that opposes or slows down another force.



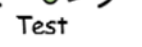
Question



Predict



Test



Observe and measure



Observe and measure

Observe and measure

Observe and measure



Record data

Record data

Record data



Results

Results

Results



Evaluate

Evaluate

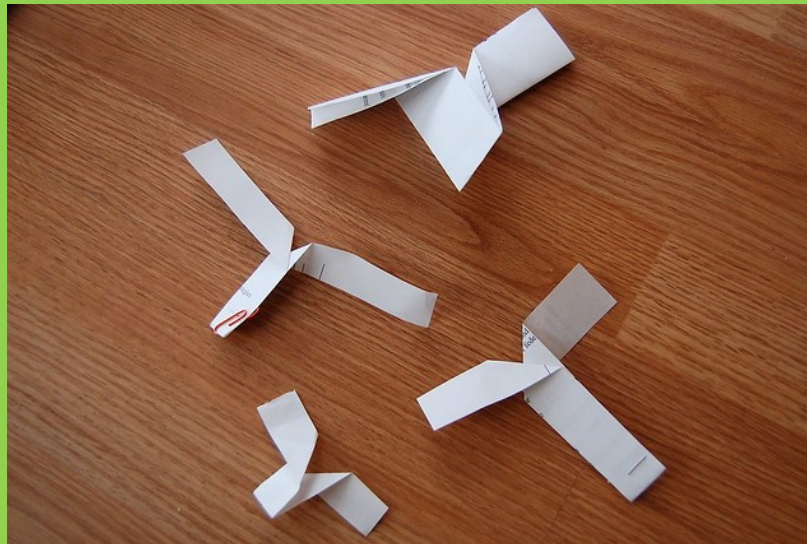
Let's Explore



Build your own levers or/pulleys to create a lifting device. Bring it in so we can see how effective it is!



Try building your own stomp rocket. Think carefully about what forces are acting upon it.



How many different paper helicopters can you make?
Which one flies the best?