

Key Ideas

forces	A force is a push, pull or twist that can make an object start moving, speed up, slow down, stop or change direction.
friction	It takes a larger force to pull an object across a surface such as carpet than across ice. This is because the surface material is resisting the movement. This is a force known as friction.
magnets	Magnets provide a force which can push or pull over a distance. The stronger the magnet the greater the distance this force can be felt. Magnets attract magnetic materials.
magnetic materials	Iron and materials containing iron (including steel) are the most common magnetic materials, but nickel and cobalt are also magnetic.

Key Figures

	Sir Issac Newton 1642-1727	He discovered Newton's law of motion and he also discovered the laws of gravity.
	William Gilbert 1540-1603	He was the first to investigate the phenomenon of magnetism systematically using scientific methods. He also discovered that the earth is a weak magnet.

Key words

Explanation

push	A force that makes something move away from you.
pull	A force that makes something move towards you.
force	A force acts upon an object and makes it move or change shape.
surface	The area on which something is placed.
friction	A force that slows an object down.
magnet	A magnet can attract magnetic objects.
poles	The ends of a magnet are called the north and south pole.
attract	To pull something towards it.
repel	To push something away.
material	What an object is made from.
magnetic	Attracted to a magnet.
metal	A material. Some metals are magnetic.
prediction	What you think will happen.
conclusion	What actually happened.
investigate	To test something to find out what happens.

Key Questions

How can you make an object start to move?

How can you make an object speed up?

How can you make an object slow down?

What effect does friction have on a moving object?

pushes and pulls - forces and motion

