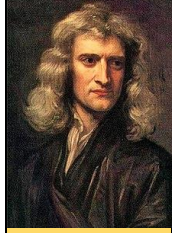




Key People/Scientists



Sir Isaac Newton (1643-1727).
An English physicist and mathematician who developed the concept of gravity.



Charles Augustin de Coulomb (1736-1806)
A French physicist who pioneered research into friction



Hans Christian Oersted (1777-1851)
A Danish physicist and chemist who discovered the relationship between magnetism and electricity

Key Questions

What is a force?	A force is a push or pull in a particular direction.
What are the different forces?	Push, pull and twist.
What does friction do?	Friction is a force between 2 surfaces which slows a moving object down.
What is a magnet?	A magnet is an object which produces a magnetic field that attracts or repels other objects.
Which materials are magnetic?	Iron, nickel and steel, which are types of metals, are all magnetic.
How strong are magnets?	All magnets have different strengths and some are much stronger than others.
What are the magnetic poles?	A magnet has two ends called poles. The north pole attracts south poles and repels other north poles. The south pole attract north poles and repels other south poles.

Common Misconceptions / Key Facts

Not all metals are magnetic. Only iron, steel and nickel are magnetic.

Most forces need direct contact between two objects (for example, opening a door, pushing a swing), but magnetic forces can act without direct contact.

Magnets work by using their poles to either attract or repel objects. Only metals which contain iron, nickel or cobalt are magnetic. The two poles which are the same will repel each other, and the two poles which are different will attract each other.

Diagrams/Visual Aids

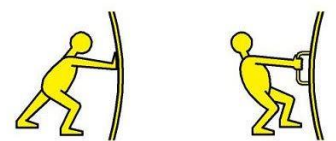
Repel and Attract



Magnet



Compass



PUSH

PULL

Key Vocabulary

FORCE	A force is a push or pull in any direction.
FRICTION	A force between 2 surfaces which slows down a moving object.
MAGNETIC	Can be attracted by a magnet
ATTRACT	To pull towards the magnet.
REPEL	To push away from the magnet.
MAGNETIC POLE	The two ends of the magnet. One end is the south pole and one end is the north pole.
COMPASS	A device which always points north