




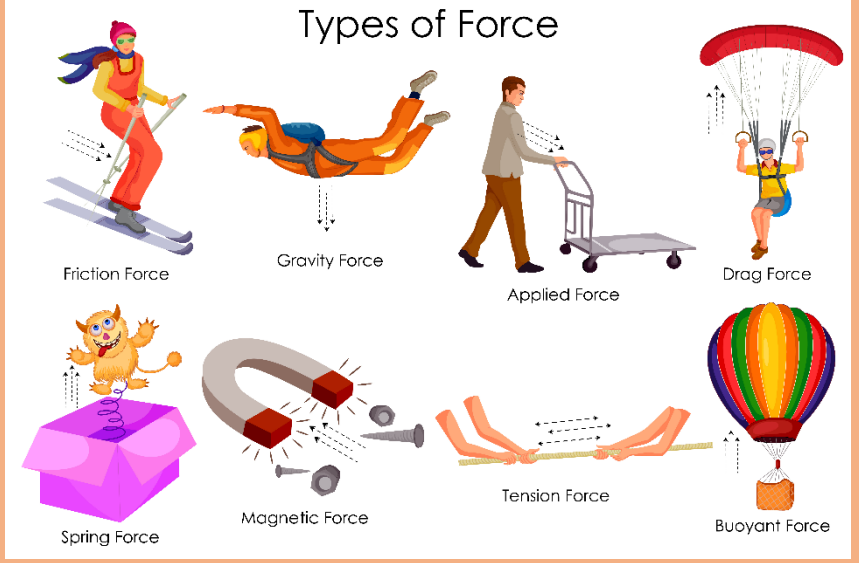


Key People/Scientists	
	<p><b>Sir Isaac Newton (1643-1727).</b> An English physicist and mathematician who developed the concept of gravity.</p>
	<p><b>Charles Augustin de Coulomb (1736-1806)</b> A French physicist who pioneered research into friction.</p>
	<p><b>Hans Christian Oersted (1777-1851)</b> A Danish physicist and chemist who discovered the relationship between magnetism and electricity.</p>

Key Questions	
<b>What is a force?</b>	A force is a push or pull in a particular direction. Forces can act on an object by either; squashing, bending, twisting or stretching it.
<b>Why does friction occur?</b>	Friction is a force between two surfaces that are sliding or moving across each other. For example, when you try to push a book along the floor, friction makes this difficult. Friction slows a moving object down.
<b>Why do magnets attract and repel?</b>	Magnets work by using their poles to either attract or repel objects. Only metals which contain iron, nickel or cobalt are magnetic.
<b>What are the magnetic poles?</b>	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. Some magnets are stronger than others.

### Diagrams/Visual Aids

#### Types of Force



The diagram illustrates eight types of forces with corresponding illustrations and labels:

- Friction Force:** A skier on a snowy slope.
- Gravity Force:** A person falling through the air.
- Applied Force:** A person pushing a shopping cart.
- Drag Force:** A person parachuting.
- Spring Force:** A toy figure on a spring.
- Magnetic Force:** A bar magnet attracting metal objects.
- Tension Force:** A person pulling on a rope.
- Buoyant Force:** A hot air balloon rising.

Misconceptions/Key facts
<p><b>Misconception:</b> All metallic-looking objects are magnetic.</p> <p><b>Fact:</b> Not all metals are magnetic. Iron, steel, nickel and cobalt are metals which are magnetic.</p>
<p><b>Misconception:</b> Friction only occurs between solid objects.</p> <p><b>Fact:</b> Friction can occur between solids, liquids and gases. Although the friction maybe reduced.</p>

Key Vocabulary	
<b>attract</b>	To pull towards the magnet.
<b>compass</b>	An instrument with a magnetised pointer which always points north.
<b>force</b>	A force is a push or pull in any direction.
<b>friction</b>	A force between two surfaces, which slows down a moving object.
<b>magnetic</b>	An object that can be attracted by a magnet.
<b>repel</b>	To push away from the magnet.
<b>surface</b>	The outside or top layer of something.