













Linked Scientists

William Gilbert (doctor who developed the theory of magnetism)
Leonardo da Vinci (first person to carry out tests on friction)

Key Vocabulary	
attract	A pull force . If one object attracts another object, it causes the second to move towards it.
bar magnet	Magnet in the shape of a bar with poles at both ends. 
contact force	A force that happens when two objects come into contact
force	Push or pull on an object
horseshoe magnet	Magnet in the shape of a horseshoe 
iron	Metal which is attracted to magnets
magnetism	An invisible force which attracts or repels materials
magnetic field	Space or area in which a magnetic force can be detected
material	Substance used to make something. Materials have different properties
metal	A material usually known for its strength . They are also good conductors of heat and electricity. Most metals are attracted to magnets
north pole	Strongest part at the end of a magnet . Magnets have 2 poles (north and south). Two of the same poles will repel each other. Opposite poles will attract
south pole	
non-contact force	Force which affects an object without coming into contact with it
pull	When a force brings an object closer
push	When a force moves an object away
repel	A push force
steel	Metal which is attracted to magnets
strength	Measure of how strong or weak something is
twist	Turning force

What I will know by the end of the unit	
What are forces?	A force is a push or pull . These forces change the motion of an object. They will make it start to move or speed up, slow it down or make it stop. 
How things move on different surfaces	Forces act in opposite directions to each other. When an object moves across a surface, friction acts as an opposite force. Friction is a force that holds back the motion of an object. Some surfaces create more friction than others which means that objects move slower across them, <div>       </div> <div> grass gravel carpet concrete sand wood </div> On a ramp, the force that causes the object to move downwards is gravity.
How magnets work	Magnets produce an area of force around them called a magnetic field. When objects enter this magnetic field, they will be attracted to or repelled from the magnet if they are magnetic. 
Magnets attract and repel different materials Magnets have two poles and attract and repel each other.	Magnets attract magnetic materials. The metals iron and steel are magnetic. Anything containing these metals is also magnetic.  Magnets can attract and repel each other. The ends of a magnet are called poles. One end is called the north pole and the other end is called the south pole. These are the strongest parts of a magnet.  Two of the same pole will repel (push away) each other. Two opposite poles will attract (pull together) each other. 