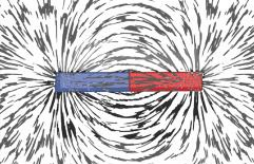
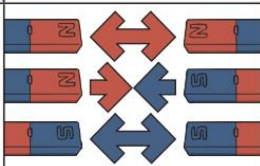


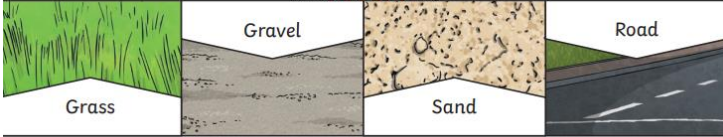
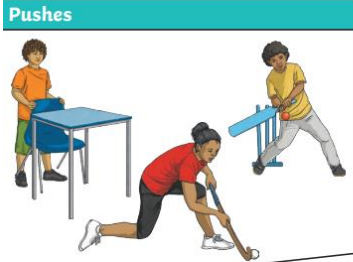
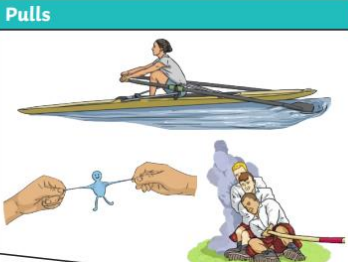
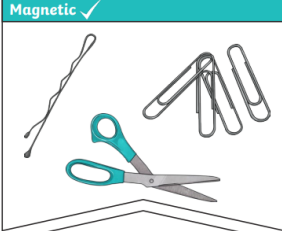
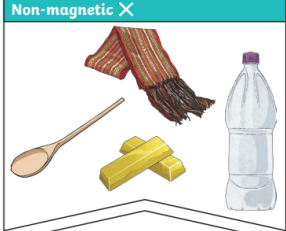
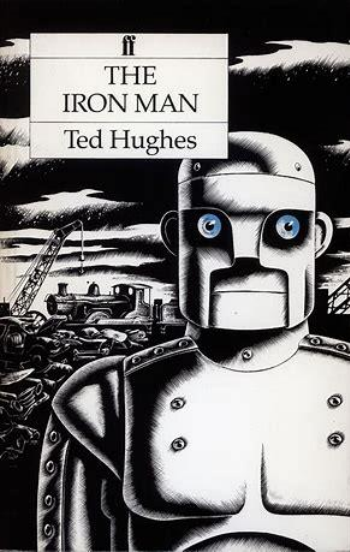




Key Facts	Diagram/Investigations	
<p>Different surfaces create different amounts of friction. The amount of friction created by an object moving over a surface depends on the roughness of the surface and the object, and the force between them.</p> <p>Forces will change the motion of an object. They will make It start to move, speed up, slow It down or even make It stop.</p> <div><p>Like poles repel. Opposite poles attract.</p></div> <div><p>A magnetic field is invisible. You can see the magnetic field here though. This is what happens when iron filings are placed on top of a piece of paper with a magnet underneath.</p><p>The needle in a compass is a magnet. A compass always points north-south on Earth.</p></div>	<div><p>The driving force pushes the bicycle, making it move.</p><p>Friction pushes on the bicycle, slowing it down.</p></div> <div><p>Grass Gravel Sand Road</p></div> <div><p>Pushes</p></div> <div><p>Pulls</p></div> <p>Forces will change the motion of an object. They will either make it start to move, speed up, slow it down or even make it stop.</p>	<p>Set up simple practical enquiries and fair tests.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest Improvements and raise further questions.</p>
Key Learning:		Books to support/ Enrichment Opportunities:
<p>Magnets can attract, repel each other and have two poles. Magnets can attract some materials and not others. Predict whether two magnets will attract or repel each other based on which poles are facing. Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet.</p> <div><p>Magnetic ✓</p><p>These objects contain iron, nickel or cobalt. Not all metals are magnetic.</p></div> <div><p>Non-magnetic ✗</p><p>These objects do not contain iron, nickel or cobalt.</p></div>	<p>Following on from Year 2:</p> <p>What are pushes and pulls? How can we control speed and direction of an object? Can pushes and pulls change the shape of objects?</p>	

Subject Specific Vocabulary	
Key word	Definition
Forces	Pushes or Pulls
Friction	A force that acts between two surfaces or objects that are moving, or trying to move, across each other
Surface	The top layer of something.
Magnet	An object that produces a <i>magnetic force</i> that pulls certain objects towards it.
Magnetic	Objects which are <i>attracted</i> to a <i>magnet</i> are <i>magnetic</i> . Objects containing iron, nickel or cobalt metals are <i>magnetic</i> .
Magnetic Field	The area around a <i>magnet</i> where there is a <i>magnetic force</i> which will pull <i>magnetic</i> objects towards a <i>magnet</i> .
Poles	North and south poles are found at different ends of the magnet.
Repel	Repulsion is a force that pushes objects away.
Attract	Attraction is a force that pulls objects together.