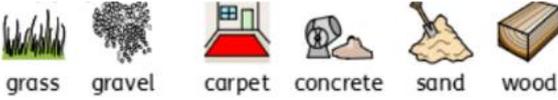


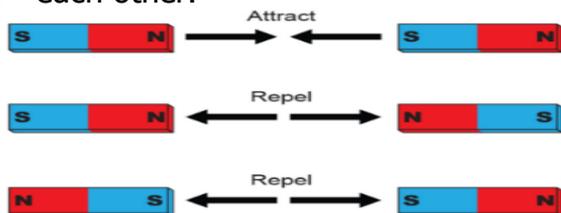


**What should I already know?**

- The shapes of some materials can be changed. By **pulling** or **pushing** we can stretch, twist, bend or squash materials.

**What will I know by the end of the unit?**

What are forces?	<ul style="list-style-type: none"> <li>Forces are <b>pushes</b> and <b>pulls</b> that can change the way an object moves.</li> <li>For example, when a cyclist <b>pushes</b> down on their pedals, a bike moves. The harder they push, the faster the bike goes.</li> <li>In a tug of war, each team <b>pulls</b> the rope. The team with the greatest <b>force</b> will win.</li> </ul>
How do surfaces affect movement?	<ul style="list-style-type: none"> <li>Some surfaces create more <b>friction</b> than others, which means that objects move across them more slowly.</li> </ul> 
What are magnets?	<ul style="list-style-type: none"> <li>Magnets attract magnetic objects without touching them.</li> <li>Magnets will only attract magnetic objects.</li> </ul> 
Which materials are magnetic?	<ul style="list-style-type: none"> <li>Iron and steel are magnetic.</li> <li>Aluminium and copper are non-magnetic.</li> </ul>
How do magnetic poles work?	<ul style="list-style-type: none"> <li>The ends of magnets are called poles.</li> <li>One end is the north pole, the other the south pole.</li> <li>Opposite poles attract each other, so a north pole will <b>attract</b> a south pole.</li> <li>If the same poles face each other they will move away from (repel) each other.</li> </ul>



**Vocabulary**

attract	when one object causes another object to move towards it
contact	when two objects touch each other
friction	the <b>resistance</b> of movement when there is contact between two surfaces
force	the <b>pulling</b> or <b>pushing</b> effect that something has on something else
gravity	the <b>force</b> that causes things to drop to the ground
magnet	a piece of material which attracts <b>magnetic</b> materials towards it
metal	a hard material such as iron, steel, gold or lead
non-magnetic	an object that is not <b>magnetic</b>
opposite	north and south are opposite directions
pull	to use <b>force</b> to move something toward you
push	to use <b>force</b> to move something away from you
repel	when one object causes another object to move away from it
resistance	a <b>force</b> which slows down a moving object or vehicle
surface	the flat top part of something or the outside of it

**Data Handling**

Collect results using a table and produce a bar chart where appropriate.

