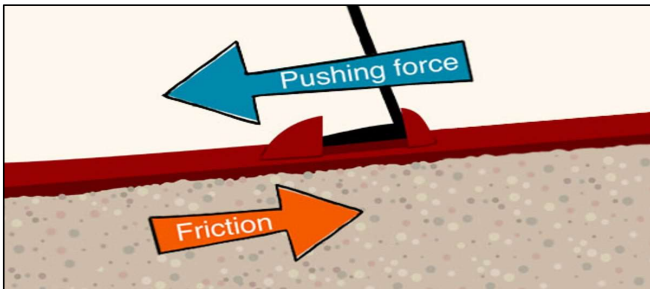


Knowledge Organiser

Y3 - Forces and Magnets

Key Knowledge - Friction

Friction is the force that acts when two objects are moving against each other. It works to slow the moving objects down. The amount of friction depends on the materials from which the two surfaces are made. The rougher the surface, the more friction is produced. Friction also produces heat.



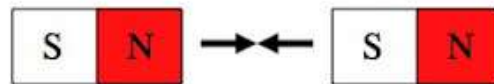
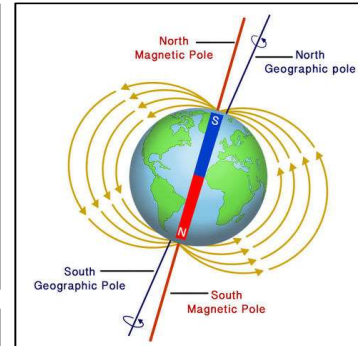
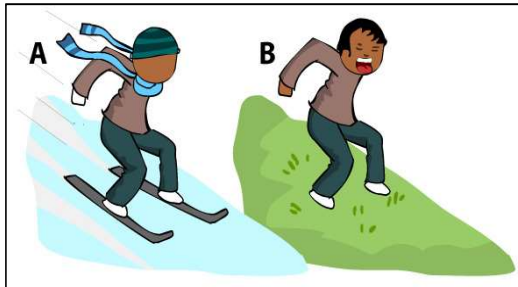
Key Knowledge - Magnets

Magnets have two poles: a north and south pole. If the north pole of one magnet is facing the south pole of another magnet, they will be pulled together by the force of attraction. If the same pole of two different magnets are facing each other, they will be pushed apart by the force of repulsion.

Some materials are magnetic which means they will be attracted to a magnet. This can happen without the objects touching each other.

Famous Scientist – William Gilbert

The first scientist to actually make a magnet was William Gilbert. In 1600 he discovered that the Earth itself is a magnet using a the needle of a compass. He found that the needle always points north because the Earth acts like a bar magnet with a north and south pole. He also that magnets could be forged out of iron and that their magnetic properties could be lost when that iron was heated.



Opposite poles attract



Matching poles repel



Key Vocabulary

friction	The force that acts against you when you try to move something heavy.
magnetism	A force that can attract or repel objects that have a magnetic material.
magnetic pole	The two ends of a magnet.
attract	The force pulling two objects together.
repel	The force pushing two objects apart.
material	What objects are made of.

