

Remember
in Year 2,
we learned:

How a
material
can be
changed

Year 3

Forces and magnets

Later, in
Year 5, you
will learn:

Understand
the role of
gravity and
air/water
resistance

Knowledge

By the end of this unit of study, pupils will be able to:

One	Compare how things move on different surfaces.	
Two	Notice that some forces need contact between two objects, but magnetic forces can act at a distance.	
Three	Observe how magnets attract or repel each other and attract some materials and not others.	
Four	Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.	
Five	Describe magnets as having two poles.	
Six	Predict whether two magnets will attract or repel each other, depending on which poles are facing.	



Key Learning

A force is a push or a pull. When an object moves on a surface, the texture of the surface and the object affect how it moves. It may help the object to move better or it may hinder its movement e.g. ice skater compared to walking on ice in normal shoes.

A magnet attracts magnetic material. Iron and nickel and other materials containing these, e.g. stainless steel, are magnetic. The strongest parts of a magnet are the poles. Magnets have two poles – a north pole and a south pole. If two like poles, e.g. two north poles, are brought together they will push away from each other – repel. If two unlike poles, e.g. a north and south, are brought together they will pull together – attract.

Key Vocabulary

Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole