Wellesley Park Primary School – Science

Topic: Forces and Magnets	Year: 3	Strand: Physics

What should I already Know?

- In **Year 1** children should have learnt to identify a variety of everyday materials and describe their simple physical properties in order to compare and sort materials
- In **Year 2** children should have learnt how things move on different surfaces

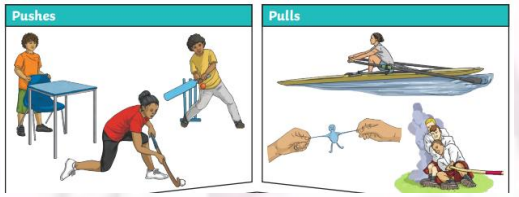
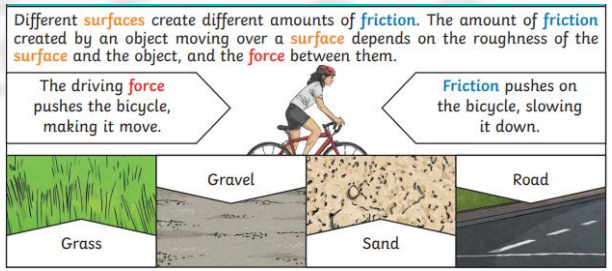
What will I know by the end of the unit?

- ❑ I can compare how things move on different surfaces
- ❑ I notice that some forces need contact between 2 objects, but magnetic forces can act at a distance
- ❑ I can observe how magnets attract or repel each other and attract some materials and not others
- ❑ I can 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
- ❑ I can describe magnets as having 2 poles
- ❑ I can predict whether 2 magnets will attract or repel each other, depending on which poles are facing.

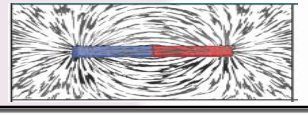
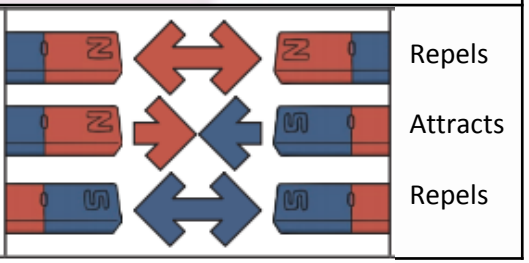
Big Questions

What is motion?
Are all metals magnetic?
Are bigger magnets always stronger?
What is the best surface for riding a bike on?

Vocabulary: Forces

Word	Definition	Image
Forces	The pulling or pushing effect that something has on something else	 **Forces** will change the motion of objects. They will either make if start to move, speed it up, slow it down or even make it stop
Friction	A force which slows down a moving object or vehicle when there is contact between two surfaces	

Vocabulary: Magnets

Word	Definition	Image
Magnet	A magnet is a metal which attracts or repels other materials. A magnet is made from iron, nickel, steel or cobalt. A magnet has a north end and a south end.	
Magnetic	**Objects which are attracted to a magnet are magnetic. Objects that contain iron, nickel or cobalt metals are magnetic**	
Magnetic field	**The invisible area around a magnet where there is a magnetic force which will pull magnetic objects towards the magnet.**	
Poles	**North and South poles are found at different ends of a magnet**	
Repel	**Repulsion if the force that pushes objects away**	
Attract	**Attraction is a force that pulls objects together**	