

Plants	Animals including humans	Rocks	Light	Forces and magnets
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Year 3 – Forces and magnets

Knowledge

- To know how things move on different surfaces.
- To know that some forces need contact between two objects, but magnetic forces act at a distance.
- To know how magnetics attract or repel each other and attract some materials and not others
- To know that everyday materials can be compared and grouped on the basis of whether they are attracted to a magnet, and identify some magnetic materials.
- To know magnets have two poles.
- To know whether two magnets will attract or repel each other. Depending on which poles are facing

Skills

- **using straightforward scientific evidence to answer questions or to support their findings.**
Use magnets to test a range of materials to test whether they are magnetic or not and use this to make conclusions about what magnetic materials have in common. Pupils could look for patterns in the way that magnets react to each other. (Pattern seeking)
- **setting up simple practical enquiries, comparative and fair tests**
- **using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions**

This could be achieved by testing how e.g. a car moves on different surfaces and using results to answer given questions, suggest improvements and raise further questions. Use results to raise further questions e.g. Are all metals magnetic? (Fair testing)

<u>Vocabulary</u>	
Force	Poles
Magnets (bar, ring horseshoe)	Push
Attract	Pull
Repel	Distance
Strength	Direct contact
Magnetic	Properties
Surface	

Preload

- Materials – attraction to magnets (include transparent)