



**What should I already know?**

I have found out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

**Knowledge**

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

**Year 3 Intention: In Science I will be learning about Forces and Magnets**

**Scientific Skills**

- i) asking relevant questions and using different types of scientific enquiries to answer them
- ii) setting up simple practical enquiries, comparative and fair tests
- iii) making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- iv) gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- v) recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- vi) reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- vii) using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- viii) identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings

**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