

Harrowbarrow School: Science



Topic Forces and Magnets Year/s

3 & 4

Term

Autumn

What I should know already

Forces and magnets has not been taught before.

I should know about working scientifically:



Research





Fair testing

Observation

grouping and Problem solving classifying

Pattern seeking

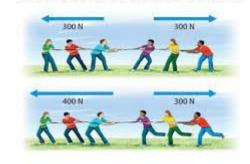
Important facts

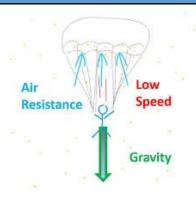
A force is a push or a pull that can:

- 1.Start
- 2.Stop
- 3. Speed up
- 4.Slow down
- A magnet either attracts or repels another magnet.
- Not all forces need contact

Key knowledge/diagrams

Balanced and Unbalanced Forces





Vocabulary A push or pull that starts, stops, speeds Forces A piece of metal that can pull certain Magnets Magnetic fields pull towards each oth-Attract er. Repel Magnetic fields push away from each other. A force between 2 surfaces. Friction The force that pulls everything to the Gravity Air resistance A force that is caused by air. Upward force on a liquid (or gas). **Upthrust**

What I should know by then end of this unit

I can explore and describe how objects move on different surfaces.

I can explain how some forces require contact and some do not, giving examples.

I can explore and explain how objects attract and repel in relation to objects and other magnets.

I can predict whether objects will be magnetic and carry out an enquiry to test this out.

I can describe how magnets work.

I can predict whether magnets will attract or repel and give a reason.