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| **Key vocabulary** | | |
| **force** | A force is a push or a pull. | |
| **magnetic force** | An invisible force that attracts magnetic metals. | |
| **magnet** | Magnets attract magnetic materials. Iron, nickel, cobalt and materials that contain these (e.g. stainless steel) are magnetic. | |
| **attract** | To pull towards. | |
| **repel** | To push away. | |
| **poles** | Magnets have two poles, a north pole and a south pole. | |
| **contact force** | Many forces need contact to act: | |
|  |  |
| **non-contact force** | Magnetic force does not need contact and can act at a distance. | |

**What will I learn during this topic?**

Some forces need contact between two objects – magnetic forces can act at a distance.

Magnets attract and repel some materials. Predict whether they attract or repel

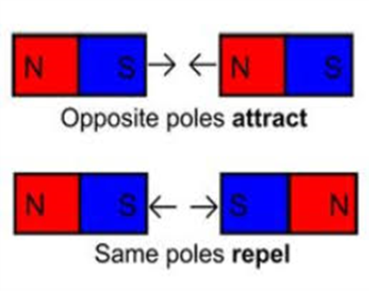
Compare/ group various materials on the basis of attraction to a magnet; and identify some magnetic materials.

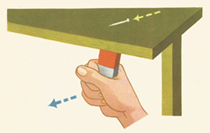
Magnets have two poles

**Objects moving on surfaces:**

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|  | | Ice skates have a sharp blade. This helps them move better on ice. |
|  | | It is much harder to walk on ice in trainers. |
| A bowling green is closely mown so the grass is short and the balls roll easily. | |  |
| **Significant scientist** | | |
| **Michael Faraday** *(1791-1867)* | Michael Faraday was an English scientist.  In 1831, he discovered electromagnetic induction. This was a very important discovery for the future of science and technology. | |

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| **Types of magnets:** | |
| **Bar** | **Ring**    **We can sort and classify materials as:** |
| **Button** | **Horseshoe** |

**Magnets have two poles**

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**A magnet attracts magnetic materials.**

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| **These metals are magnetic:** | | |
| **iron nails** | **Nickel** | |
|  | 50p coins contain nickel |
| **stainless steel** | **steel** | |

