|  |
| --- |
| **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. |

**Objects moving on surfaces:**

|  |  |
| --- | --- |
|  | 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. |  |

**Forces and magnets – Year 3**

|  |
| --- |
| **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. |

|  |
| --- |
| **Types of magnets:** |
| **Bar** | **Ring** |
| **Button** | **Horseshoe** |

**Magnets have two poles**

****

**A magnet attracts magnetic materials.**

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

**We can sort and classify materials as:**



****