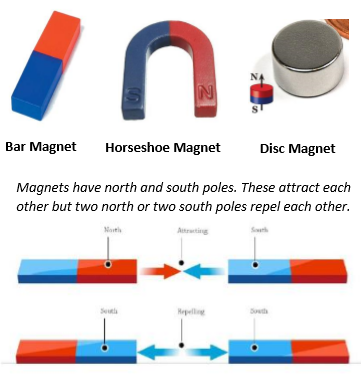
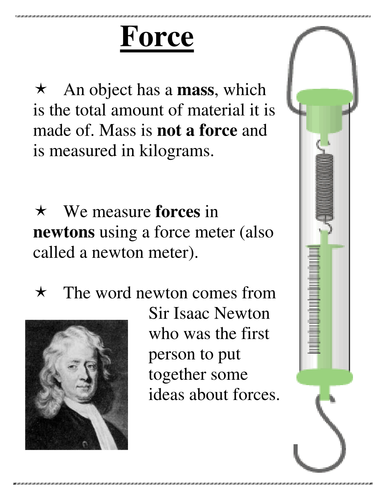


**Science - Forces and Magnets**

00

**Knowledge**

**Skills**

🞄Identify forces as pushes and pulls.

🞄Identify that friction is a force that slows objects down.

🞄I can sort and classify materials.

🞄I can investigate and explore outcomes.

🞄Talk about your learning.



**Books**

|  |  |
| --- | --- |
| **Vocabulary** | **Meaning** |
| **acceleration** | An increase in the rate or speed of something. |
| **attract** | To pull towards. Opposite of repel. |
| **balanced force** | Two forces of equal size acting in opposite directions. |
| **contact force** | A force that requires physical contact to occur e.g. kicking a ball. |
| **force** | A push or pull on an object which can cause it to move, change speed, direction or shape. Measured in Newtons (N). |
| **friction** | The resistance of motion when one object rubs against another. |
| **gravity** | The area around a large object when a weight can be felt. |
| **mass** | The amount of matter contained in an object. Measured in units such as g, kg. |
| **magnet** | A material or object that produces a magnetic field. It attracts or repels magnetic objects, including iron. |
| **propel** | The act of driving or pushing forward. |
| **repel** | To push away. Opposite of attract. |
| **weight** | The force due to gravity on objects. |

• I can make systematic and careful observations.

• I can set up some simple practical enquiries, including comparative tests.

• I am beginning to collect data in a variety of ways, including labelled diagrams, bar charts and tables.

• I am beginning to talk about and identify differences and similarities in the properties of materials.

• I am beginning to identify simple changes related to simple scientific phenomena.

• I am beginning to discuss criteria for grouping and sorting and can classify using a simple key.

**Key skills in Science**

**What I will know and be able to do at the end of the topic.**

**What I should be able to do and know now.**

**Knowledge**

**Identify the type of force required to carry out an action.**

**Explain that magnets produce an invisible pulling force.**

**Can you name 3 magnetic materials?**

**What are the different types of magnet?**

I know that magnets will r\_\_\_\_ or a\_\_\_\_\_ based on their poles.

**Skills**

**What type of chart can I use to display my results?**

I can explain my predictions and conclusions using key words or prompts.

Investigate the force of friction produced by different surfaces.

**Investigate the strength of different magnets**.

**Knowledge**

🞄I know that some forces need contact between two objects.

🞄I know that objects move at different speeds.

🞄I know how non-fiction books can help my learning.

**Skills**

🞄Identify that there are different types of forces acting on objects.

🞄I am able to compare how objects move on different surfaces.

🞄I can compare, sort and group materials.

🞄I can use a magnet to identify whether the action is pull or push.

**What I will be learning**

🞄How to describe magnets as having two poles.

🞄How to identify different types of magnets.

🞄How to identify whether a force is a repelling or an attracting force.

🞄The differences between magnetic and non-magnetic materials.

🞄How to create an investigation and display my results.