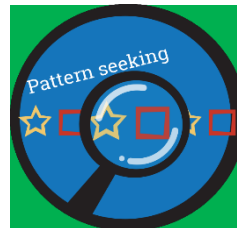


Scientific Enquiries



WHO?



Brand new topic



Physics





Vocabulary

force	A power or strength that can cause an object to move	attract	To pull towards
friction	The force that pulls backwards to slow down or stop a moving object.	repel	To push away
motion	The process of movement	magnetism	The force of a magnet
magnet	An object that can pull some metal objects towards it	non-contact force	A force that occurs without objects touching each other



WHAT?

1.  



- A **force** can be a **push** or a **pull** action that is caused by objects touching each other. It is forces that cause things to **move**.
- Push and pull forces are **contact forces** because the **objects touch** each other.
- If you push an object across a table, the force of you pushing is more than one side than the other.
- **Gravity** is an example of a **non-contact force**.

4.  


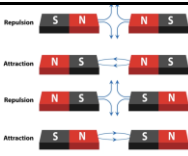
- A **magnet** is made of **magnetic materials** such as **iron**, **nickel**, **steel** or **cobalt**.
- If a **magnetic object** enters a magnet's **magnetic field**, it will be **attracted** to it and **move towards** it.
- Most other metals are **non-magnetic**. All magnetic materials are metal, but not all metals are magnetic.
- Most magnets are **man-made** and can get damaged over time.

2.  



- The **texture** of a **surface** that an object is moving on affects how **easily it will move**
- **Friction** is the **force** between two objects that are sliding across each other. **Friction slows** a moving object down.
- A **rough textured surface** will **slow** an object down quicker than a **smooth textured surface**.

5.  

- A **magnet** makes paperclips '**jump**' because they are made of **steel**, which is a **magnetic material**.
- Items that are **not** made from a magnetic material will **not** be attracted to the magnet.
- **Giant magnets** are used on junk yards to **separate** magnetic and non-magnetic materials

3.  

- A **magnet** is an object that produces a **magnetic field**. **Magnetism** does not need to touch an object to pull it, making it a **non-contact force**.
- Magnets have a **north pole** and a **south pole**. They have a magnetic field that **attracts** and **repels** objects. **Opposite poles attract**, **same poles repel**.

6.  

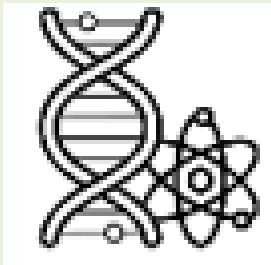
- **Maglev trains** uses **magnets** so there is **no friction** between the train and the track, allowing it to move **faster**.
- An **MRI machine** uses magnets to get images of parts of the **body**.
- The **magnetic needle** of a **compass** is attracted to the Earth's poles, so it moves to the direction of the **north pole**.

Helpful links

Iron filings going crazy!



What is physics?



Dr Binoc – magnetism!



Slipping and sliding!

