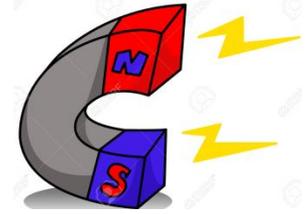


Scientist Name:



Today Science Club are going to look at

MAGNETISM!

Magnets:

Magnets have **POLES: NORTH** and **SOUTH**. **OPPOSITE** Poles attract one another. The **SAME** poles repel one another. So (please circle): NORTH + NORTH = Attract/Repel.

NORTH + SOUTH = Attract/Repel.

SOUTH + SOUTH = Attract/Repel.

Experiment 1: Test the magnets provided, can you tell which are north and which are south? YES/NO

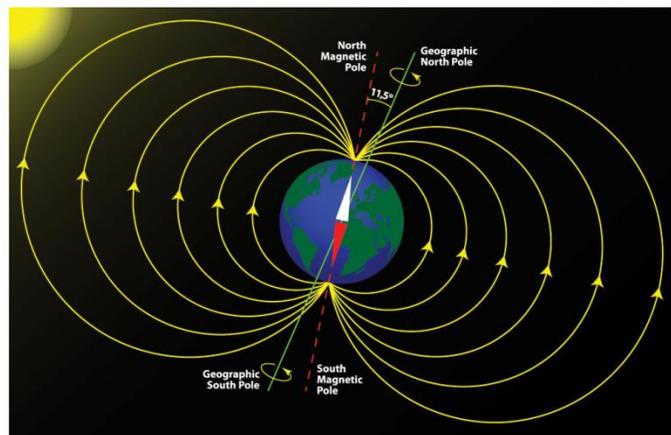
The Gauss (or G) is a measurement of a magnetic field. The bigger the measurement, the larger (& stronger) the magnetic field is. Which magnet do YOU think has the biggest field?

Some materials are **MAGNETIC**, they contain materials which respond to a magnet, usually iron.

Experiment 2: Test the various items provided with the magnets to see which are magnetic and which aren't. Are there any that surprise you?

Scientists are not sure why it happens, but the Earth has its own magnetic field. It is often drawn as a BAR MAGNET at the Earth's centre. They think birds and whales use them as navigation!

Compasses work by the 'south' side of a magnet is attracted to the Earth's magnetic NORTH POLE and 'points' that way.



Experiment 3: Use the compasses provided, do they always point the same direction? Put the IRON ORE next to them, does the compass change direction? YES/NO

Experiment 4: Some materials are also magnetic, such as iron filings, ferro-fluid and magnetic putty which have been provided. See if you can prove they are magnetic.

Note to parents: This week we have been looking at **MAGNETS**. Any questions please email: HassellScienceClub@gmail.com

Magnetics Quiz

1. Magnetism is a type of ...
 - a. electricity
 - b. gravity
 - c. force
2. When two magnets repel each other, they ...
 - a. push away from each other
 - b. pull towards each other
 - c. neither push nor pull
3. When two magnets attract each other, they ...
 - a. push away from each other
 - b. pull towards each other
 - c. neither push nor pull
4. Which of these objects would be attracted to a magnet?
 - a. A leather purse
 - b. A steel key
 - c. A wooden ruler
5. Bar magnets have two poles. Are they
 - a. East and West?
 - b. North and South?
 - c. Red and green?
6. When magnets are split into two, does this make two new magnets? YES/NO
7. Does distance **strengthen** or **weaken** a magnet's ability to attract a piece of iron?
8. Is magnetic north the same as true (grid) north? YES/NO
9. Has magnetic north always stayed in the same position? YES/NO
10. Naturally occurring magnets in nature are called:
 - a. Plastics
 - b. Stones
 - c. lodestones