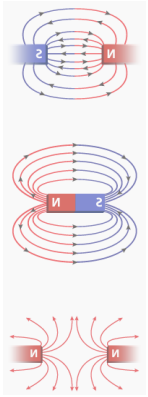
S N N S _____

S N S N _____

N S S N _____

Some materials are attracted to magnets, for example _____ and _____.
Only a magnet can _____ another magnet.
This is the test to find out if a material is a magnet.

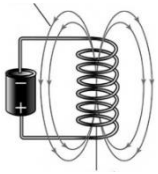
Magnetism is a f_ _ _ _ that acts only between magnetic materials like i _ _ _, s_ _ _ _, c_ _ _ _ _ and n_ _ _ _ _.
Magnets have 2 p_ _ _ _ – a n_ _ _ _ and a s_ _ _ _ _.
If two magnets are put together the poles that are the same will r_ _ _ _ each other. If two magnets are put together the poles that are different will a_ _ _ _ _ _ each other.



Magnetic field lines flow from _____ to _____

The magnetic field is strongest at the _____.
The closer together the magnetic field lines are, the _____ the magnet.

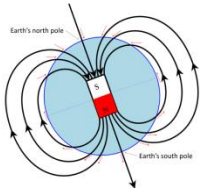
Magnetic field



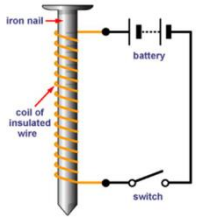
Wire coil

A solenoid

A solenoid is a coil of _____ that acts like a magnet when a flow of _____ passes through it.



Magnets and Electromagnets



An electromagnet is a _____ with an iron core, like a nail in the middle of it.

The iron core makes the magnetic field stronger.

When an electric _____ is flowing, a _____ field is produced.

The field can be switched _____ and _____.

Ways to increase the strength of an electromagnet are

1_____

2_____

3_____

4_____

Experiment to show how increasing the number of coils on an electromagnet can make it pick up more paper clips.

Independent variable
_____

Dependent variable
_____

Control variables
_____
_____
_____
_____

Conclusion
_____
_____
_____
_____

Other variables we could have tested
_____
_____
_____
_____
_____

Electromagnets are useful because
_____
_____
_____
_____