

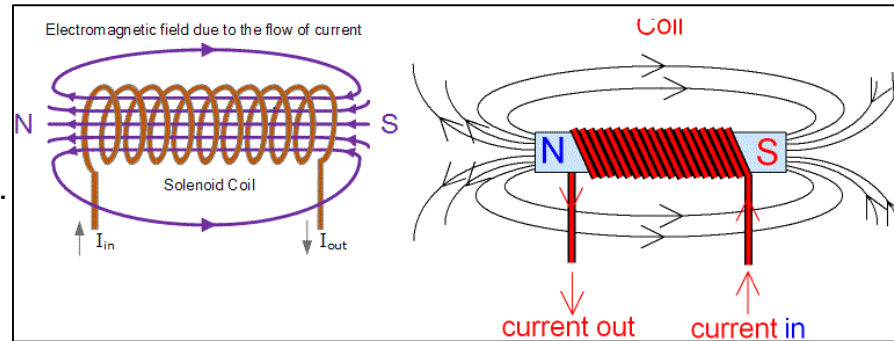
Increasing the strength of an electromagnet.

The strength of an electromagnet depends on:

1. The **number of turns or loops in the solenoid (coil)**. Increasing the number of turns will increase the strength of the electromagnet.
2. The **current flowing in the wire**. Increasing the current flowing in the wire will increase the strength of the electromagnet.
3. The **type of core**. Using a magnetic material in the core will increase the strength of the electromagnet.

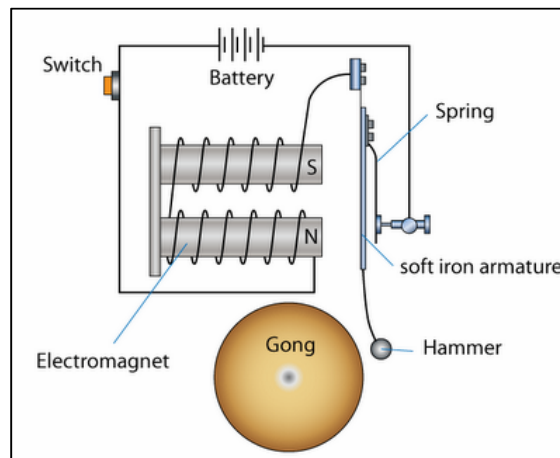
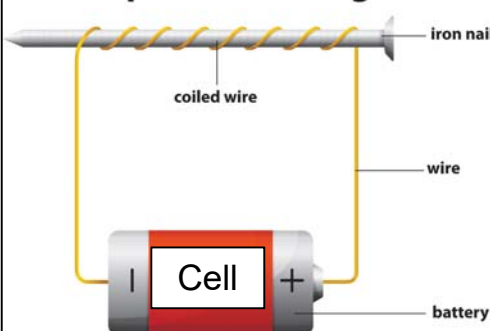
Key words

Core:	Soft iron metal which the solenoid is wrapped around
Electromagnet:	A non-permanent magnet turned on and off by controlling the current through it.
Solenoid:	Wire wound into a tight coil, part of an electromagnet.

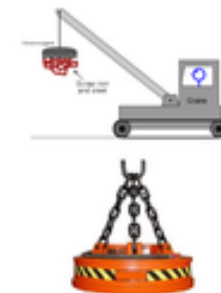


The magnetic field of an electromagnet decreases in strength as distance increases.

Simple Electromagnet



1. Using electromagnets in scrap yards



- Electromagnets can be used to lift objects made of magnetic materials e.g. iron and Steel.
- The crane has a large electromagnet, which is turned on to lift scrap iron and steel, and turned off to drop it somewhere else.