

Chapter 05

APPLICATION OF ELECTRO MAGNET

In our previous video, we learnt about electromagnets.

Let us now see an application of an electromagnet, an Electric Bell.

We will now look at simplified circuit of an electric bell.

It consists of a coil of wire wound on an iron bar that acts as a electromagnet.

An iron strip with a hammer at one end is kept close to this electromagnet.

When the circuit is closed. The current flows through the coil which becomes an electromagnet.

It then pulls the iron strip. In the process, the hammer at the end of the strip strikes the gong of the bell to produce a sound.

However note that when the hammer strikes the gong, the circuit breaks. When the current breaks the current stops flowing.

Due to this, the coil gets demagnetized and the hammer goes back to its original position. Once it goes back, the circuit is complete, the coil is magnetized again and hammer strikes the gong. The process continues till the switch is open again.

This is how an electric bulb works.

Electromagnets have many such applications.

The electromagnets. can be made very strong and can lift very heavy loads. The electromagnets are also used to separate magnetic material from the junk.

Electromagnets have applications in medicine such as MRI machines and electromagnetic therapy to help heal fractures. Many toys also have Electromagnets inside them.

In today's video, we learned about electromagnets and their applications.