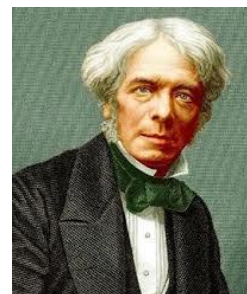


More electromagnets

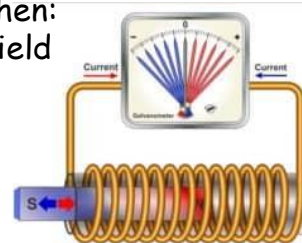
Michael Faraday was an English physicist working in the early 1800's. He worked with another scientist named Sir Humphrey Davy. Faraday's big discovery happened in 1831 when he found that when you change a magnetic field, you can create an electric current. He did a lot of other work with electricity such as making generators and experimenting with electrochemistry and electrolysis



Potential difference or voltage is needed to make an electric current flow in a circuit. This happens when:

- a coil of wire is moved in a magnetic field
- a magnet is moved into a coil of wire

This is called **electromagnetic induction**



The direction of the induced potential difference or induced current depends on the direction of movement.

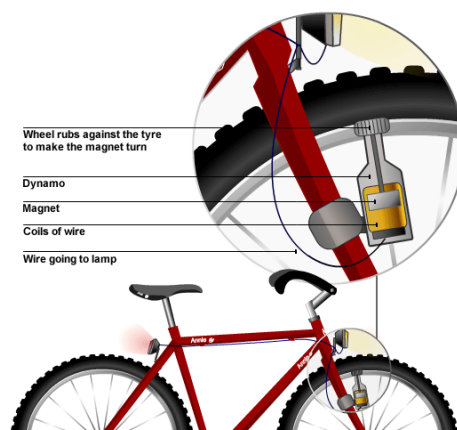
The current is reversed when:

- the magnet is moved **out** of the coil
- the other pole of the magnet is moved into the coil

The size of the induced voltage can be increased if;

- the wire is moved **faster**
- the magnet is **stronger**
- the **number of turns** on the coil is increased
- the **area** of the coil is greater

Electromagnetic induction is used in dynamo bicycle lights, motors and generators.



1. Fill in the missing words

What happens when you move the magnet in and out of the coil?

If a is moved into a a current is in the wire.

If the magnet is moved Of the coil the of the current is

This is known as electromagnetic

2. The size of the induced voltage can be increased if;

-
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-
-

3. What are some uses of electromagnetic induction?

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