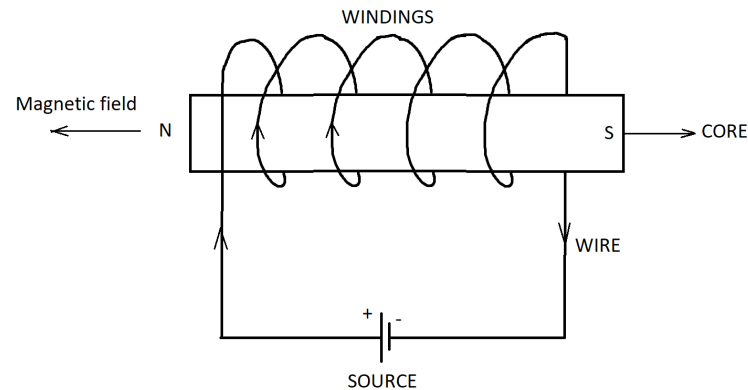


#1 - Green - What is an electromagnet?

When electricity is moved through a **coil** of wire, it produces an effect called a **magnetic field**.

When a piece of metal is put inside the coil, the magnetic field turns the piece of metal into a special kind of magnet called an **electromagnet**.



The electromagnet at this station is professionally made with many coils of small wire inside. It can move the compass as well as **pick up small metal objects**.

Push the **button** to change the coil into a magnet by running electricity through it. See how the times when the electromagnet is off or on are shown as a **wave** on the graph. The wave is either **positive** (greater than zero) when on or equal to zero when off.