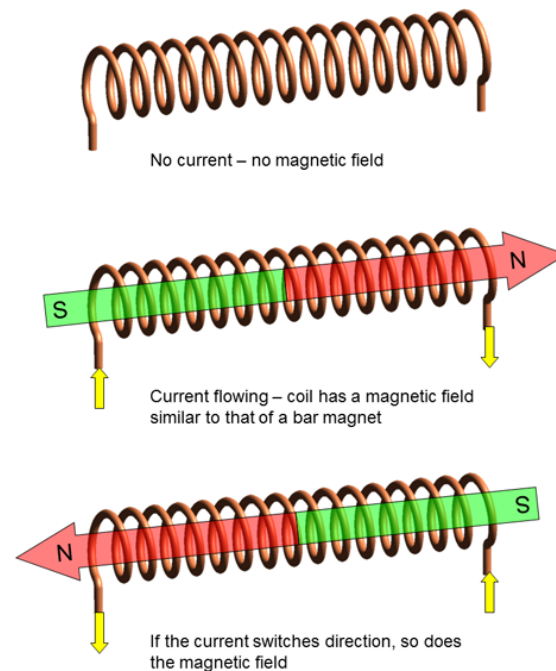


#2 - Yellow - Changing magnetic polarity

An electromagnet can change its magnetic direction, or **polarity**, depending on which way the electricity is moving through the coil.

An electromagnet can **attract** (pull) or **repel** (push) a regular, permanent magnet depending on its polarity.



Use the **switch** to change the direction of the electricity through the electromagnet that is on the base of the swing. See how it pushes or pulls the permanent magnet that is on the swing.

See how the directions on the graph can be **positive** (more than zero), **negative** (less than zero), or equal to zero.