



2 magnets are placed at each end of an AA battery (4 total) . This is your train. The train, when placed at the beginning of the coil will travel very quickly through the coil to the end and shoot out.

Visualize this train traveling quickly through the coil (track).

How do you think this happens?

What are the jobs of the magnets, the battery, and the coil?

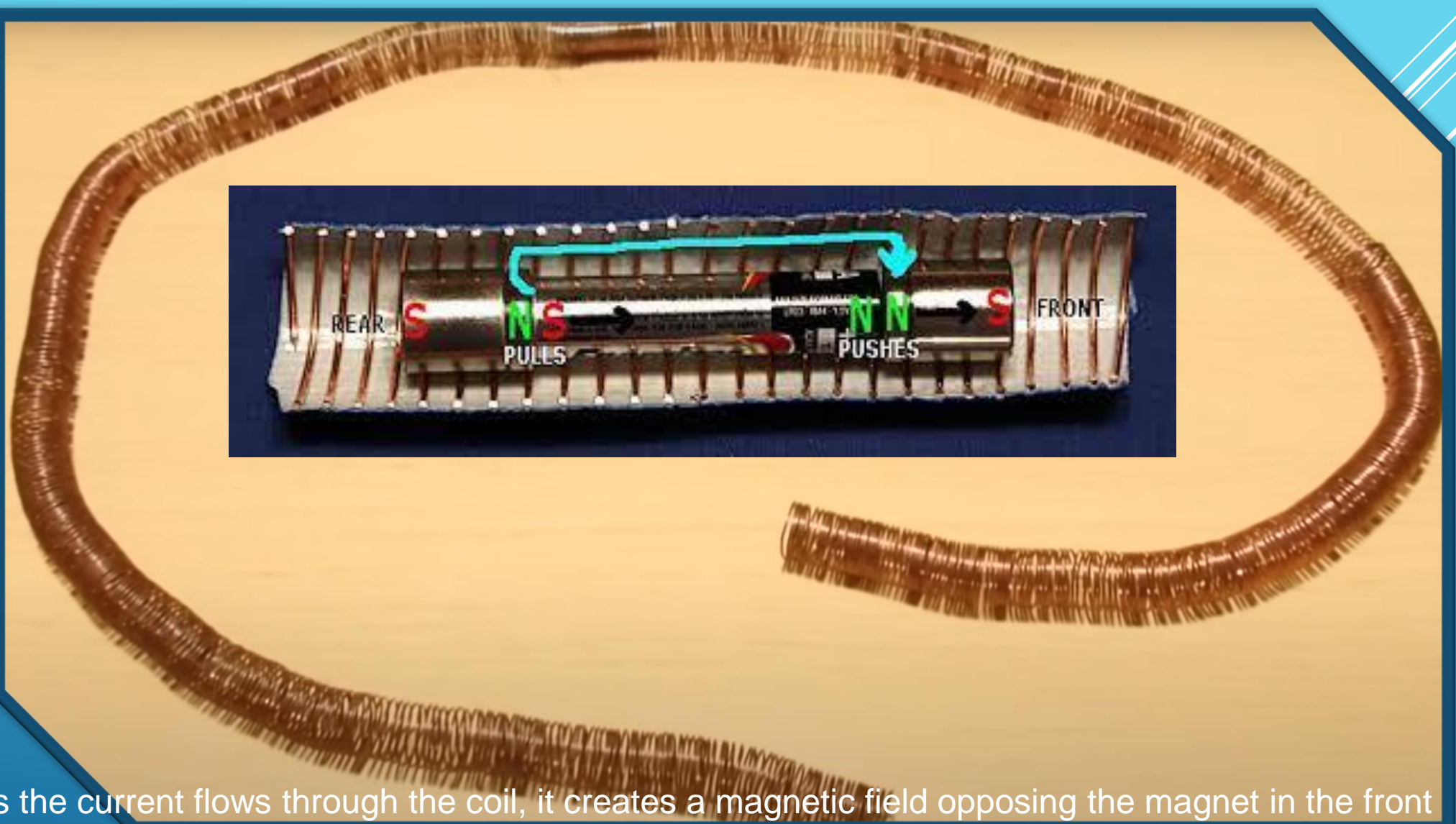


# World's Simplest Electric Train

Image Credit:  
[www.waynesthisandthat.com](http://www.waynesthisandthat.com)

The magnets are orientated to push each other apart (like=repel). The battery holds them far enough apart from each other.

Electricity flows out of the battery and through the magnet at one end. It then travels into the copper coil, then into the magnet at the other end, and back into the battery.



As the current flows through the coil, it creates a magnetic field opposing the magnet in the front of the train and pushing the magnet away. The opposite is happening in the rear of the train. The train has two forces speeding it around the track, the pushing force in the front and the pulling force in the back. Try it!

<http://www.waynesthisandthat.com/How%20To%20Build%20The%20Simplest%20Electric%20Train.html>