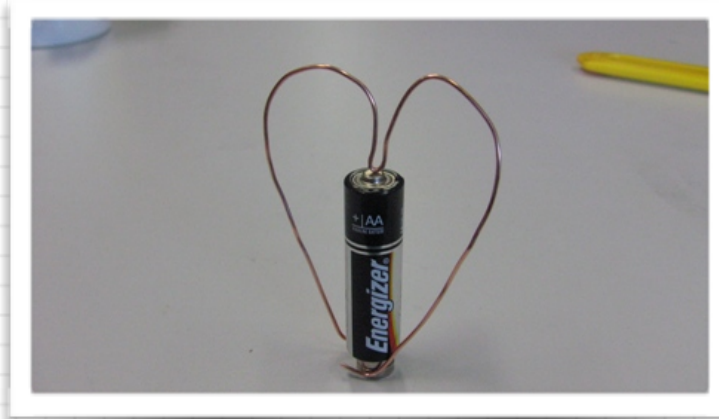


Challenge # 4 : Homopolar Engine



Homopolar motor and Lorentz force: This is the simplest of electric engines to make and will demonstrate the concept behind modern day electric engines. With an electrical circuit flowing close to a magnetic field it creates the Lorentz force. This engine combines electric force (battery) and the electromagnetic field to put your copper wire in continuous motion.

Challenge: Build a simple electric motor that can rotate at least 5 times in a row.

Materials

One AA battery
Wire
Magnets
Pliers



Resources

<https://youtu.be/0aQciWYDeV8>

<http://babbledabbledo.com/steam-project-tiny-dancers-homopolar-motor/>

Question: Sketch the wire form that worked the best. Why do you think it worked?