Application No. 410: A little different electric motor

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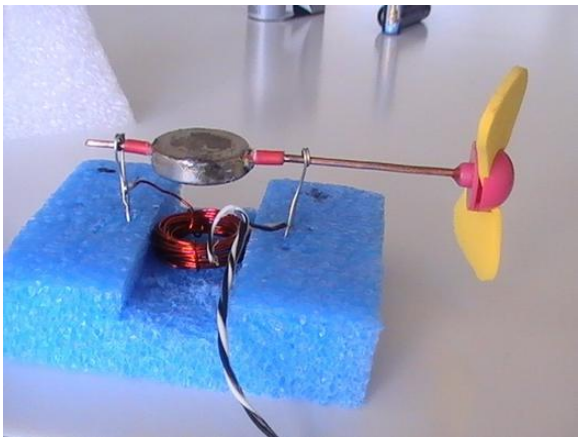
On this motor, the magnet is the rotor

We already introduced two simple electric motors in our applications: "The World's Simplest Electric Motor" (www.supermagnete.de/eng/project1)

The project "Mini Motor" follows the following principle: A copper wire rotor circles over a magnet as a stator. In this experiment it's the other way round: The magnet itself works as a rotor. In this experiment a S-20-05-N (www.supermagnete.de/eng/S-20-05-N) disc magnet and a W-12-N (www.supermagnete.de/eng/W-12-N) cube magnet are used as a rotor.



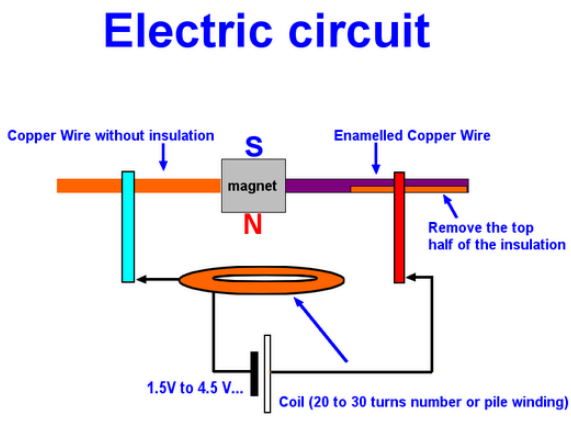
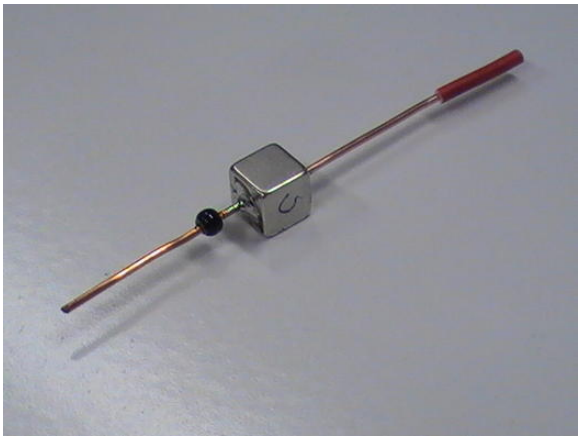
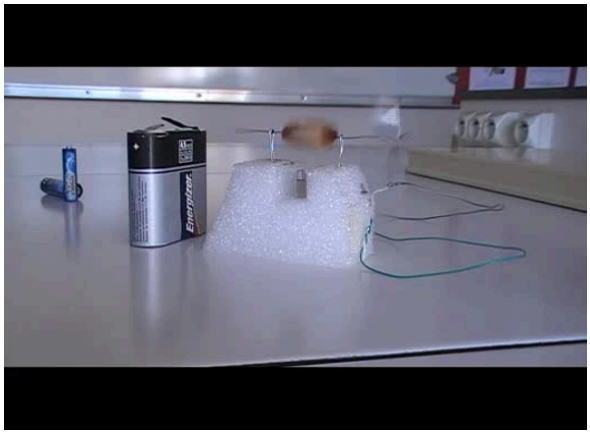


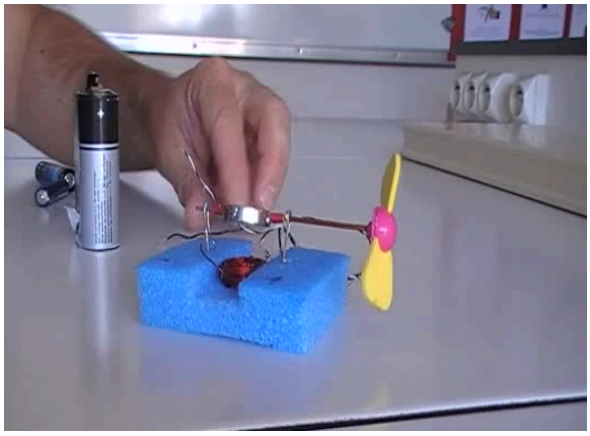
Diagram of the motor



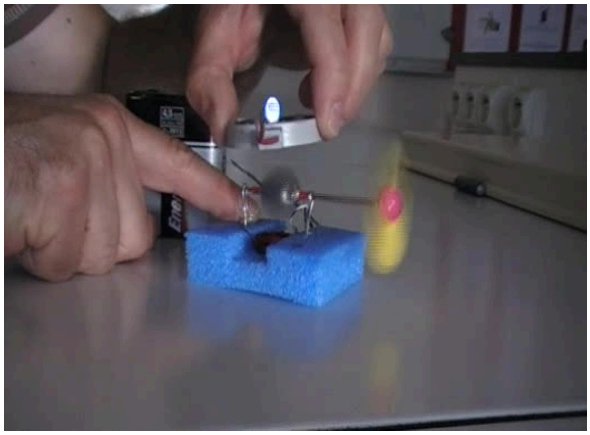
The following videos show the variations of this motor.



Video



Video



Experiment: Trying to light up an LED through induction (Video)

Articles used

S-20-05-N: Disc magnet Ø 20 mm, height 5 mm (www.supermagnete.de/eng/S-20-05-N)
W-12-N: Cube magnet 12 mm (www.supermagnete.de/eng/W-12-N)

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