Motor-project Specification

How a DC motor works! http://hyperphysics.phy-astr.gsu.edu/Hbase/magnetic/motdc.html

If you had physics classes at some point, you would remember the effect that a magnetic field has on moving electric charges: they experience a force that is perpendicular to both their direction of movement and the magnetic field.



Assignment: Your team is to create a simplest electrical motor.

Constraints: Each team is provided with a magnet. You can use additional items that can be readily purchased at a drug store, supermarket or electronic shop. The cost of all items should not exceed \$5.00. Teams will be expected to include an itemized expense list as part of their project reports if necessary.

Deliverables: Demonstration on 10/1 or 10/3 that includes a working electrical motor within the constraints.

Return your magnets immediately after the demonstration.

Here are some examples:

http://user.engineering.uiowa.edu/~eng_0055/2021/video/Motor4.wmv http://user.engineering.uiowa.edu/~eng_0055/2021/video/Motor333.wmv http://user.engineering.uiowa.edu/~eng_0055/2021/video/motor11.wmv

More examples from previous classes:

http://user.engineering.uiowa.edu/~eng_0055/2023/video/Motor.mp4 http://user.engineering.uiowa.edu/~eng_0055/2021/video/Motor12-15.wmv http://user.engineering.uiowa.edu/~eng_0055/2021/video/Motor12-15.wmv http://user.engineering.uiowa.edu/~eng_0055/2021/video/Motor12-16.wmv