



Engineering Day 2019

Build a Motor

Goal:

Construct a functioning electric motor using the materials provided.

Rules/Judging:

1. Students will design and build an electric motor with only the provided materials, no outside materials are allowed.
2. Materials provided include 3m of magnet wire, large paper clips, thumbtacks, masking tape, alligator clips, sandpaper, Bunsen burner, provided power source and a wooden block.
3. Any motor design will be accepted
4. The rotor must spin of its own accord without manual assistance.
5. Each team may test their designs and make adjustments prior to submitting their motor for judging.
6. Once submitted for judging, no further adjustments may be made to the motor.
7. No more than two team members per motor.
8. Students are encouraged to prepare ahead of Engineering Day by researching motor design and construction and practicing motor building strategies.
9. Nonfunctioning motors will not be scored.
10. The rotation frequency of the rotor will be determined via strobe light.

Score:

Scoring will be based on the rotation frequency of the rotor.