

On-Site Electricity Competition

Objective

1. Teams will be supplied a mini wall and must correctly wire a functioning circuit.
 - a. Students should be knowledgeable with; plug replacement, duplex outlets, two-way switches, three-way switch, and light fixtures.
2. Students must be able to correctly use a multimeter to correctly troubleshoot and measure continuity, resistance, and voltage.

Layout:

- Students will compete in a team consisting of 2 individuals.
- All tools and materials will be supplied.
- Students will have time limitations in each event.
- All wall sections will be constructed, students will be running wire and making all connections.

Scoring:

- Students will receive a total score from a Wiring and Troubleshooting Section.

Wiring Criteria Section

- Correct wiring standards and code.
- 1/2" stripped connections
- Use of wire nuts
- One wire per screw

Troubleshooting Section

- Students will be given small parts circuits and must be able to correctly identify:
 - Open Circuits
 - Shorted Circuits
 - Circuit Resistance
 - Parallel vs Series
 - Circuit Voltage