



ELECTRICITY

A check list for evaluating 4-H Electricity exhibits

Circle project level: 1 2 3

Name _____

Club _____ City _____

Criteria - Check the appropriate column. Comments are helpful to the exhibitor.	Meets Standards	Needs Improvement	Remarks
KNOWLEDGE OF SUBJECT MATTER			
A. General knowledge of electrical applications			
EXPLANATION OF PROJECT EXHIBIT			
A. Goals of project exhibit			
B. Ability to explain decisions made or results shown			
C. Self-evaluation of project			
D. Skills learned			
E. Age appropriate for exhibitor and project level			
F. Workmanship			
G. Appropriateness of materials used			
H. Safety			
EXHIBIT PRESENTATION			
A. Neat appearance			
B. Follows exhibit requirements			
C. Size of exhibit does not exceed limits			
Ideas & plans for continuing in project area:			
Overall Comments:			

BLUE AWARD - MEETS STANDARD
 RED AWARD - NEEDS IMPROVEMENT
 WHITE AWARD - NEEDS MUCH IMPROVEMENT

Rating _____

General Judging Criteria for Electrical Projects

1. Inspect for the wire wrapping around the screw in the direction that the screw tightens down (most commonly screws tighten in a clock-wise direction).
2. When using stranded wires, check to be sure that all strands are under the screw head.
3. Select the proper wire type and size for the particular load that the project requires.
4. Use weatherproof or watertight equipment and connections for all projects that will be used outside or in a damp location.
5. All terminals and connections that utilize household voltages (120 volts) should be enclosed. (Examples: dead-front plugs and receptacles, all connections to be inside electrical boxes.)
6. AC connections: choices include...
 - a. wire-to-wire connections must be soldered and taped...or
 - b. use proper size wire-nut...or
 - c. use a squeezed connector.
7. Wiring shall be protected from all sharp edges by any effective means. (Examples: grommets, silicone seal, etc.)
8. Ground: all electrical materials, parts, and equipment that are not intended to carry current must be grounded by use of a grounding wire (connected to a threaded grounding screw or wiring clip or grounding lug).
9. All electrical materials and equipment should be U.L. approved.
10. Where necessary, incorporate over-current protection (fuses or circuit breakers) into the project.
11. AC conductors shall be properly color coded by using black or red as hot wires, white as neutral, and green or bare copper as grounding.
12. Use battery power for Unit Level I and II and 120 V for Unit Level III.

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