



2005 State Competition
FFA Agricultural Mechanics Contest
University of Missouri
50 points

Name _____
Contestant Number _____
Chapter _____

ELECTRICAL CIRCUITS

Objectives:

Demonstrate electrical skill by wiring a light that is controlled from two locations in a house.

Materials Needed:

Power source, 1 piece 14-3 w/ ground, appropriate device, wiring board with boxes and light switch, 2 grounding clips, 5 solderless connectors, 3 grounding pigtails, and various tools provided.

Directions:

1. Complete the wiring diagram on the second page using the following letter codes
R = red/hot
W = white/neutral
B = black/hot
G = Bare or Green grounding conductor
2. Wire to NEC code.
3. **DO NOT cut wire – use the length given**
4. **NO BACK WIRING**

Point Evaluation

	Possible Points	Earned
1. Wiring diagram drawn correctly	11	_____
2. Wire secured to box	2	_____
3. Cable covering removed correctly and Insulation removed properly	11	_____
4. Grounding conductor pigtails	3	_____
5. Proper installation of grounding clips	2	_____
6. Proper connection to screws	4	_____
7. Proper use of solderless connectors	5	_____
8. Power source entry	3	_____
9. Correct wire connections	5	_____
10. Work habits and shop clean-up	4	_____
Total Points Earned	50	_____