

Name _____
AP Physics
Period _____

Date _____
Lab Activity #14 (20 pts)
Mrs. Nadworny

Partners: _____

Due Date _____

Combination Circuits

Purpose

- To build and analyze combination circuits qualitatively.

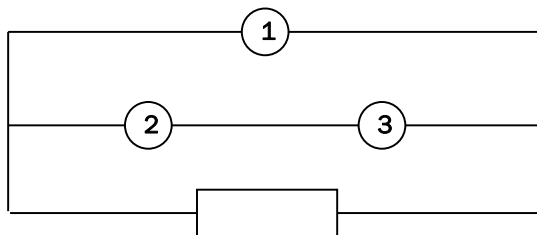
Materials

- 3 battery holders
- 3 batteries
- 3 small light bulbs
- 3 light bulb bases
- Connecting Wires

NO Lab Write-Up Required
must be neatly written in pencil

PART 1

Examine the circuit shown below with three identical bulbs and answer the prediction questions before you build the circuit.



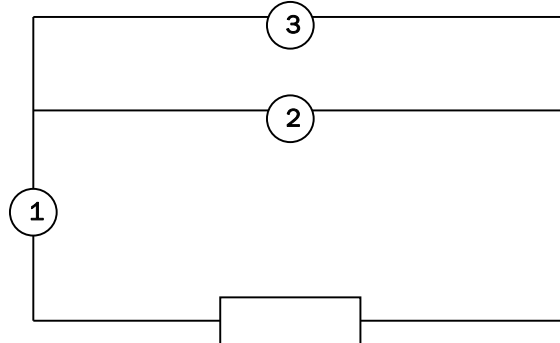
- Predict a ranking for the bulbs from brightest to dimmest. (1 pt)
- Predict what will happen to each remaining bulb if you remove bulb 1 from its base. (1 pt)
- Predict what will happen to each remaining bulb if you remove bulb 2 from its base. (1 pt)

Now, build the circuit and check your predictions.

- Rank the bulbs from brightest to dimmest. (2 pts)
- What happened to each remaining bulb when you removed bulb 1 from its base? (2 pts)
- What happened to each remaining bulb when you removed bulb 2 from its base? (2 pts)

Part 2

Examine the circuit shown below with three identical bulbs and answer the prediction questions before you build the circuit.



7. Predict a ranking for the bulbs from brightest to dimmest. (1 pt)
8. Predict what will happen to each remaining bulb if you remove bulb 1 from its base. (1 pt)
9. Predict what will happen to each remaining bulb if you remove bulb 2 from its base. (1 pt)

Now, build the circuit and check your predictions.

10. Rank the bulbs from brightest to dimmest. (2 pts)
11. What happened to each remaining bulb when you removed bulb 1 from its base? (2 pts)
12. What happened to each remaining bulb when you removed bulb 2 from its base? (2 pts)

(2)
neatness