

Name: _____

Date: _____

Ohm's Law I Data Sheet

Circuit	Ammeter Reading 1 (A)	Ammeter Reading 2 (A)	Ammeter Reading 3 (A)	Ammeter Reading 4 (A)	Volts
1 battery in series		—	—	—	
2 batteries in series		—	—	—	
3 Batteries in series		—	—	—	
2 Batteries in parallel				—	
3 Batteries in parallel					

	Group1	Group2	Group3	Group4	Group5	Mean
1 battery in series						
2 batteries in series						
3 Batteries in series						
2 Batteries in parallel						
3 Batteries in parallel						

Questions:

1. How is the brightness of the light bulb affected by the number of batteries connected in series? Explain.

2. How is the brightness of the light bulb affected by the number of batteries connected in parallel? Explain.

3. How is the current affected by the number of batteries connected in series? Explain.

4. How is the current affected by the number of batteries connected in parallel? Explain.

5. What are the advantages of connecting the batteries in parallel?

6. What are the advantages of connecting the batteries in series?

7. How might batteries be connected in a circuit to take advantage of both series and parallel characteristics?
