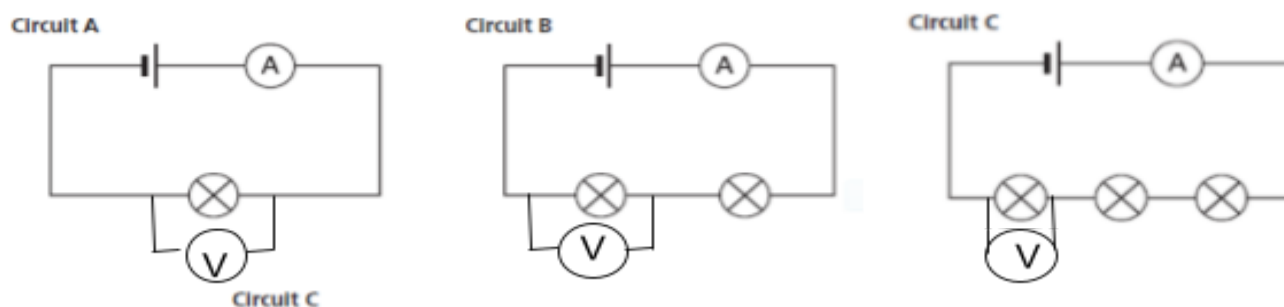


Build the Circuits A, B and C

Take the ammeter and voltmeter readings and complete the table below.



|           | Ammeter reading A | Voltmeter reading V | Resistance ( $\Omega$ ) |
|-----------|-------------------|---------------------|-------------------------|
| Circuit A |                   |                     |                         |
| Circuit B |                   |                     |                         |
| Circuit C |                   |                     |                         |

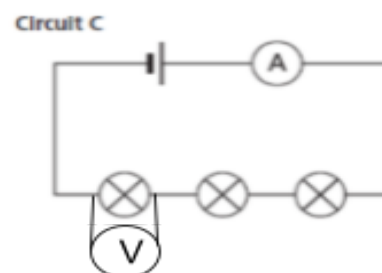
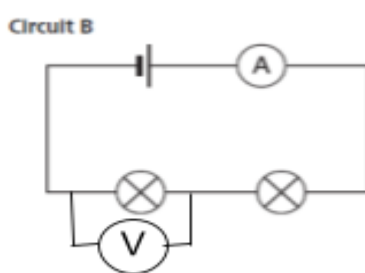
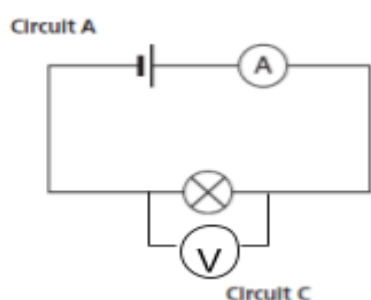
**QUESTIONS:**

1. What happened to the brightness of each bulb as more bulbs were added?
2. What happened to the current flowing in the circuit as more bulbs were added?
3. Can you explain why this happened to the current? **Use the word resistance in your answer.**

Extension: Can you explain why a bulb has resistance? (Use ideas about collisions in your explanation.)

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