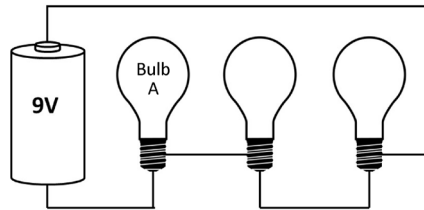


## Checkout Questions

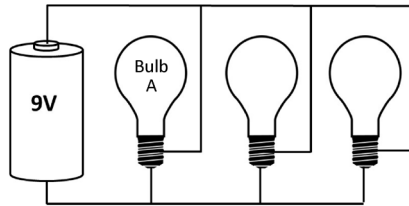
# Lab 16. Electrical Energy and Lightbulbs

How Does the Arrangement of Lightbulbs That Are Connected to a Battery Affect the Brightness of a Single Bulb in That Circuit?

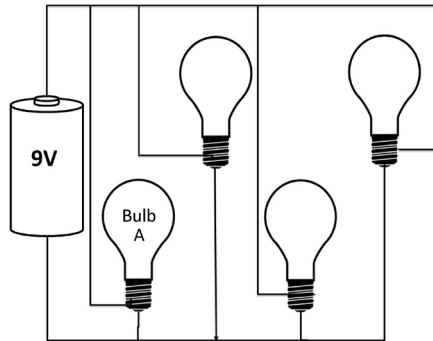
1. In which circuit will lightbulb A be brightest: circuit 1, circuit 2, or circuit 3?



Circuit 1



Circuit 2



Circuit 3

Explain your answer. Why do you think that bulb will be brightest?

2. If you want to make a lightbulb less bright, what are some things you could do to the circuit to make the bulb decrease in brightness? How do you know those things will work?

3. In science, there is no difference between data and evidence.

- a. I agree with this statement.
- b. I disagree with this statement.

Explain your answer, using an example from your investigation about series and parallel circuits.

4. No matter what is being investigated, conducting an experiment is the best way to develop scientific knowledge.

- a. I agree with this statement.
- b. I disagree with this statement.

Explain your answer, using an example from your investigation about series and parallel circuits.

5. Often, the structure of a system influences the function of that system. In other words, how something is structured influences how it works. Using an example from your investigation about series and parallel circuits, explain how the structure of a system can influence how it functions.
6. Scientists often need to keep track of the movement of energy into, out of, and within systems. Using an example from your investigation about series and parallel circuits, explain why it is important to track how input of energy into a system affects how it behaves.