

Circuits 3

Name & Set

- 1** Someone connects a circuit like the one shown in figure 1 below. When the switch S is closed, lamp A lights and when the switch is open, lamp A goes off.
- (a) A second lamp B is wired into the circuit. The idea is that the same switch can be used to control both lamps. However, when the switch is open, both lamps shine dimly, and when the switch is closed lamp A continues to shine and gets brighter whereas lamp B goes out.
- (i) Draw a circuit diagram for this faulty circuit in the space on the left. [2]
- (ii) Complete figure 1 on the right to show how lamp B has been wired up. [2]

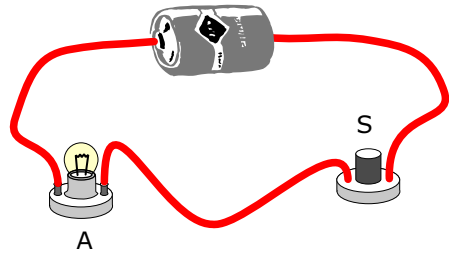


Figure 1

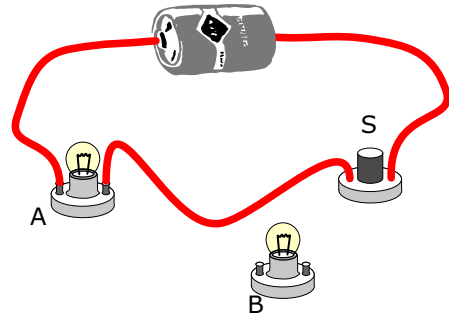


Figure 2

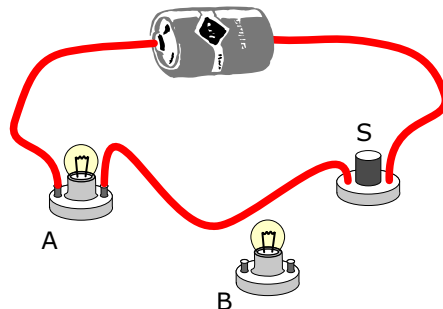


Figure 3

