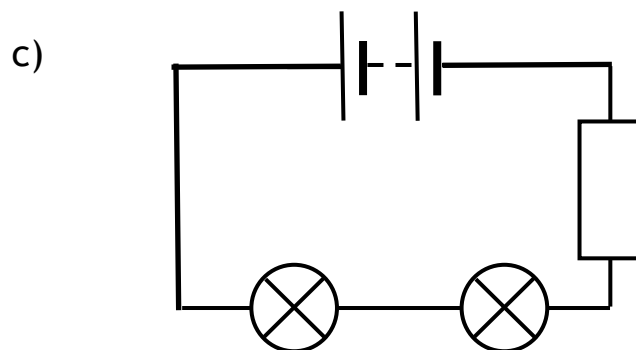
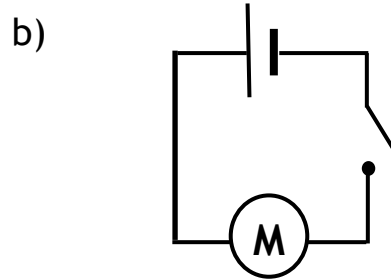
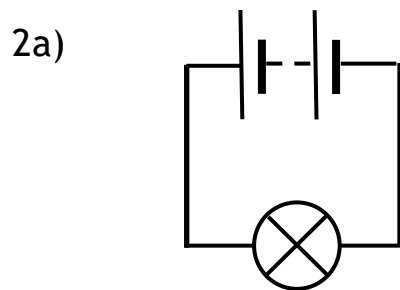
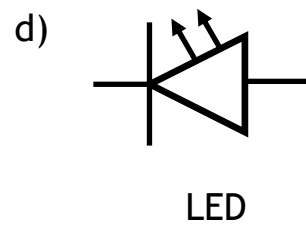
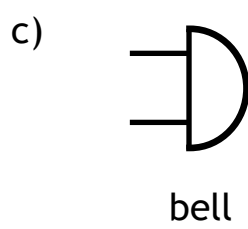
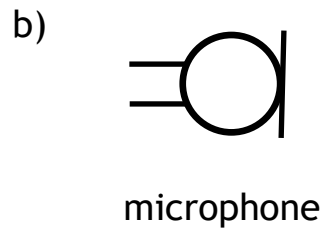
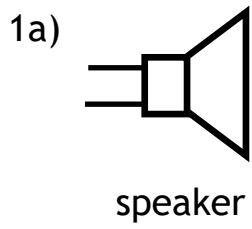


S2 Science—Circuit Symbols Answer Scheme

Task



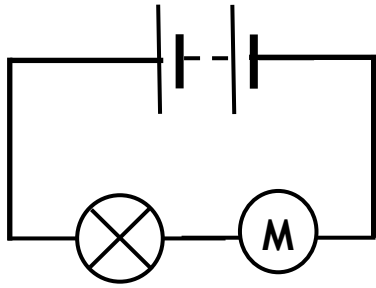
Bonus Task

- 1 Fuse
- 2 Variable Resistor
- 3 Light Dependent Resistor

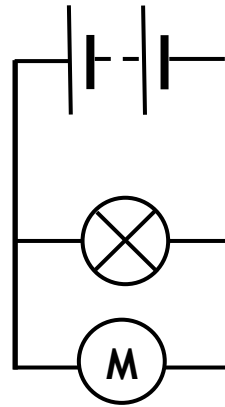
S2 Science—Circuit Theory Answer Scheme

Task

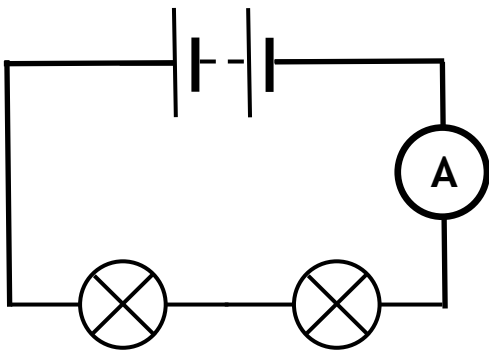
1a)



b)

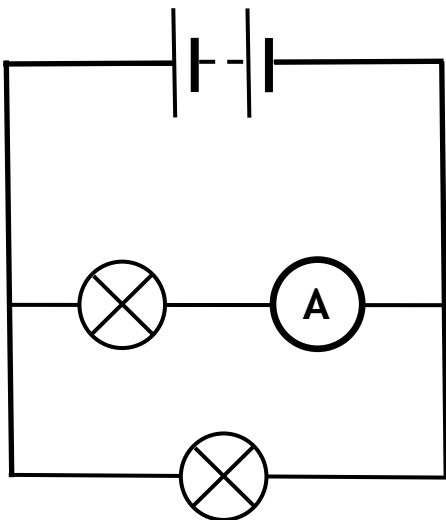


c)

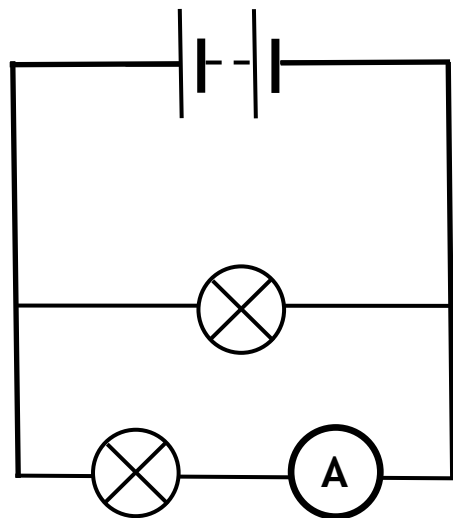


Ammeter can be placed anywhere in the circuit—as long as it is one continuous loop!

d)



OR

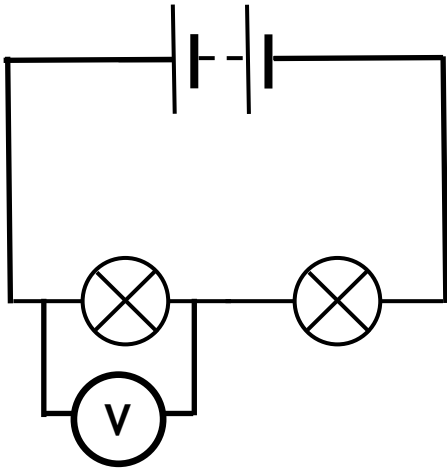


- 2) In a series circuit the current is the same at all points.
Current through the second bulb = 2A.

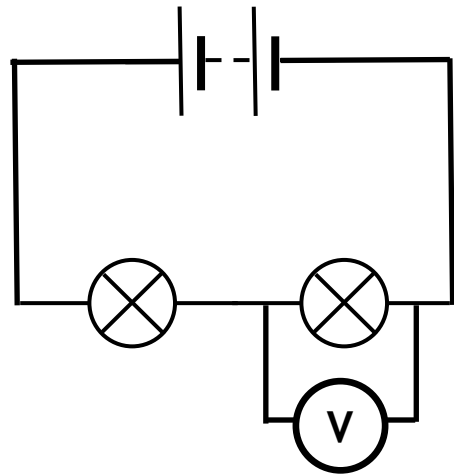
S2 Science—Voltage Marking Scheme

Task

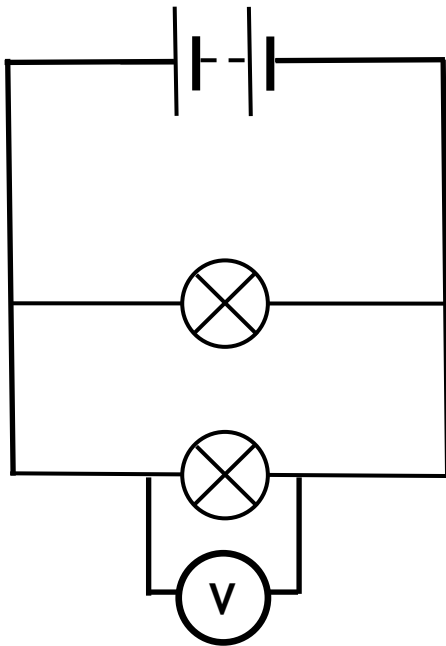
1a)



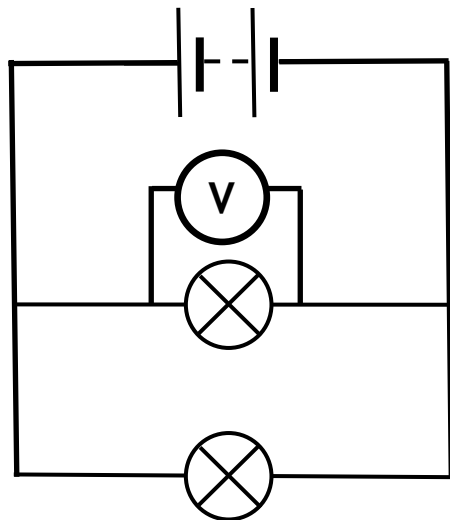
OR



b)



OR



2) Voltage adds up in a series circuit.

$$\begin{aligned}\text{Supply voltage} &= V_1 + V_2 \\ &= 5 + 5 \\ &= \underline{10 \text{ V}}\end{aligned}$$

3) Voltage through each electrical component is the same as the battery

$$\begin{aligned}\text{Voltage through bulb} &= \text{Voltage across battery} \\ \text{Supply voltage} &= \underline{5\text{V}}\end{aligned}$$