

Circuit Exercises

For each of the circuits below:

- draw the circuit diagram (on paper or in your jotter)
- use the correct symbols
- check your diagram using the answers on the next page

Question 1

Draw a circuit containing a battery, a resistor and a signal lamp (bulb) all in SERIES

Question 2

Draw a circuit where an A.C. supply, a heater and a filament lamp are all in PARALLEL

Question 3

Draw a circuit containing D.C. supply connected to a resistor and an ammeter in series. Add a voltmeter in parallel with the resistor

Question 4

Draw a circuit with a battery connected to a buzzer and a motor in parallel. Add two switches, one to turn the buzzer on and off and one to turn the motor on and off

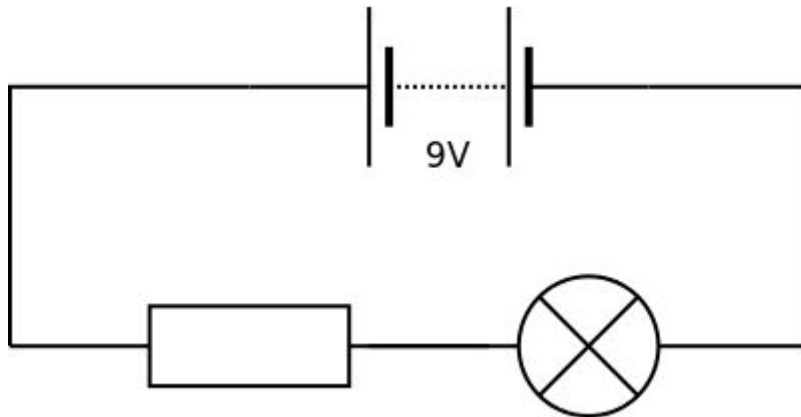
Question 5

Draw a circuit containing a battery, an LDR and an LED all in series

Circuit Exercises Answers

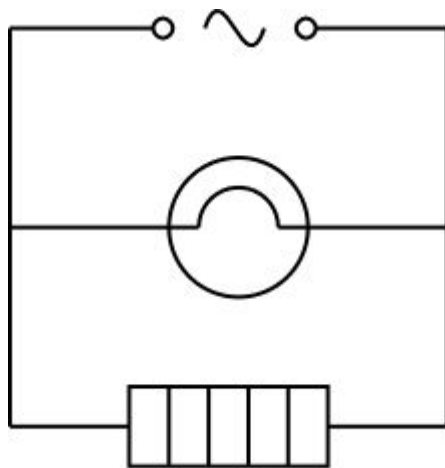
Question 1

The resistor and signal lamp can be in either order - it doesn't matter which comes first



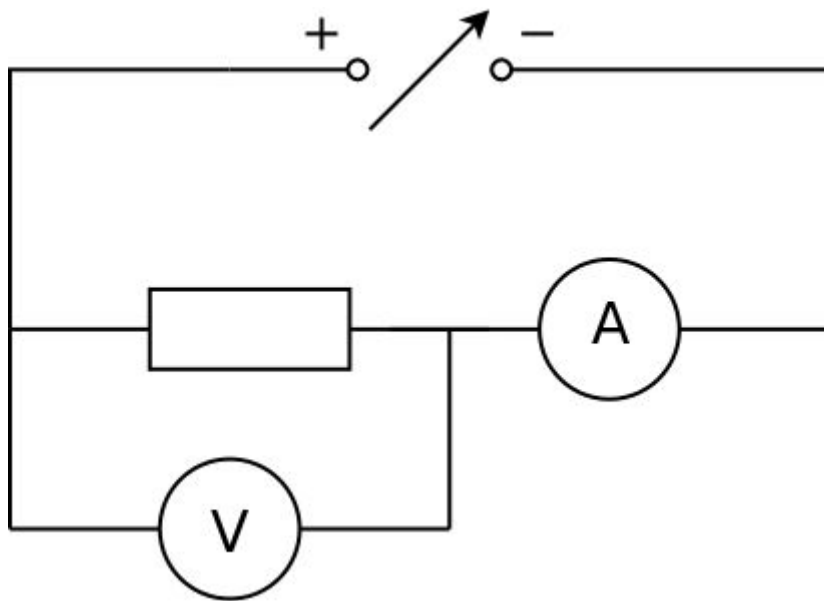
Question 2

The filament lamp and heater can be in either order - it doesn't matter which is on top



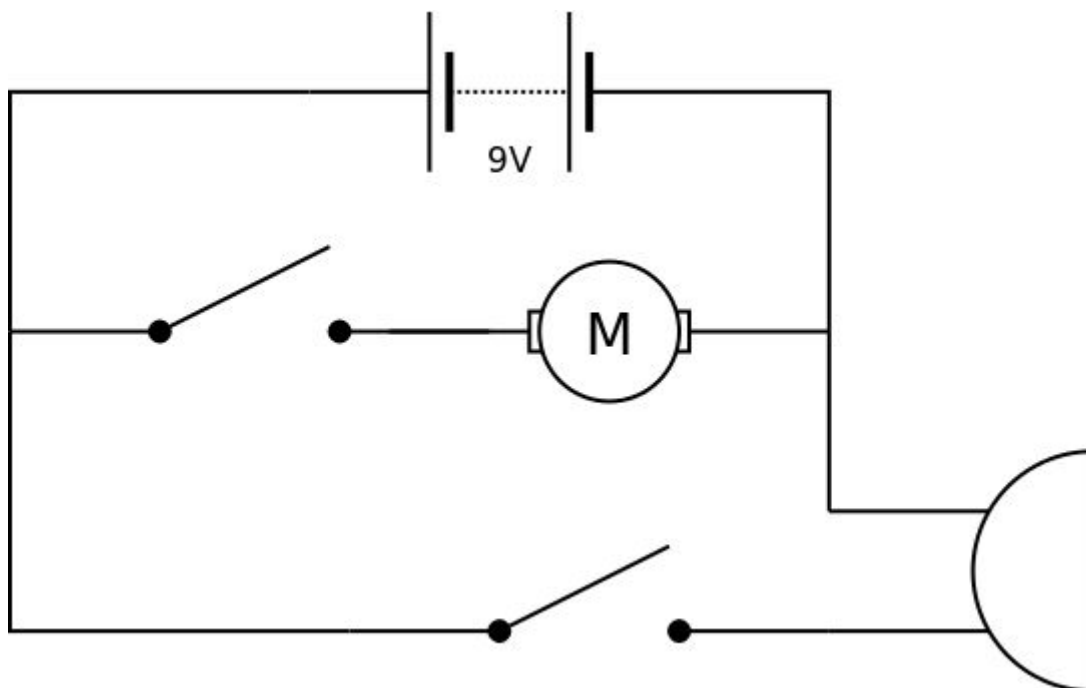
Question 3

The resistor and ammeter can be in any order. The voltmeter must be in parallel with the resistor



Question 4

There needs to be a separate switch for each component



Question 5

The LDR and LED can be in either order but must have the arrows pointing in the right direction i.e. towards the LDR and away from the LED.

