Practice Question Set For GCSE
Subject : Physics
Paper-2 Topic :10_ Electricity And Circuits

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Name of the Student:_____
Max. Marks : 18 Marks **Time : 18 Minutes**

Q1.

Describe the difference between direct current (d.c.) and alternating current (a.c.) in electrical circuits.

(2)

.....
.....
.....
.....

(Total for question = 2 marks)

Q2.

A battery sends a current through a metal wire.

(i) Complete the sentence by putting a cross (■) in the box next to your answer.
Direct current is movement of charge

(1)

- ☒ **A** backwards and forwards
- ☒ **B** in many directions
- ☒ **C** in one direction
- ☒ **D** up and down

(ii) Complete the sentence by putting a cross (■) in the box next to your answer.
The particles that flow in the metal wire are

(1)

- ☒ **A** atoms
- ☒ **B** electrons
- ☒ **C** protons
- ☒ **D** neutrons

Q3.

Figure 1 shows an electrical circuit.

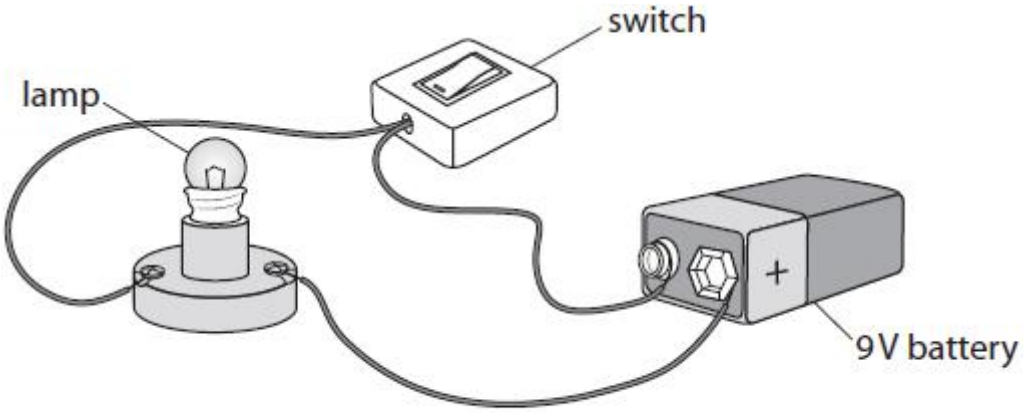


Figure 1

Draw a circuit diagram of the electrical circuit in Figure 1 in the space below.

(4)

(Total for question = 4 marks)

Q4.

A student is given a low voltage power supply and 1 m of resistance wire.

The student uses these and other pieces of equipment to measure the resistance of just 50 cm of the resistance wire.

Draw a diagram of the circuit that the student should use.

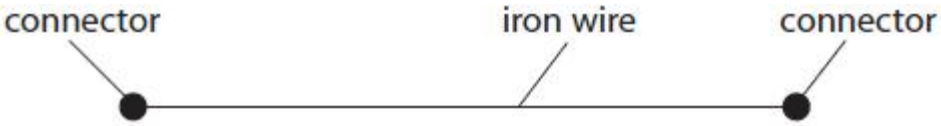
Your circuit diagram should identify the pieces of equipment that the student uses.

(3)

(Total for question = 3 marks)

Q5.

Figure 12 shows some of the apparatus that students use to determine the resistance of a piece of iron wire.



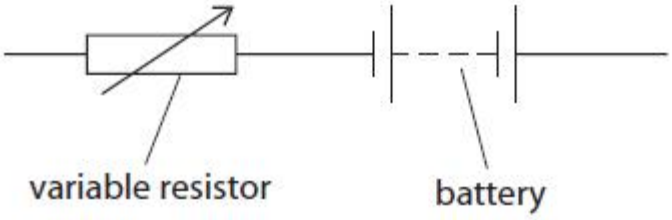


Figure 12

Add connecting wires, a voltmeter and an ammeter to complete the circuit in Figure 12 so that the students can determine the resistance of the piece of iron wire.

(2)

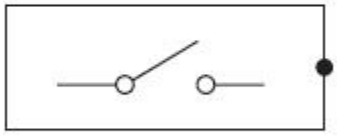
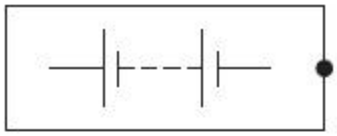
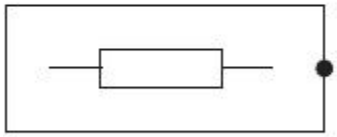
(Total for question = 2 marks)

Q6.

This question is about electrical circuits.

Draw **one** straight line from each circuit symbol to its description.

(3)

circuit symbol	description
	battery
	LED
	switch
	resistor

(Total for question = 3 marks)

Q7.

Figure 1 shows the parts in an electrical circuit.

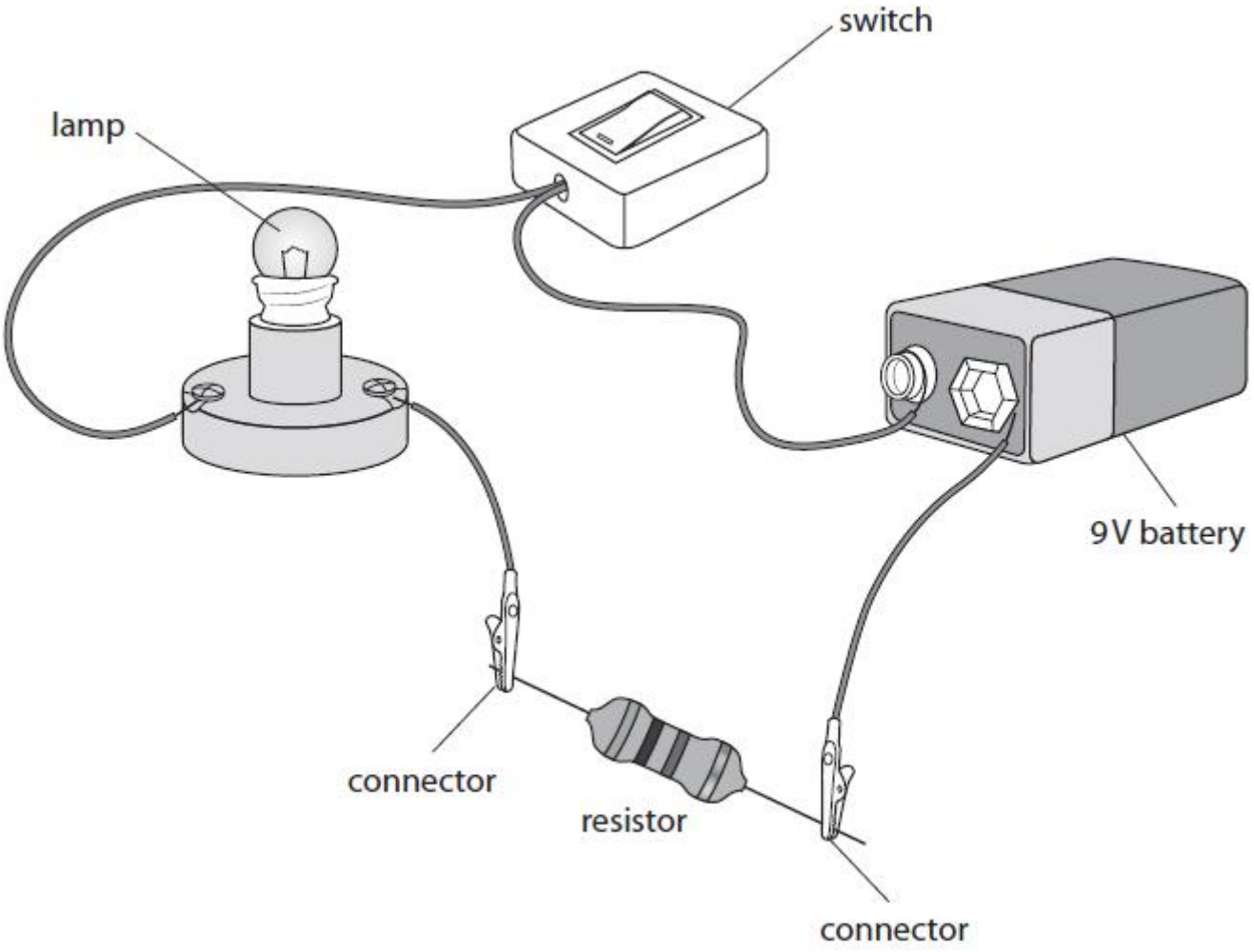


Figure 1

Draw the circuit diagram of this electrical circuit in the space provided.

The battery symbol and some of the connecting wires have been drawn for you.

(4)

(Total for question = 4 marks)