

Answer ALL questions.

1 (a) The diagram shows some electrical circuit symbols.

**A****B****C****D**

(i) Which symbol represents a switch?

(1)

☐ **A**

☐ **B**

☐ **C**

☐ **D**

(ii) Which symbol represents a diode?

(1)

☐ **A**

☐ **B**

☐ **C**

☐ **D**



(b) A hairdryer connected to the mains supply takes a current of 5.5 A.

(i) Which of these fuses should be used with the hairdryer?

(1)

☐ **A** 3 A

☐ **B** 5 A

☐ **C** 7 A

☐ **D** 13 A

(ii) Explain your answer.

(1)

(iii) The hairdryer has a plastic case so there is no need for an earth wire connection in the plug.

Explain why the hairdryer is still safe to use.

(2)

(Total for Question 1 = 6 marks)

