

Questions are for both separate science and combined science students

**Q1.**

**Figure 1** shows a student putting a coin into a vending machine that sells food.

**Figure 1**



- (a) The vending machine is connected to the mains electricity supply.

What is the frequency and the potential difference of the mains electricity supply in the UK?

Frequency = \_\_\_\_\_ Hz

Potential difference = \_\_\_\_\_ V

(2)

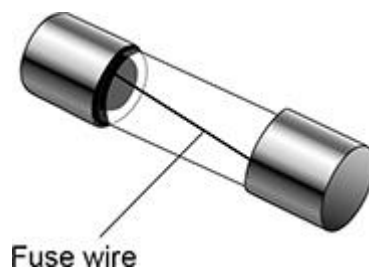
(Total 2 marks)

**Q2.**

The live wire in a three-core cable is connected to a fuse inside a plug.

A fuse contains a wire that is designed to melt when the current gets too great.

The figure below shows a fuse.

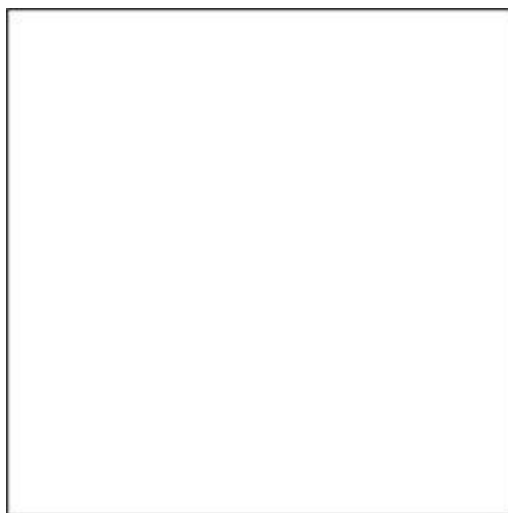


- (a) What colour is the insulation covering the live wire in a three-core cable?

\_\_\_\_\_

(1)

- (b) Draw the circuit symbol for a fuse in the box below.



(1)

**(Total 2 marks)**