

**Paper Reference(s)    1SC0/2PF**  
**Pearson Edexcel Level 1/Level 2 GCSE (9–1)**

**Combined Science**  
**PAPER 6**  
**Foundation Tier**

**Friday 14 June 2024 – Afternoon**  
**Time: 1 hour 10 minutes**

**Diagram Booklet**

**THIS DIAGRAM BOOKLET MUST BE  
RETURNED WITH THE QUESTION PAPER  
AT THE END OF THE EXAMINATION.**

**In the boxes below, write your name, centre  
number and candidate number.**

<b>Surname</b>					
<b>Other names</b>					
<b>Centre Number</b>					
<b>Candidate Number</b>					

## **INSTRUCTIONS**

**There may be spare copies of some diagrams in case you need them.**

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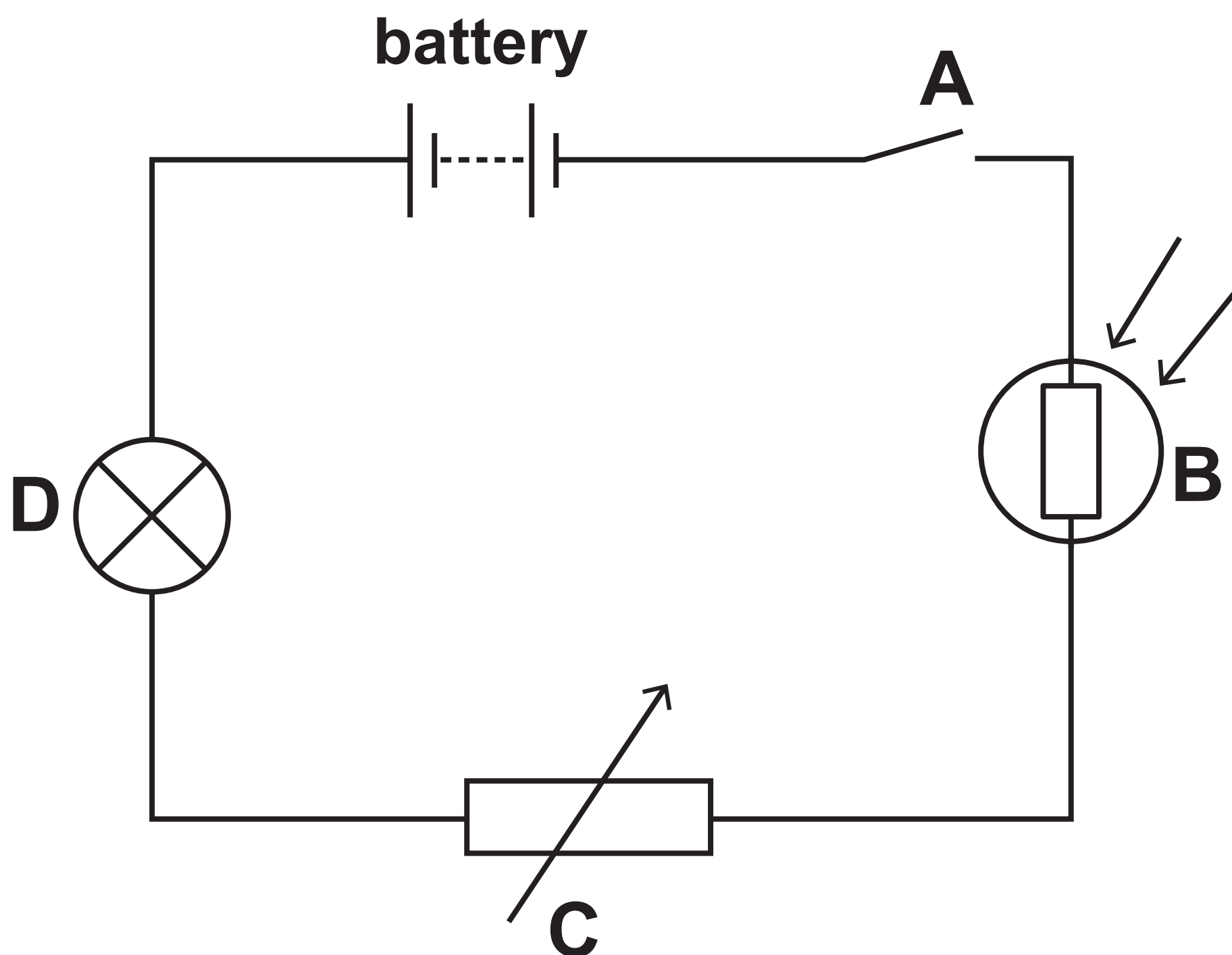
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## Question 1(a)

FIGURE 1

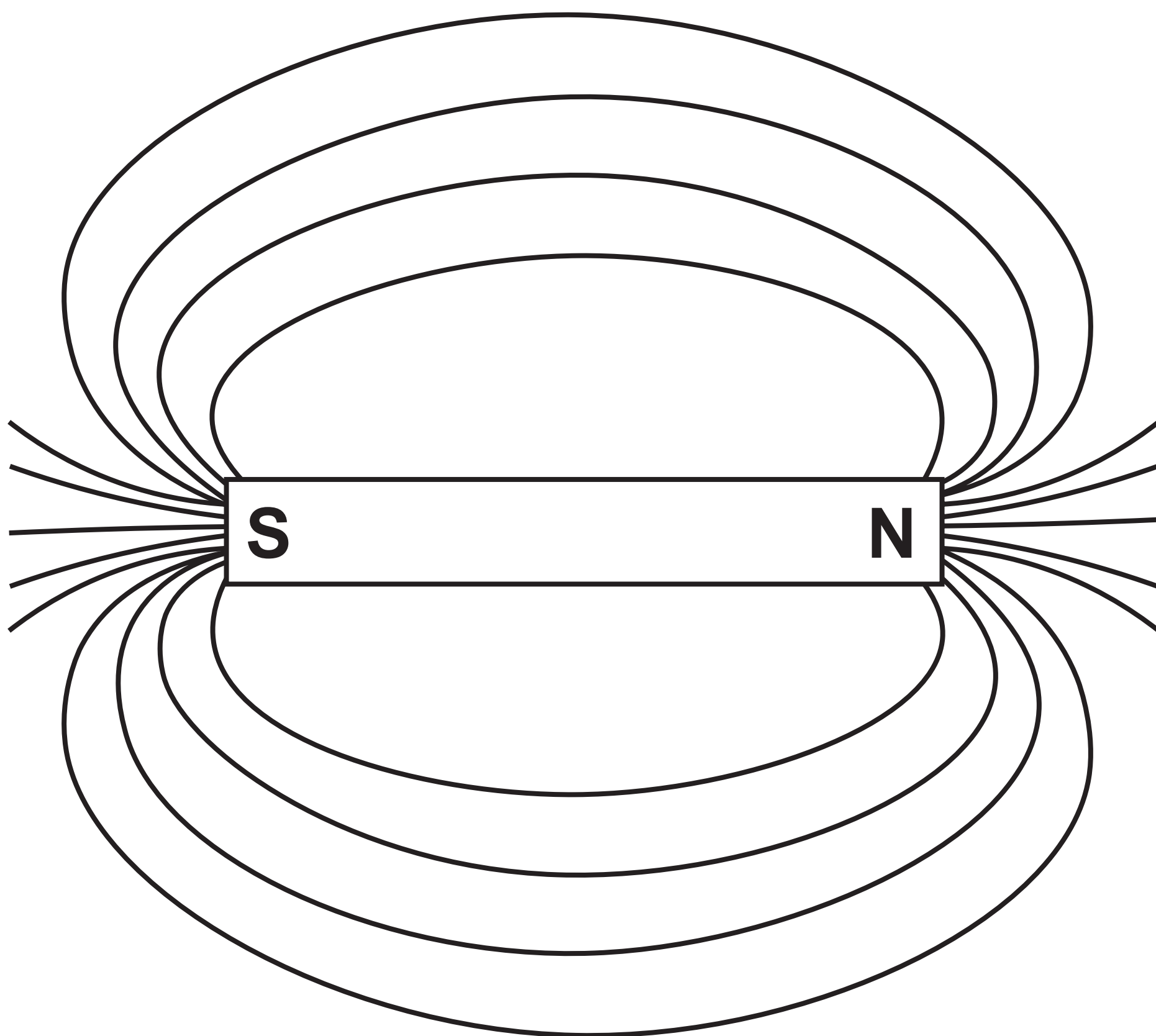


**A** \_\_\_\_\_

**B** \_\_\_\_\_

**C** \_\_\_\_\_

**D** \_\_\_\_\_

**Question 2(a)****FIGURE 2**

## Question 2(b)

**FIGURE 3**

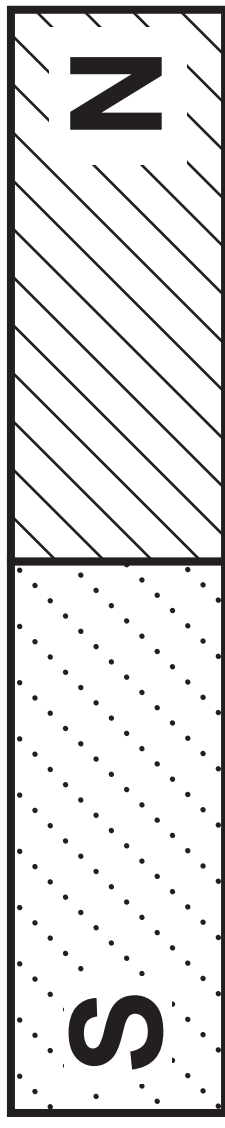
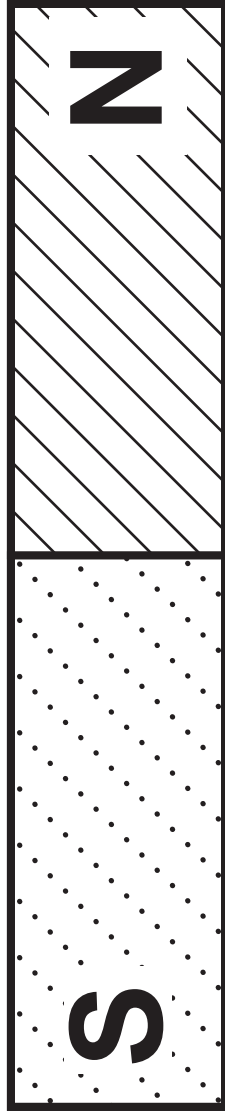
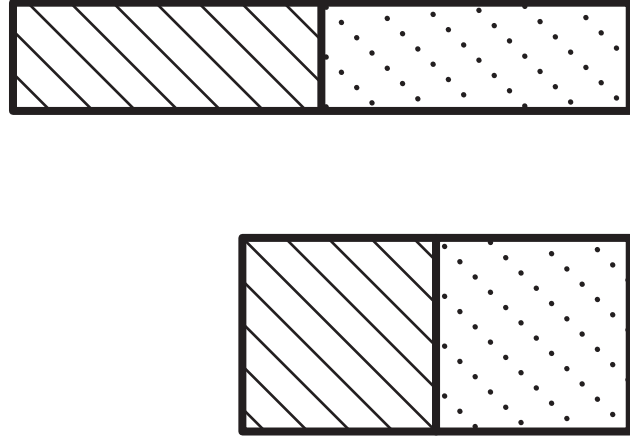


FIGURE 4

two permanent  
magnets



paper clips

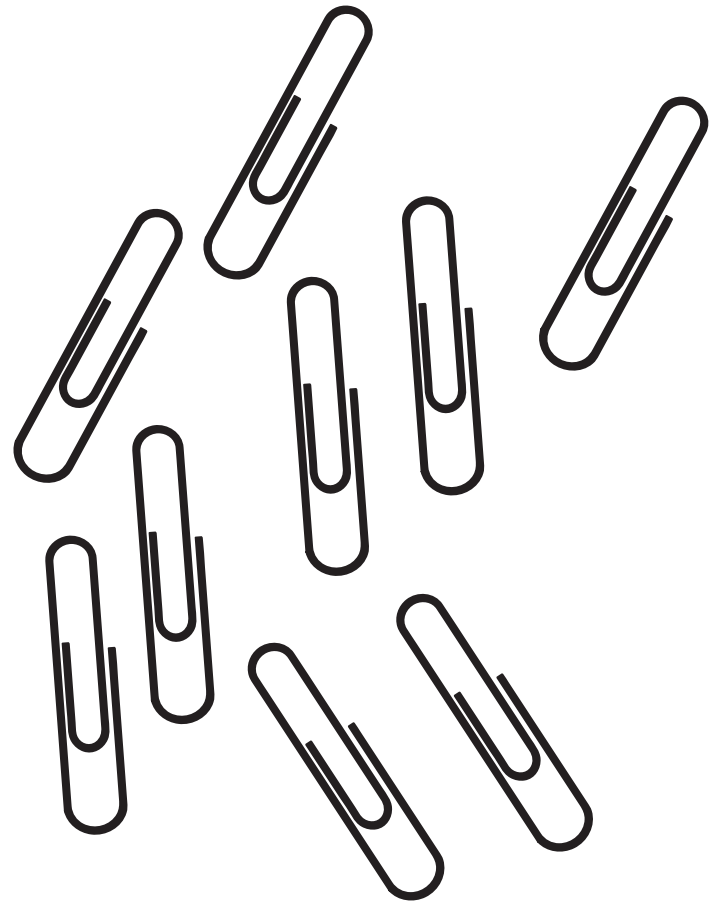
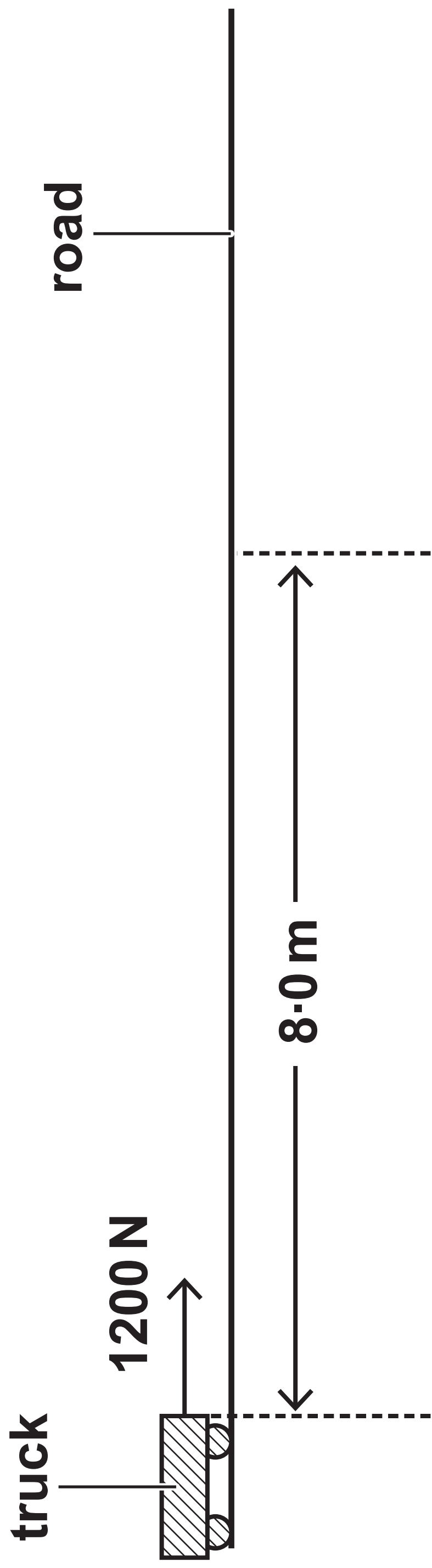


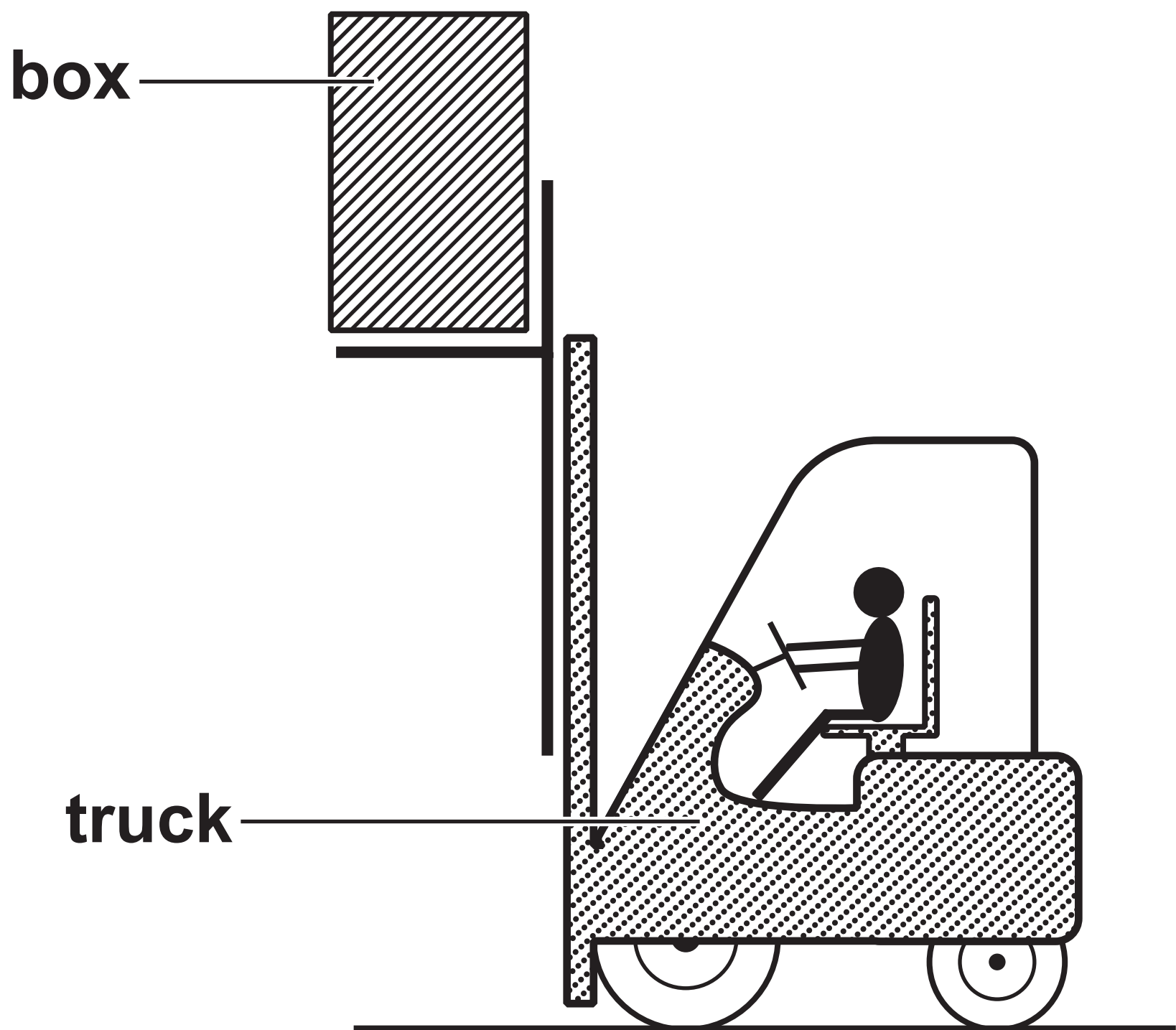
FIGURE 5





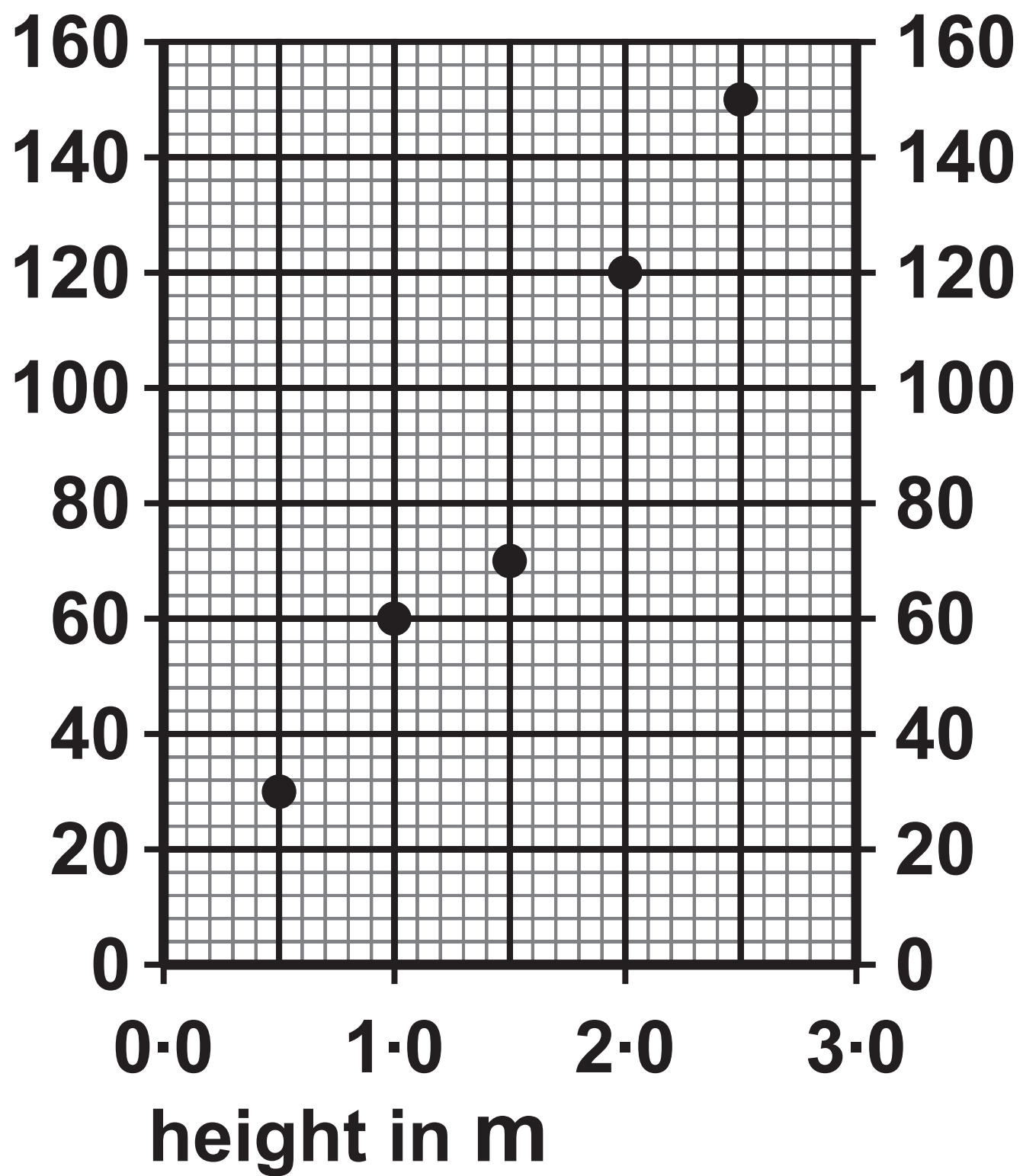
## Question 3(c) – FIGURE 6

**FIGURE 6**



## Question 3(c) – FIGURE 7

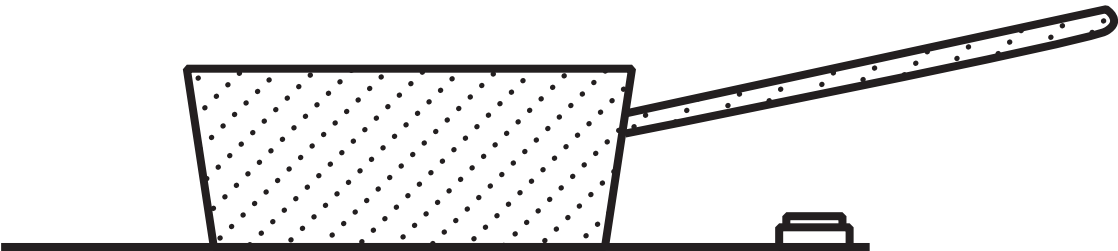
FIGURE 7

 $\Delta GPE$  in J

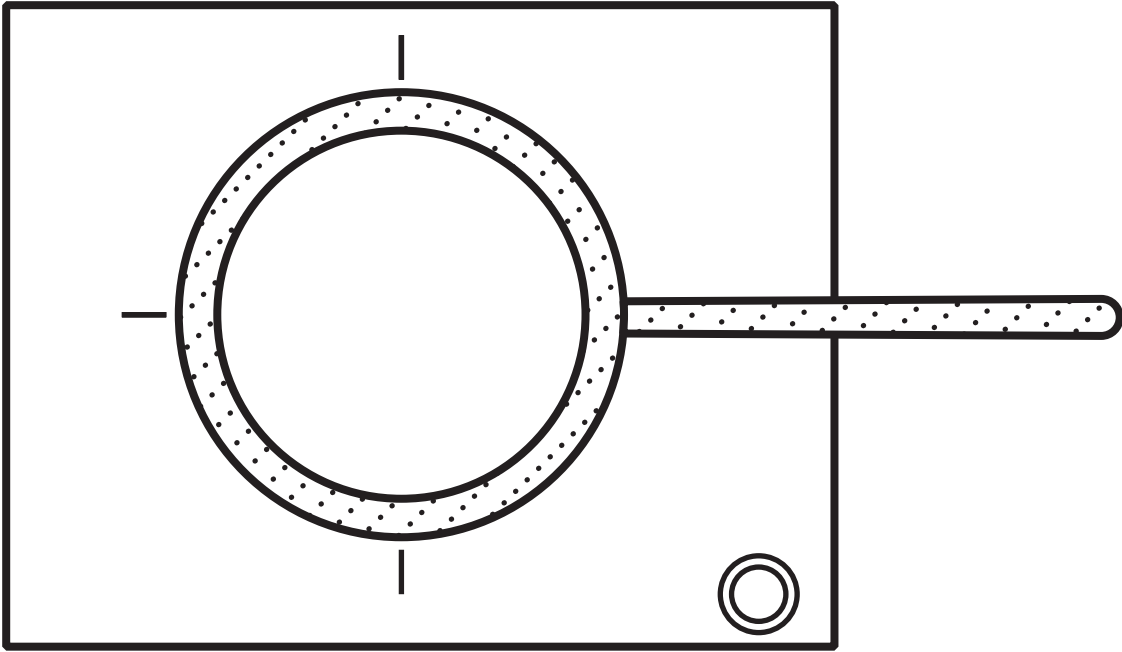
Question 4

FIGURE 8

SIDE VIEW



TOP VIEW

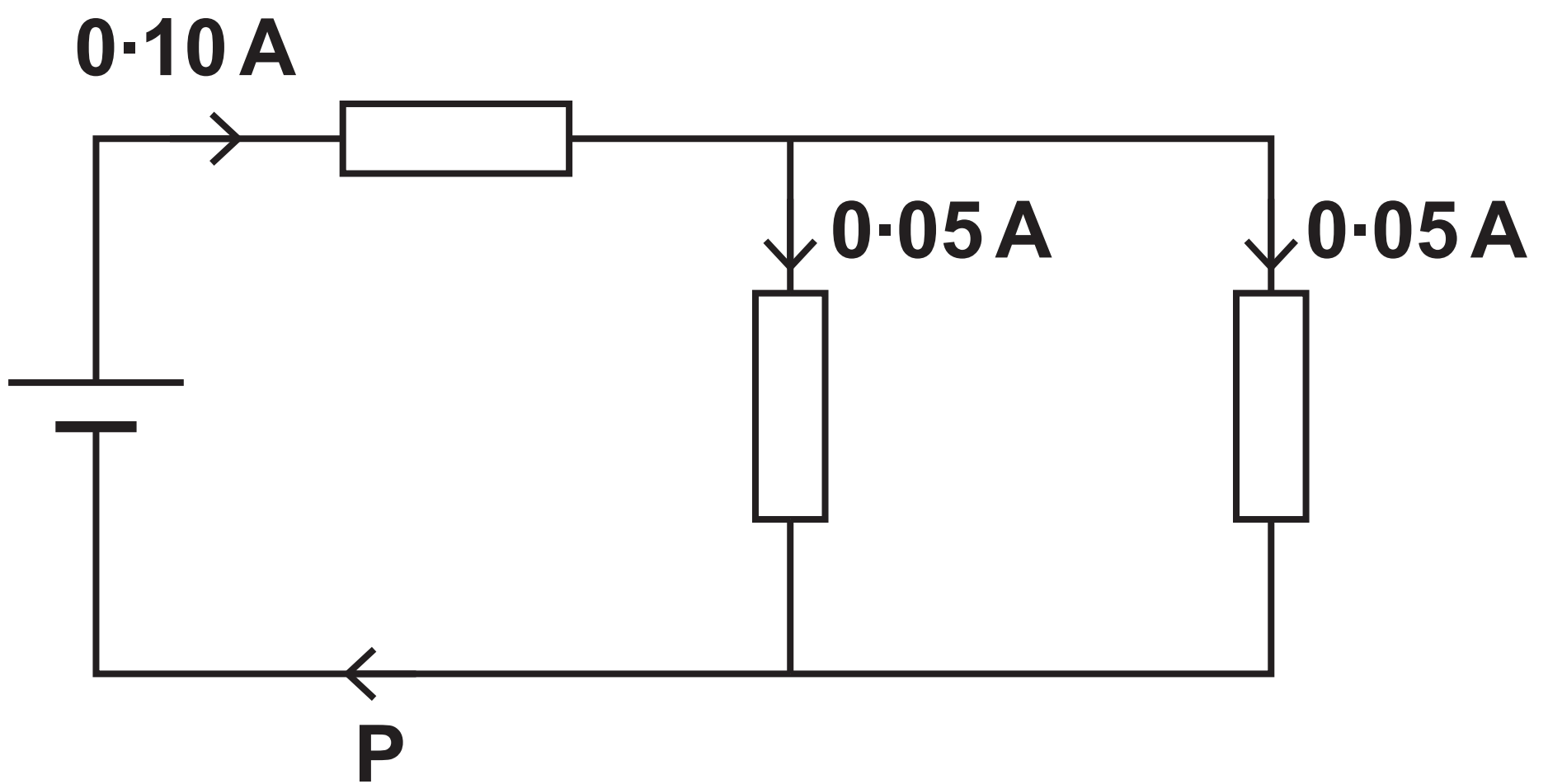


**Question 4(a)****FIGURE 9**

<b>mass of milk</b>	<b>0.82 kg</b>
<b>starting temperature of milk</b>	<b>10 °C</b>
<b>final temperature of milk</b>	<b>40 °C</b>
<b>change in thermal energy of milk</b>	<b>96 000 J</b>

## Question 5(a)

FIGURE 10



## Question 5(b)(i)

FIGURE 11

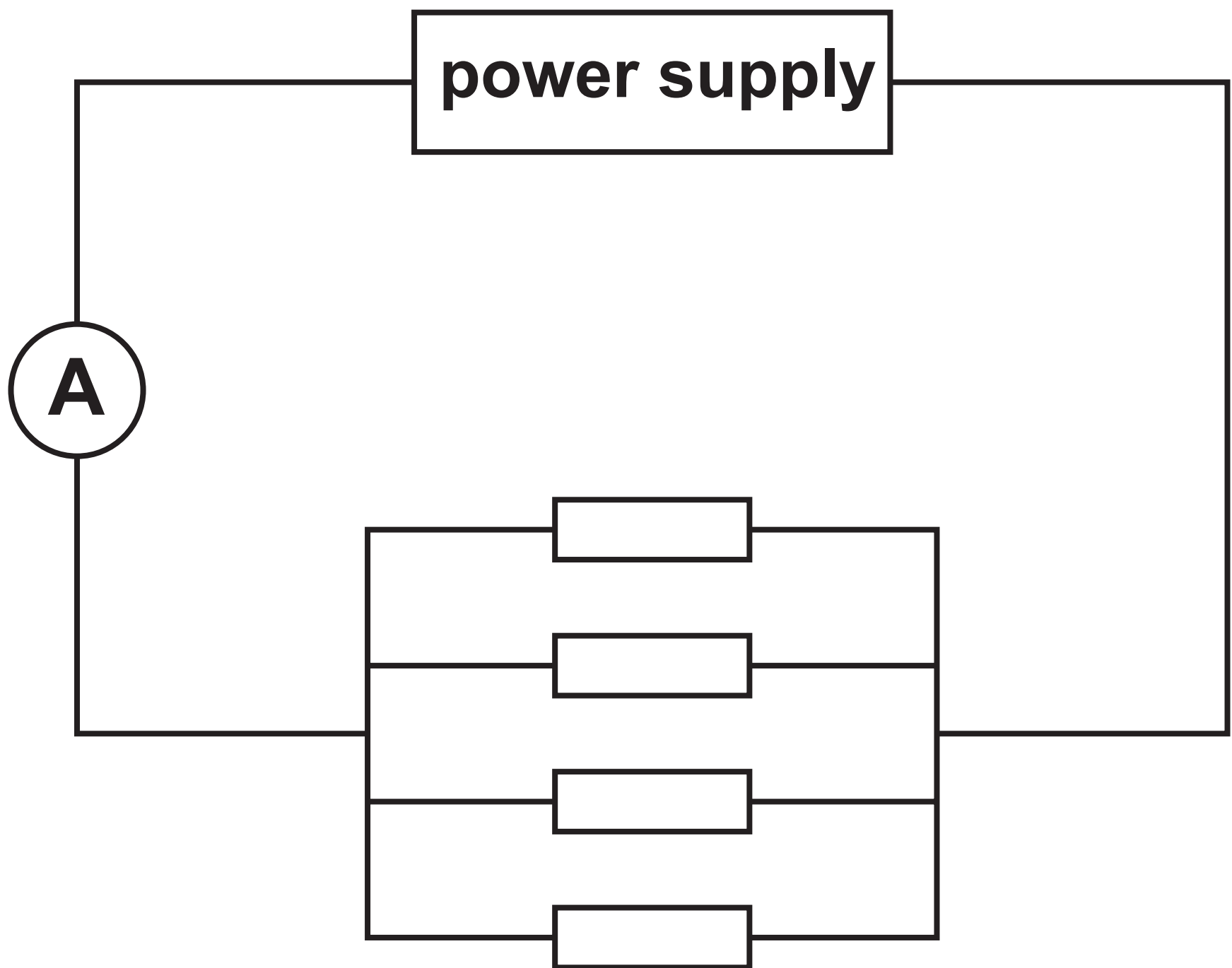


FIGURE 12

number of resistors	current in mA	voltage in V
4		6·00
3	27·3	6·00
2	18·2	6·00
1	9·1	6·00

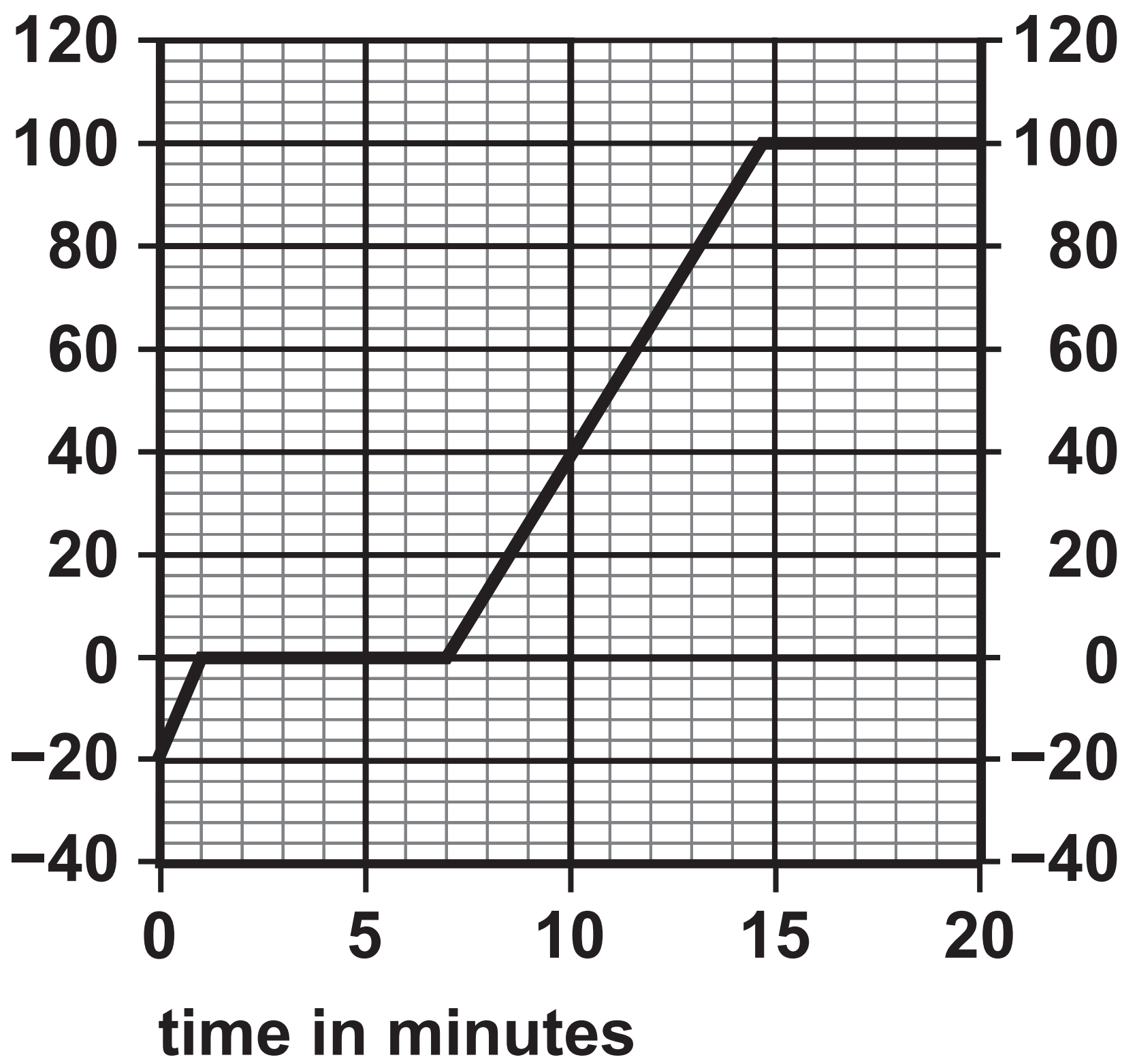
FIGURE 13

	density in g/cm <sup>3</sup>
solid aluminium	2.70
liquid aluminium	2.38



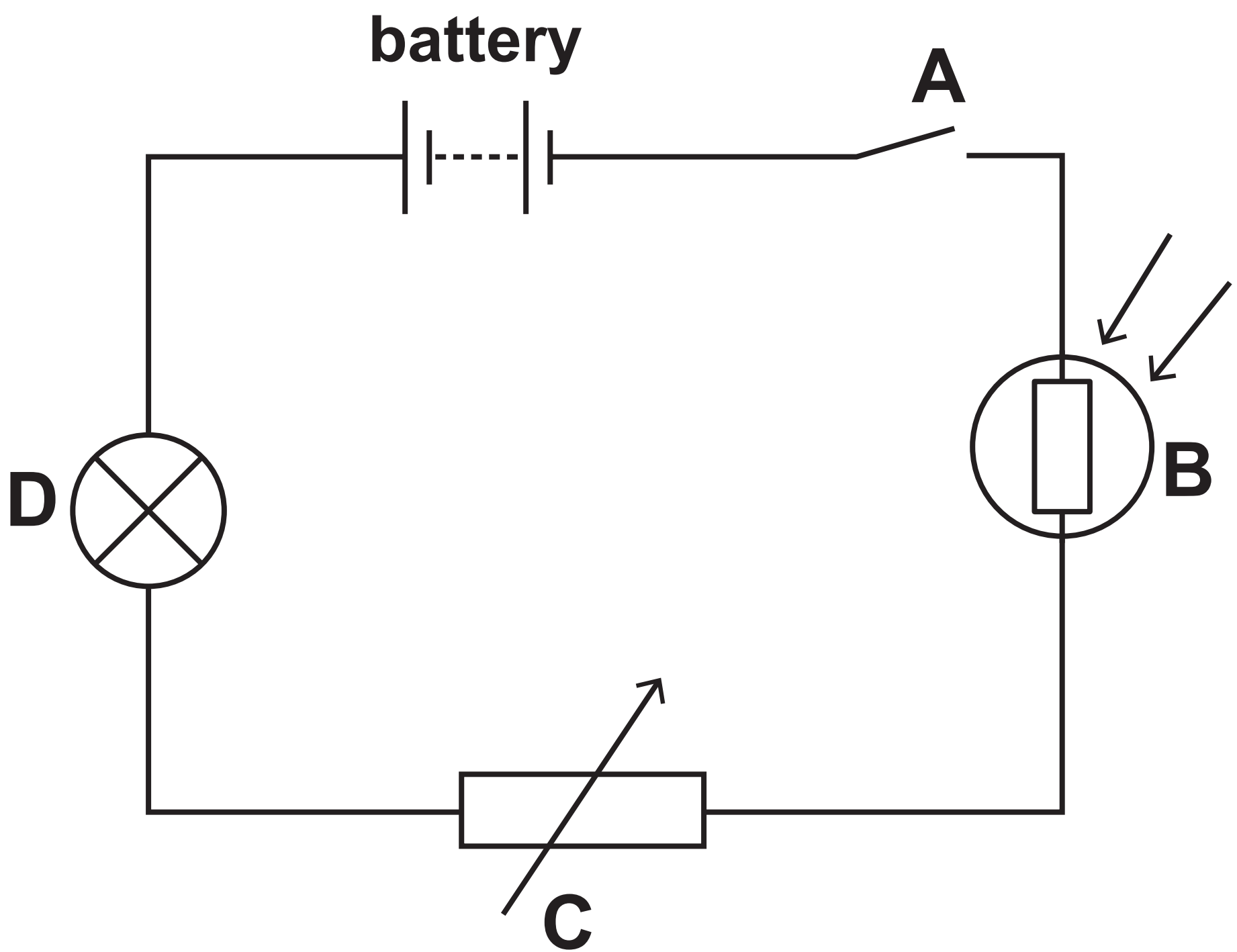
## Question 6(d)

FIGURE 14

temperature in  $^{\circ}\text{C}$ 

Question 1(a)

FIGURE 1



A \_\_\_\_\_

B \_\_\_\_\_

C \_\_\_\_\_

D \_\_\_\_\_

## Question 2(a)

FIGURE 2

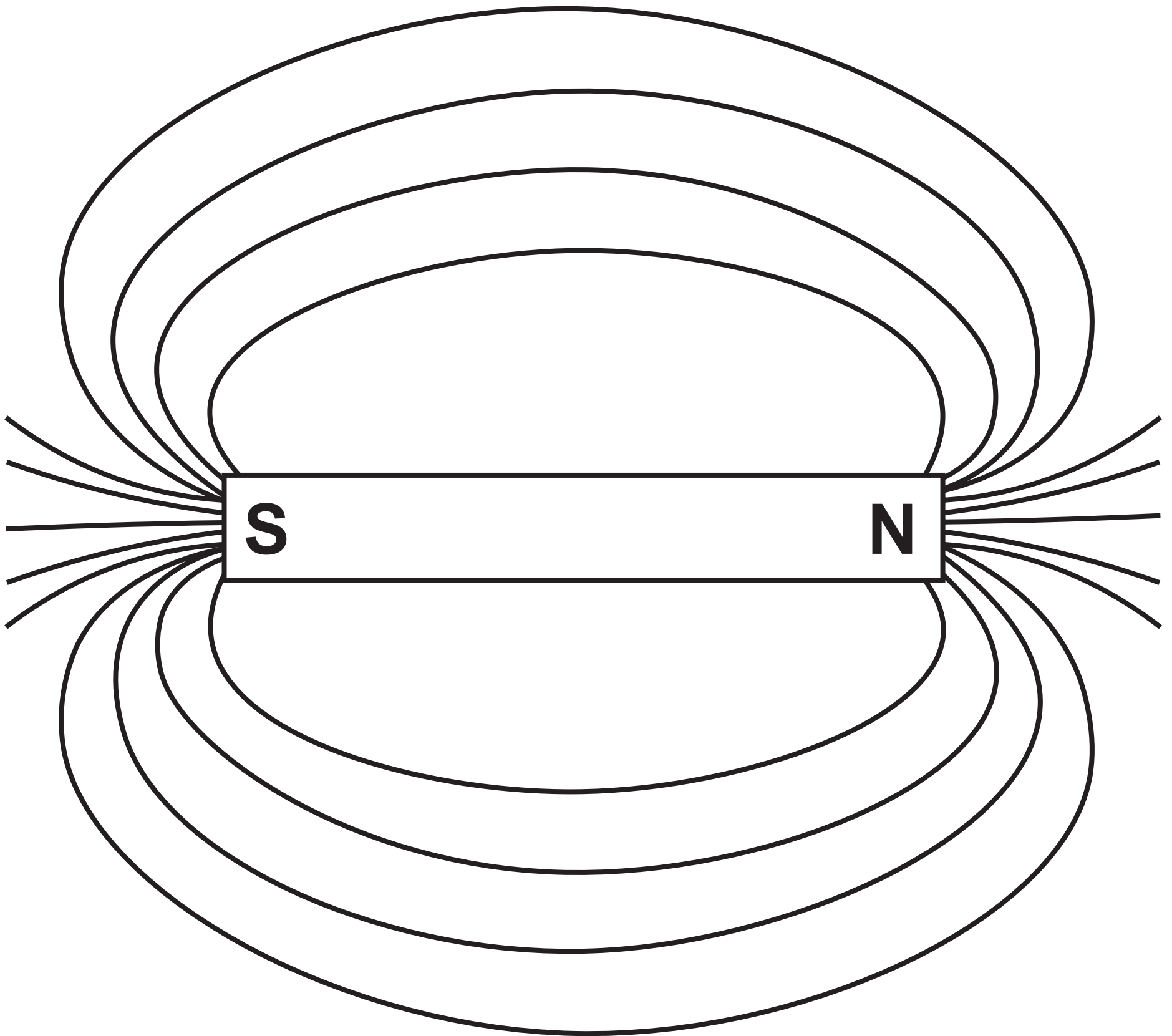
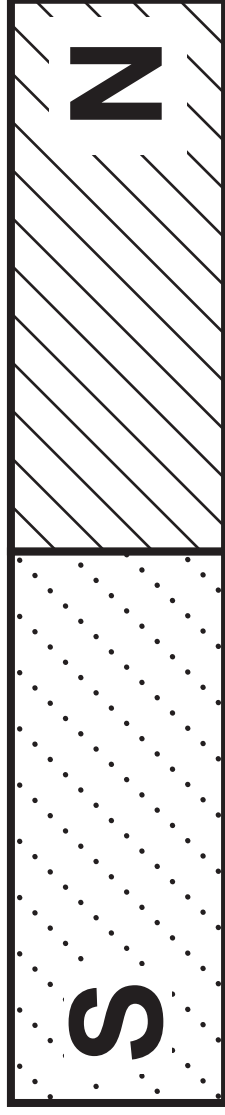
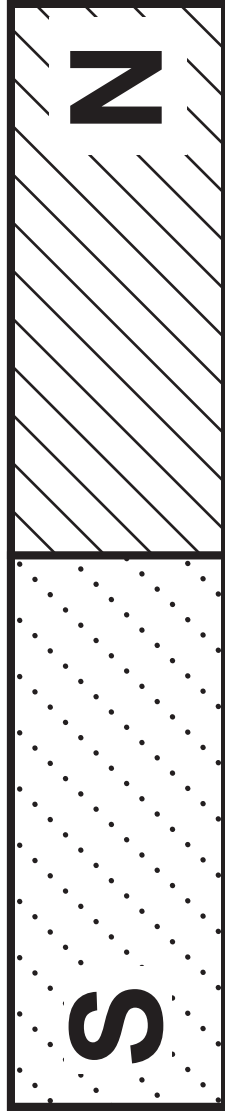
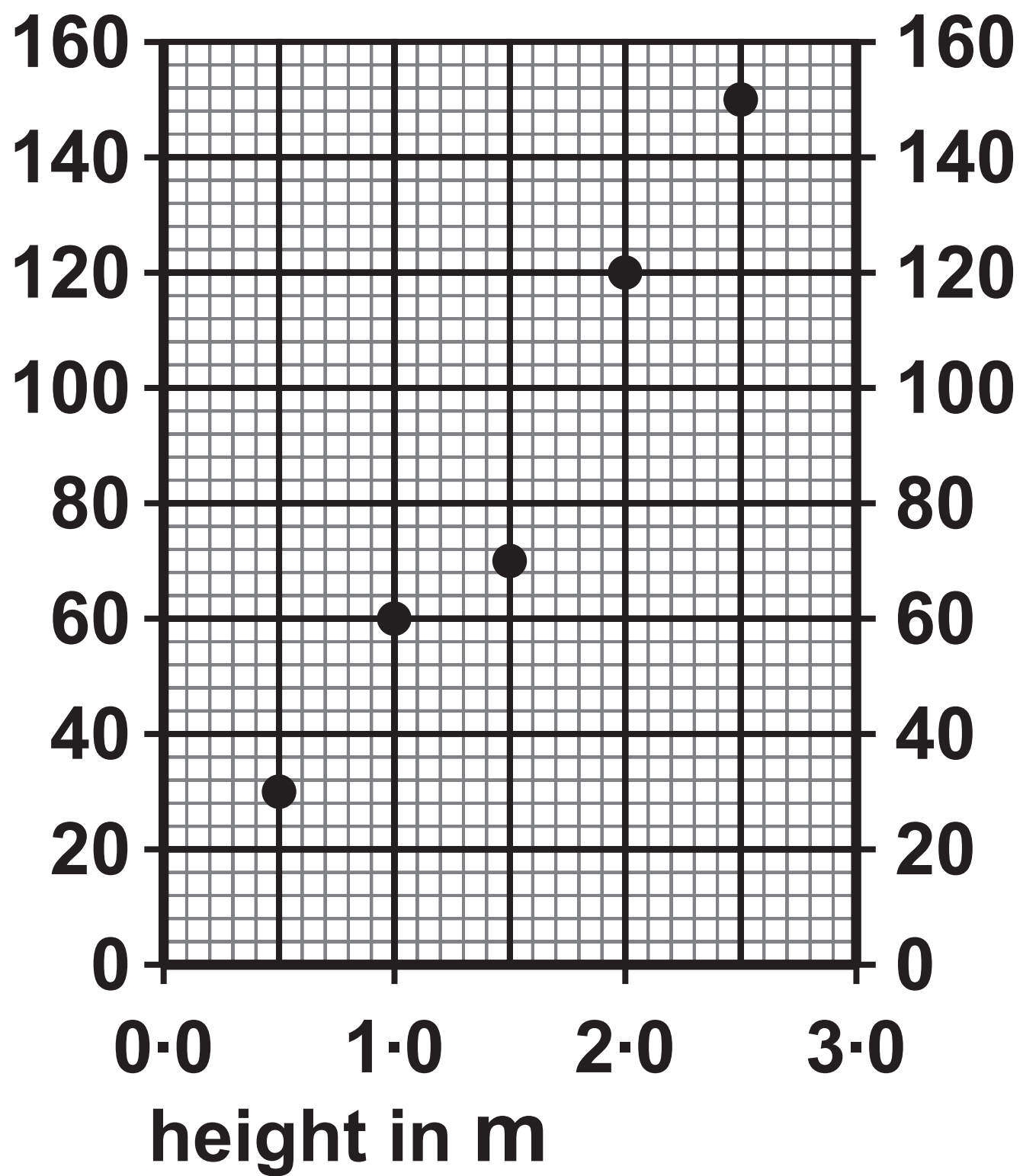


FIGURE 3



## Question 3(c) – FIGURE 7

FIGURE 7

 $\Delta GPE$  in J

## Question 5(b)(i)

FIGURE 11

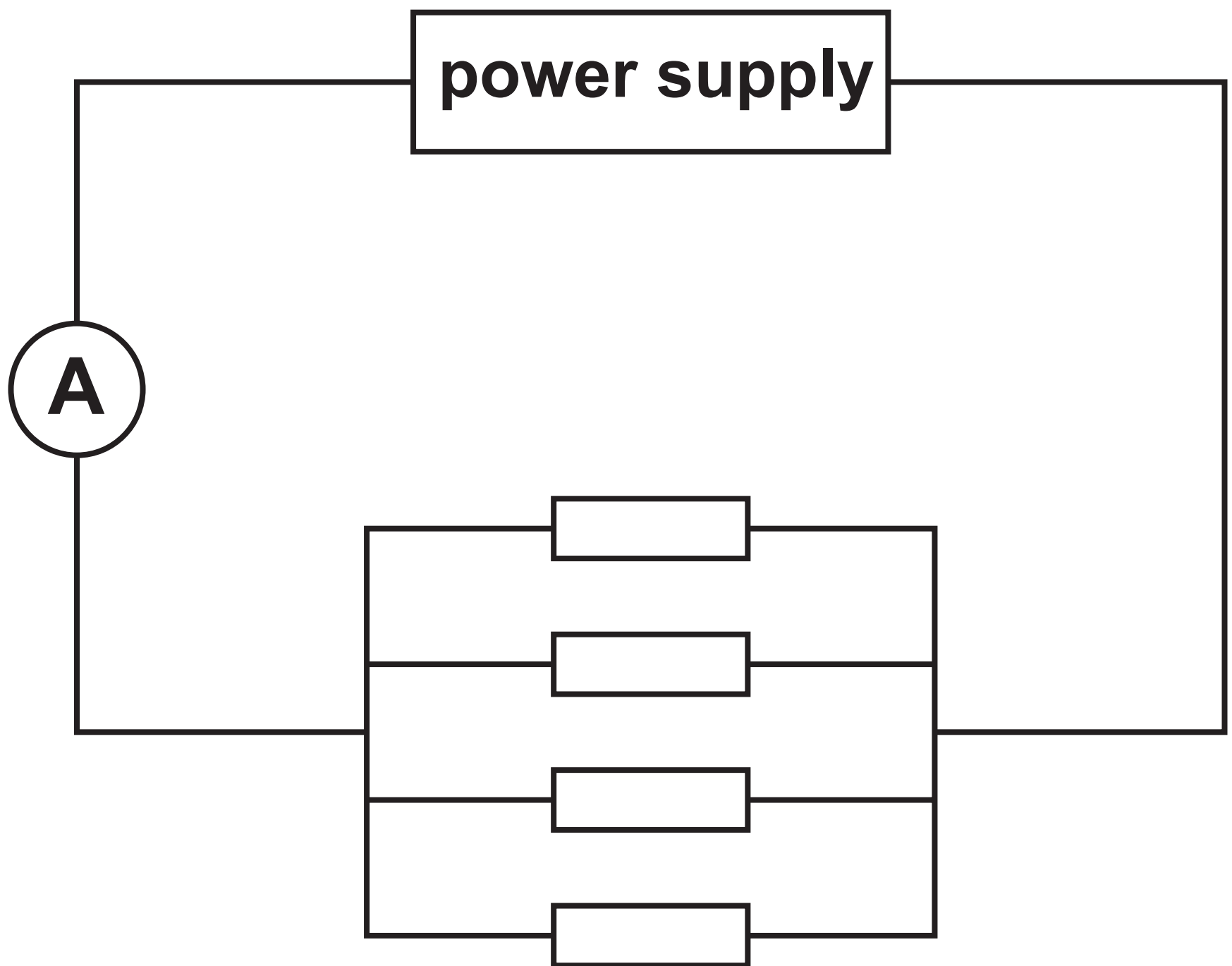


FIGURE 12

number of resistors	current in mA	voltage in V
4		6·00
3	27·3	6·00
2	18·2	6·00
1	9·1	6·00

**Source information:**

**Question 4**

**(Source adapted from:**

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