

Chemistry  
UNIT: 4CH1  
Science (Double Award) 4SD0  
PAPER: 1C

Monday 22 May 2023 – Morning

Diagram Booklet

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

Surname					
Other names					
Centre Number					
Candidate Number					

## INSTRUCTIONS

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

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

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## Question 1

**chromatography**

**crystallisation**

**dissolving**

**evaporating**

**filtering**

**fractional distillation**

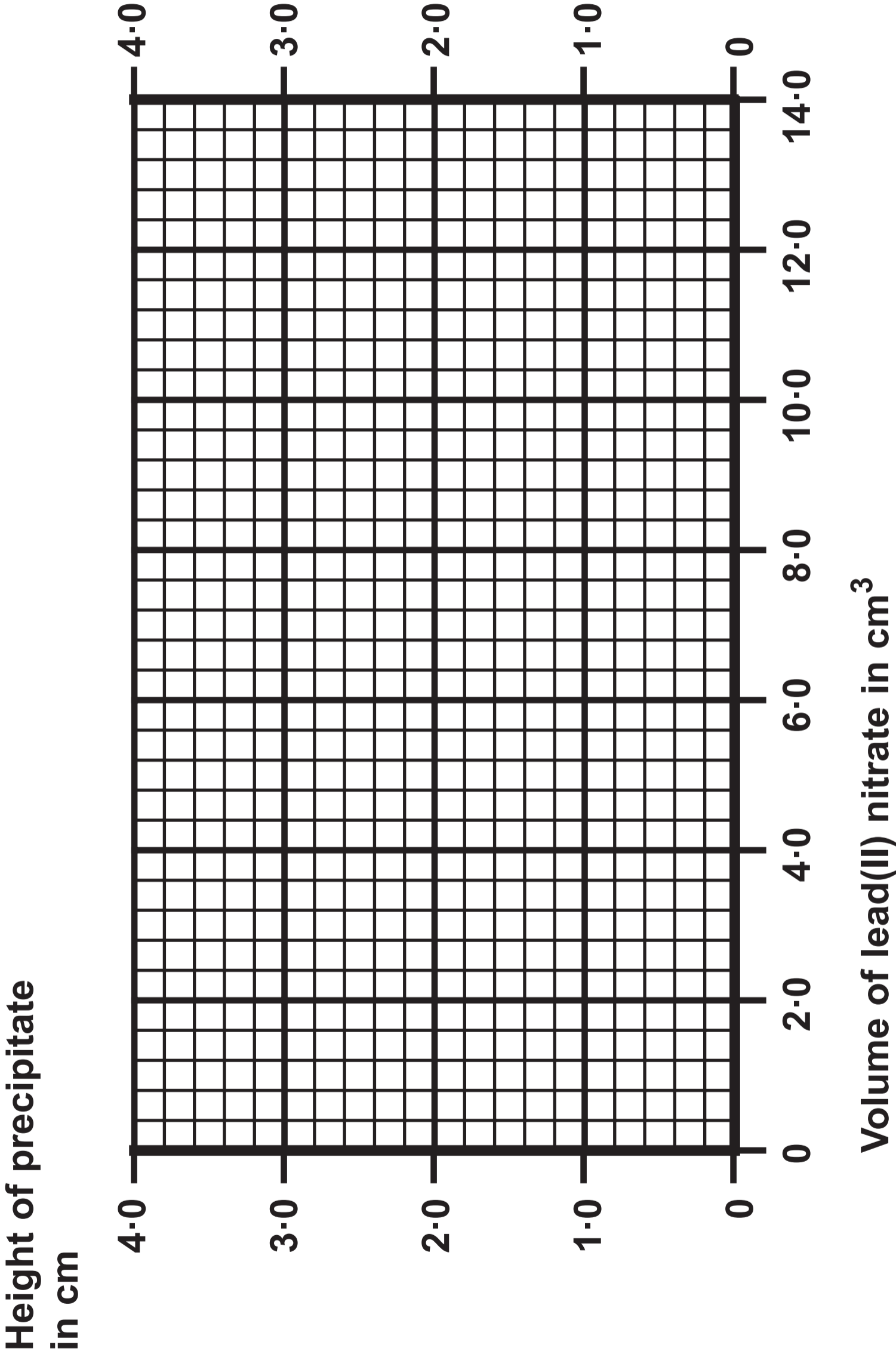
**simple distillation**

Question 3

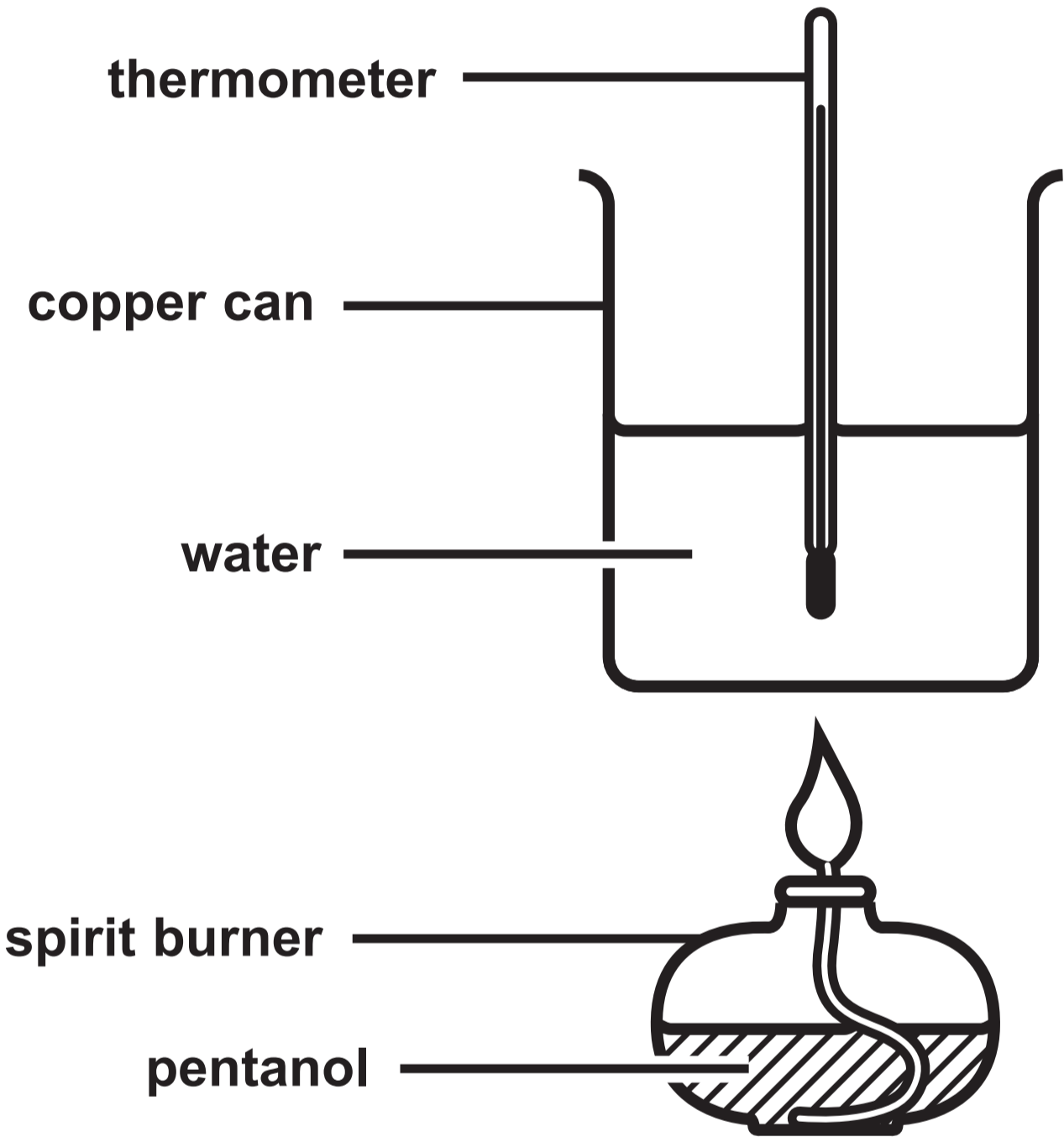
Substance	Melting point	Conducts electricity when solid	Conducts electricity when molten	Type of bonding	Type of structure
X	low	no	no	covalent	simple molecular
Y	high	no	no	A	B
Z	high	no	yes	C	D

<p>propene</p>	<p>repeat unit of poly(propene)</p>
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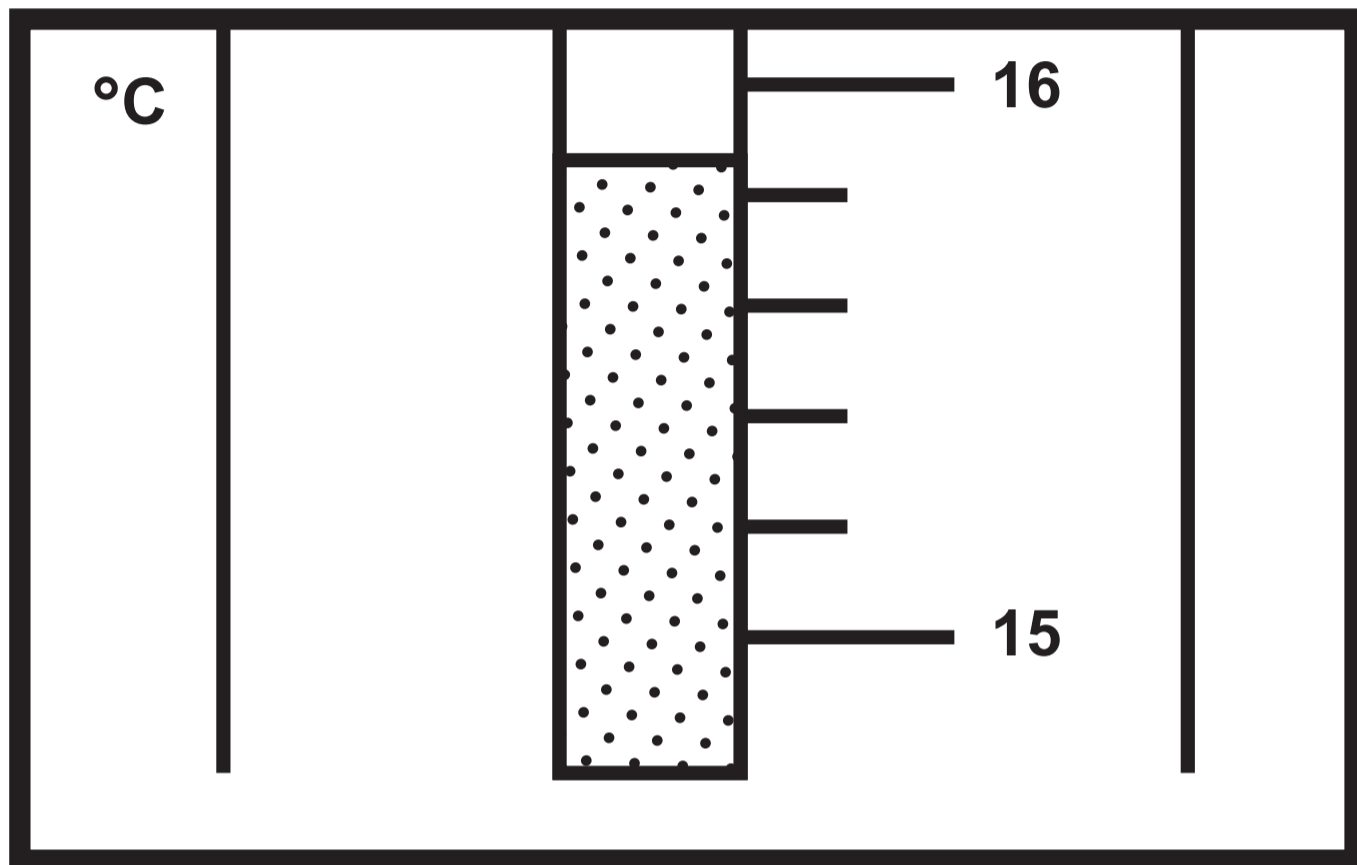
Question 6(b)



Question 8(a)



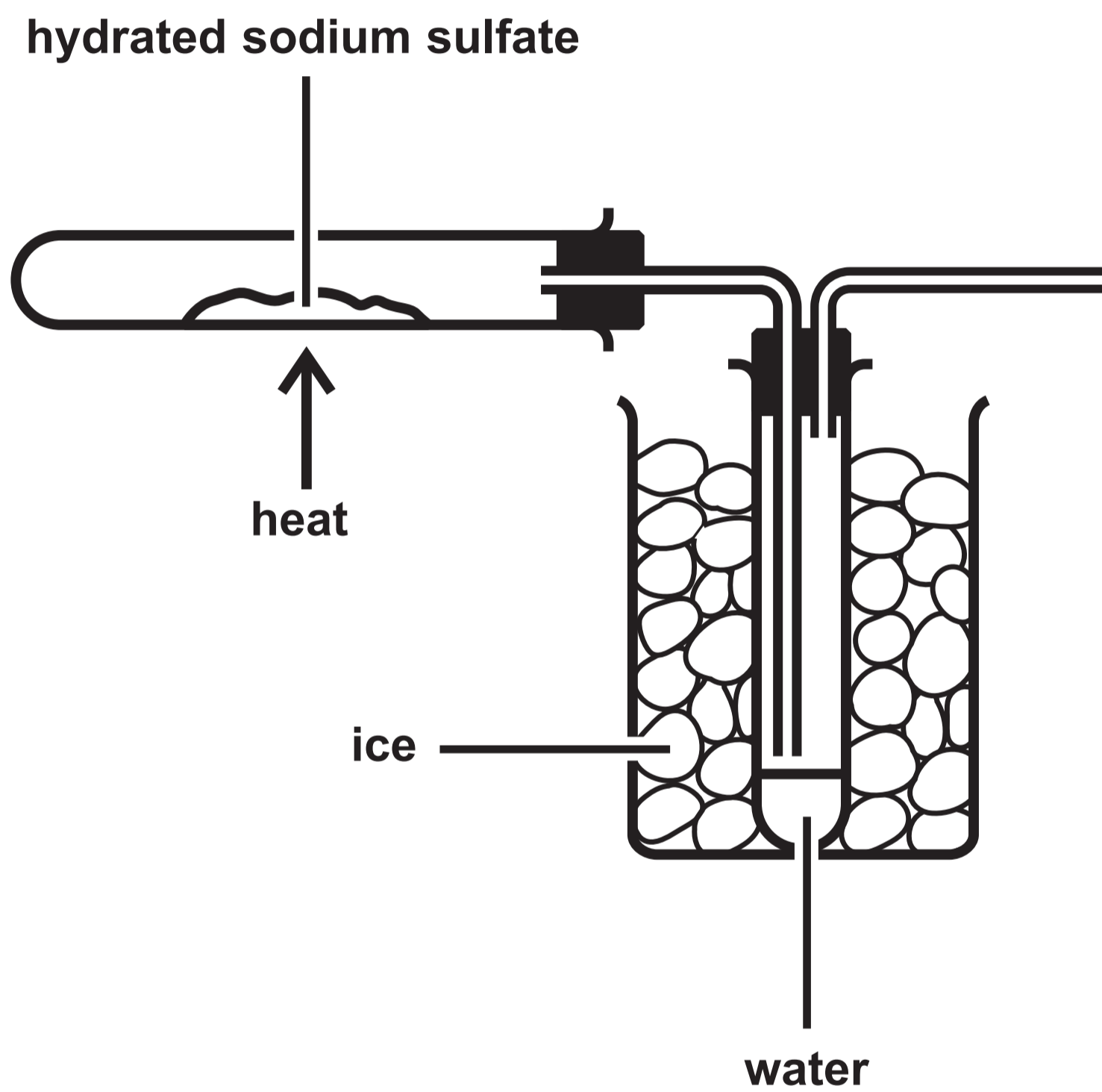
## Question 8(b)



Question 8(c)(ii)

Initial mass of spirit burner and pentanol in g	90.11
Final mass of spirit burner and pentanol in g	89.75

## Question 9(b)

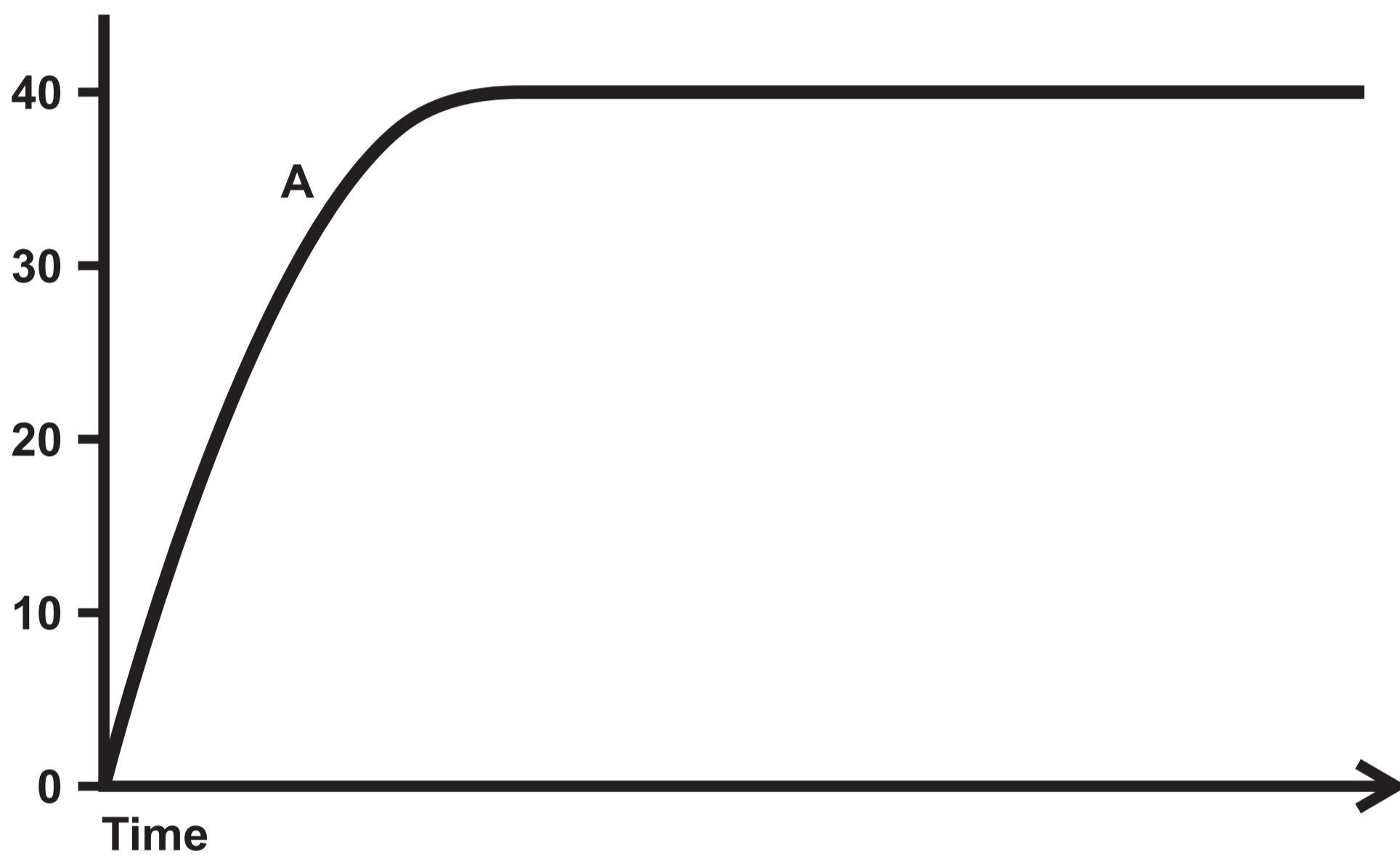


Question 9(c)

Mass of empty tube in g	15.83
Mass of tube and $\text{Na}_2\text{SO}_4 \cdot x\text{H}_2\text{O}$ in g	23.88
Mass of tube and $\text{Na}_2\text{SO}_4$ in g	19.38

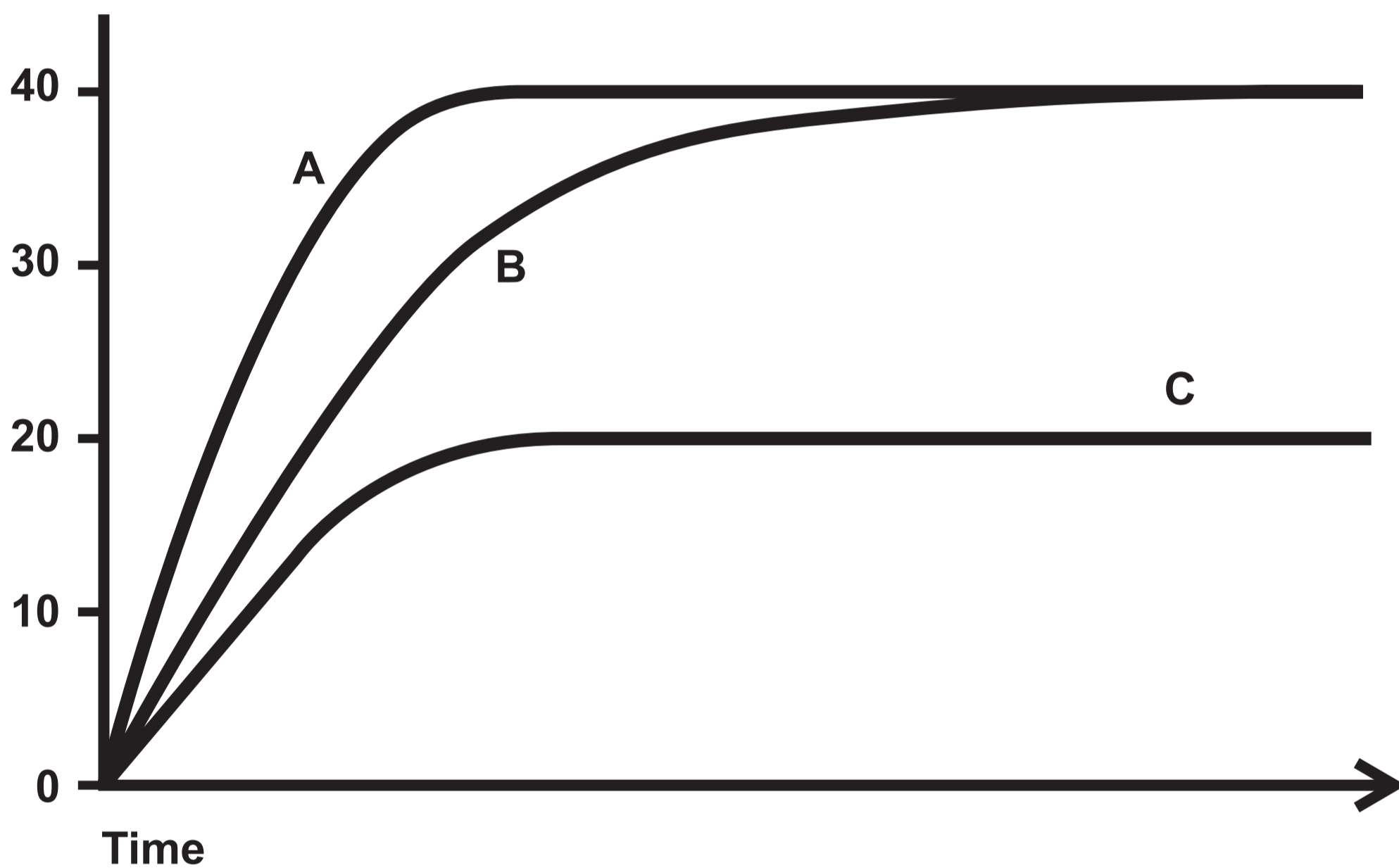
## Question 10(a)(ii)

Volume of  
hydrogen in  $\text{cm}^3$

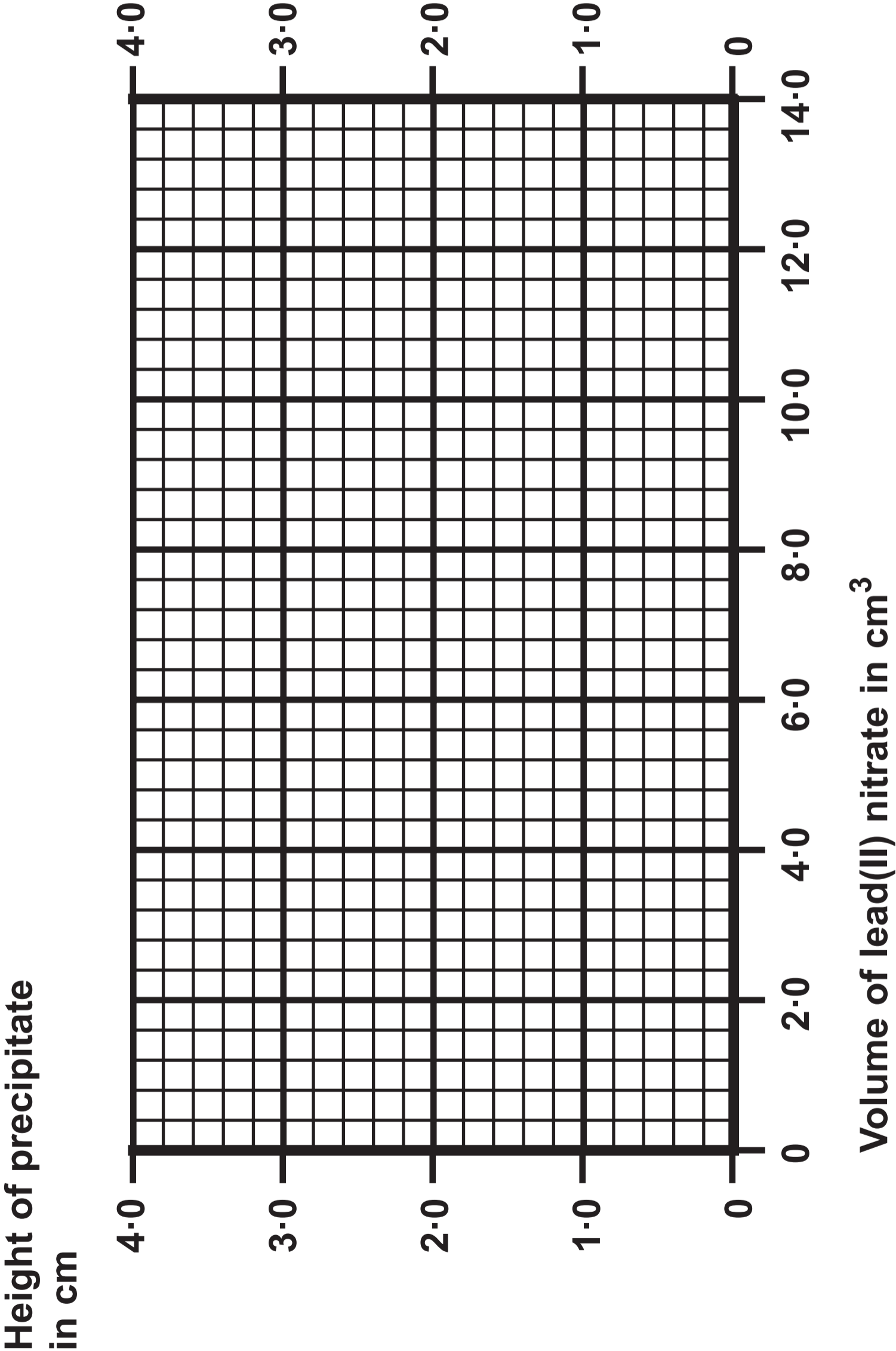


## Question 10(b)

Volume of  
hydrogen in  $\text{cm}^3$



<p>propene</p>	<p>repeat unit of poly(propene)</p>
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## Question 10(a)(ii)

Volume of hydrogen  
in  $\text{cm}^3$

