

Chemistry  
Paper 2C

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.

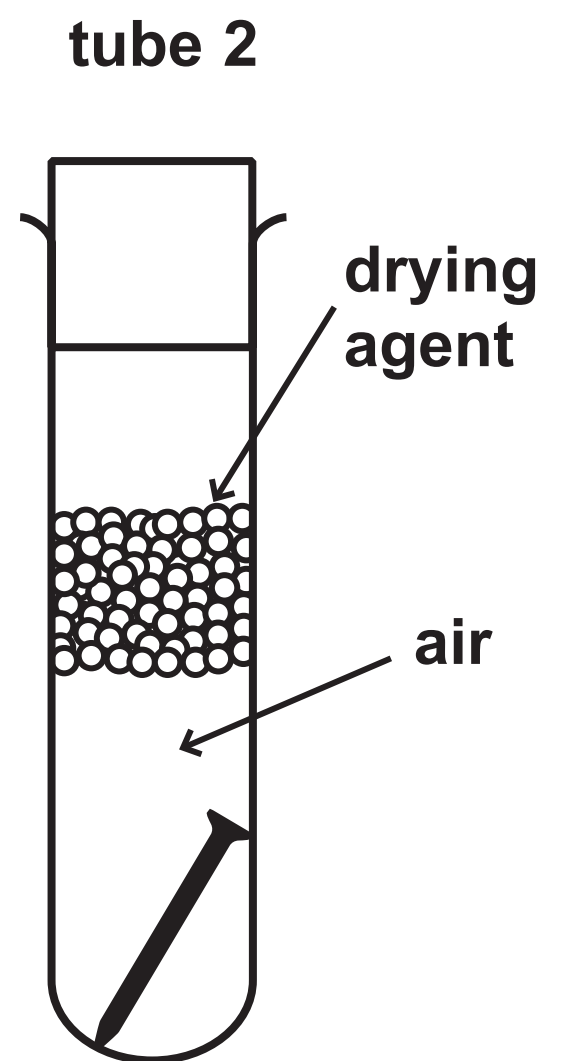
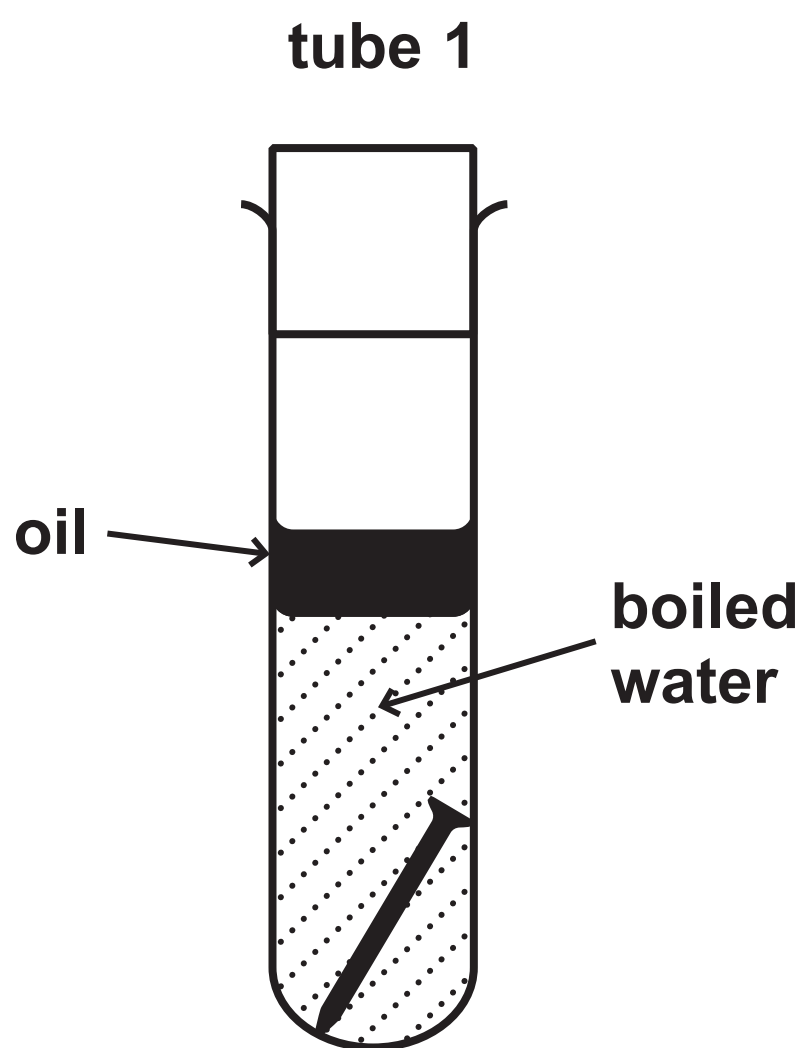
**THIS DIAGRAM BOOKLET MUST BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.**

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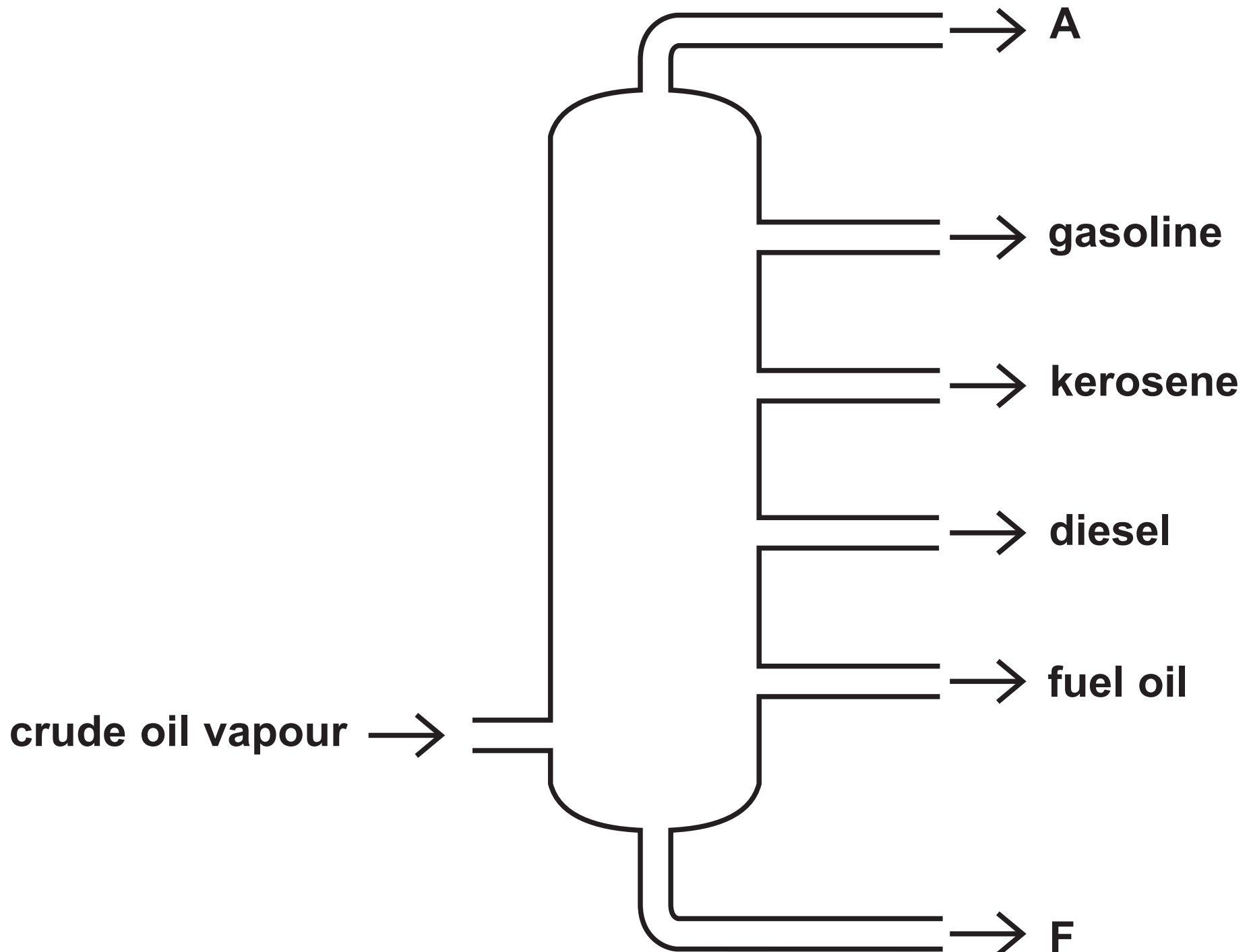
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## Question 2(b)



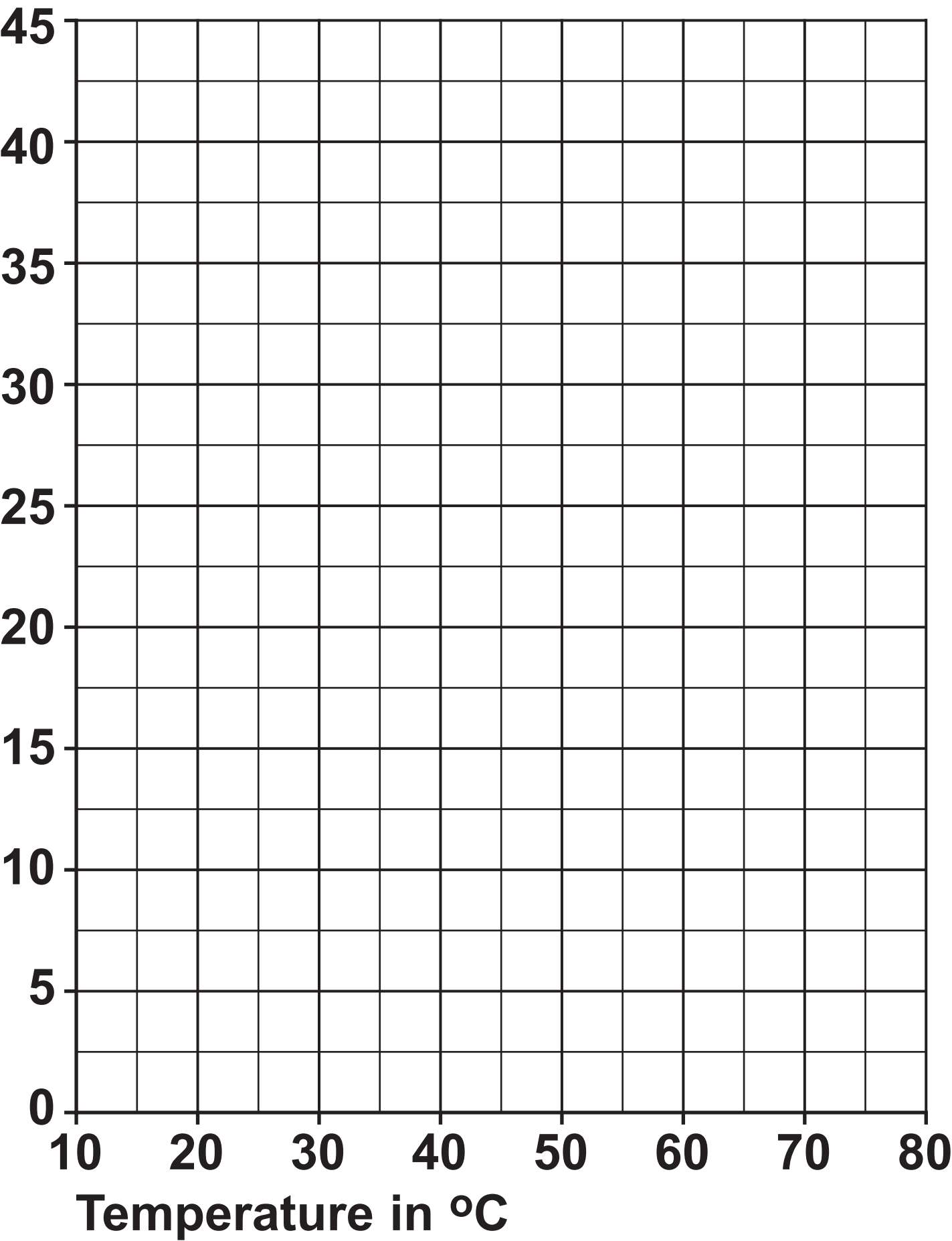
## Question 3(a)



Question 4(a)

Temperature in °C	10	20	30	40	50	60	70
Mass of potassium nitrate in g	8.0	10.0	12.5	16.0	17.5	26.5	34.0

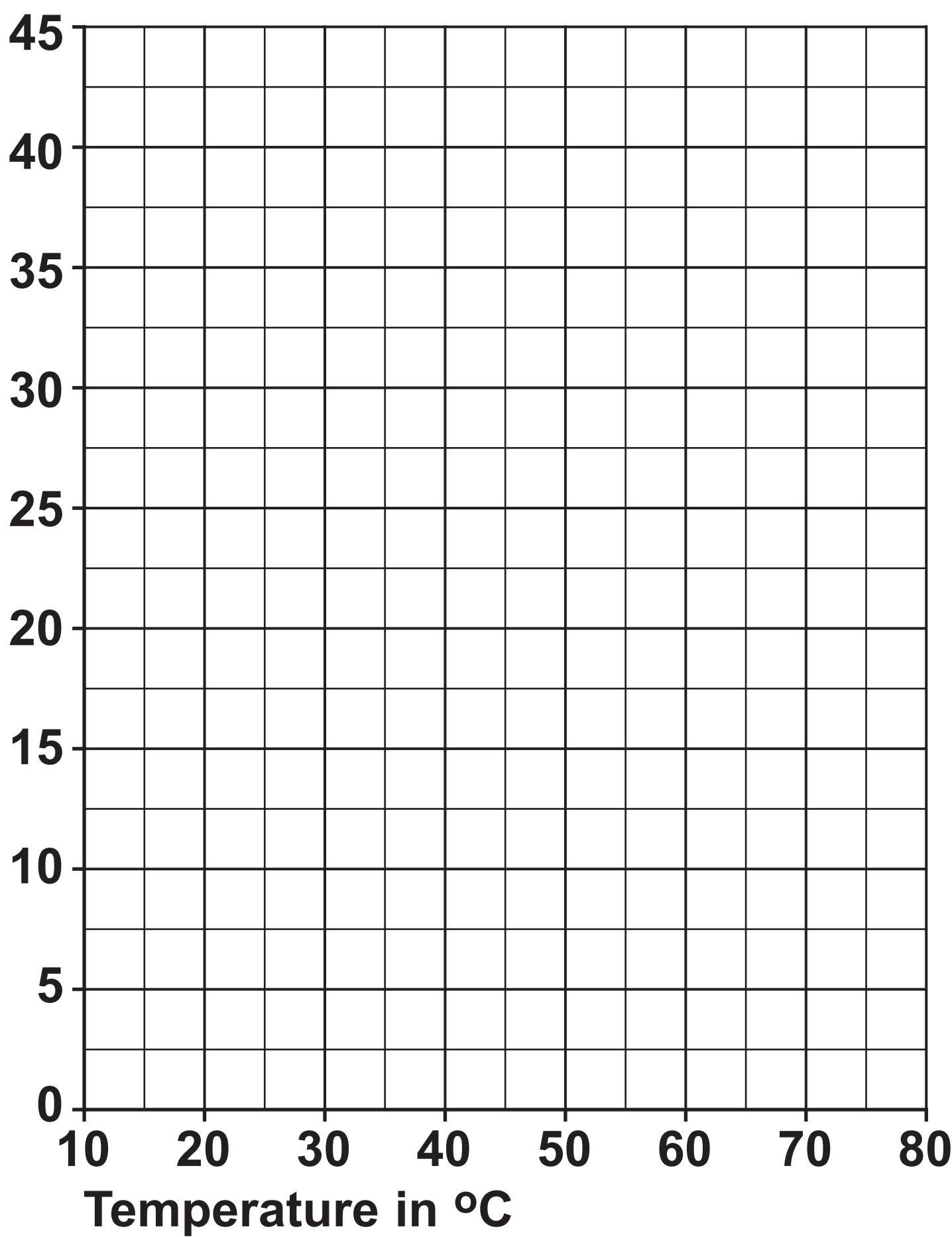
Mass of  
potassium nitrate in g



Question 4(a) (Spare copy)

Temperature in °C	10	20	30	40	50	60	70
Mass of potassium nitrate in g	8.0	10.0	12.5	16.0	17.5	26.5	34.0

Mass of potassium nitrate in g



Question 5(b)(iii)

ethanol	ethanoic acid
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Question 5(b)(iii) (Spare copy)

ethanol	ethanoic acid
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## Question 5(c)(i)

	<b>Hydration of ethene</b>	<b>Fermentation of glucose</b>
<b>raw material</b>	crude oil	sugar cane
<b>rate of reaction</b>	fast	slow
<b>purity of ethanol</b>	pure	impure
<b>operating temperature</b>	300 °C	30 °C
<b>operating pressure</b>	60 – 70 atmospheres	1 atmosphere
<b>catalyst</b>	phosphoric acid	enzymes in yeast

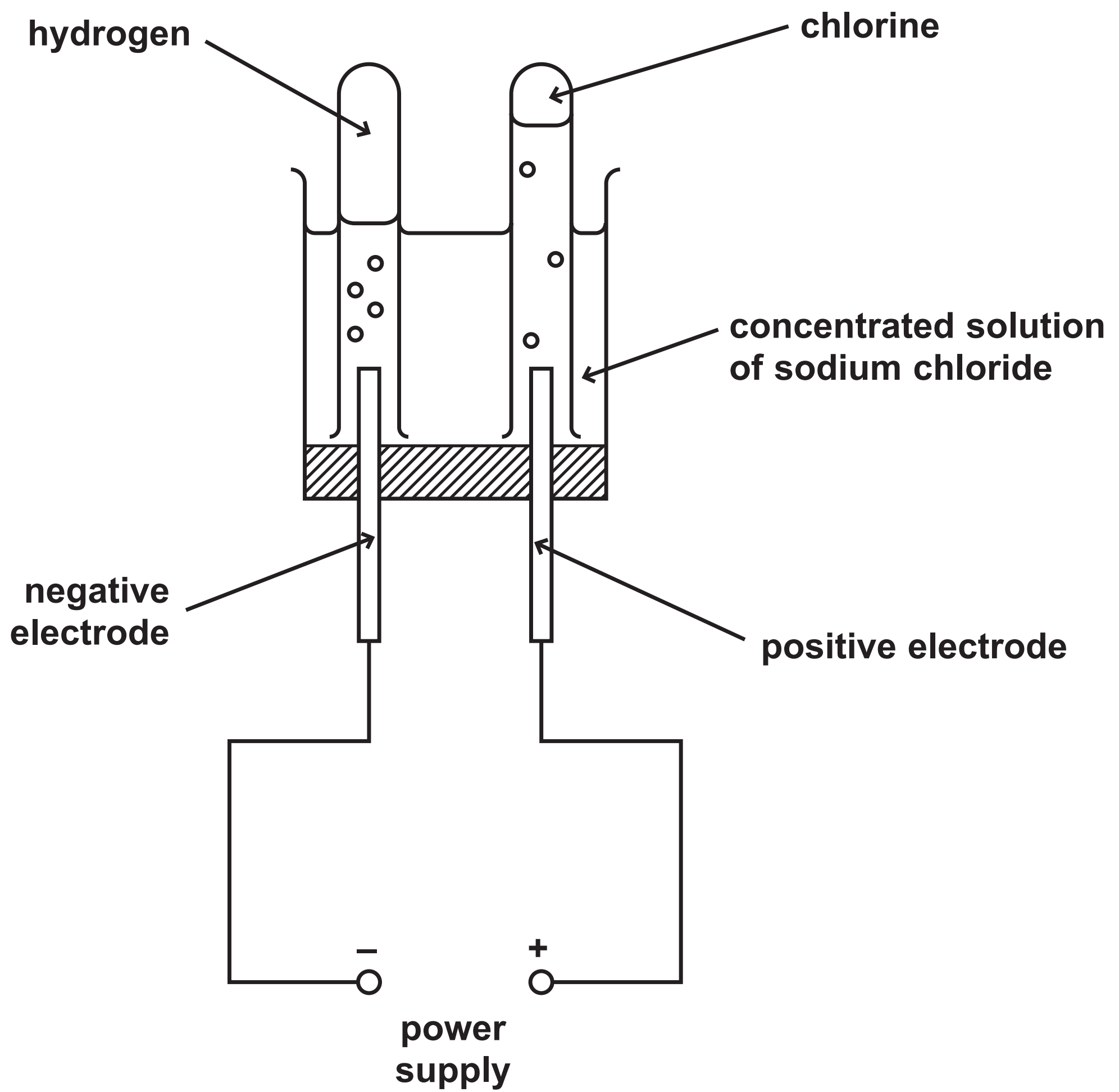
## Question 5(c)(ii)



## Question 5(c)(ii) (Spare copy)



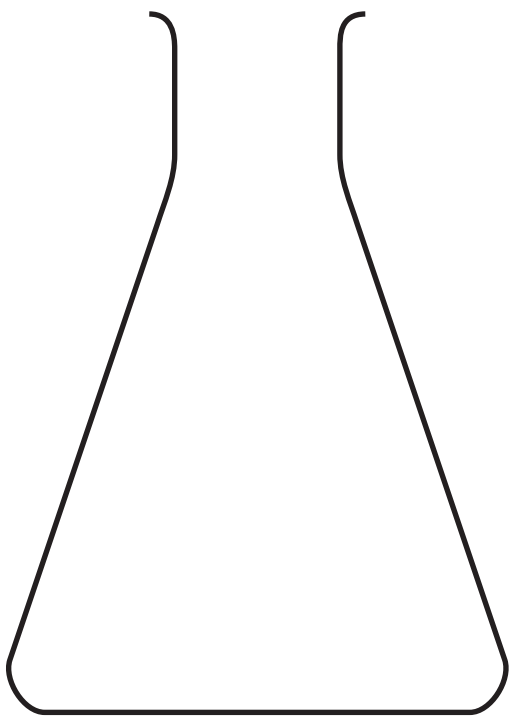
## Question 6(a)



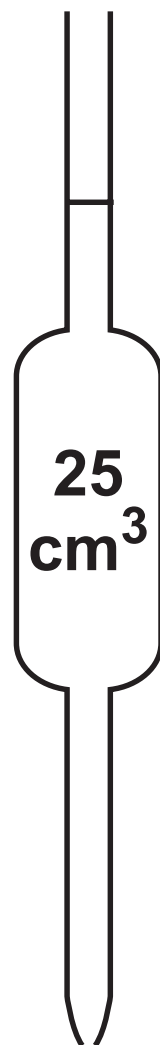
## Question 7(a)

Diagrams are not to scale.

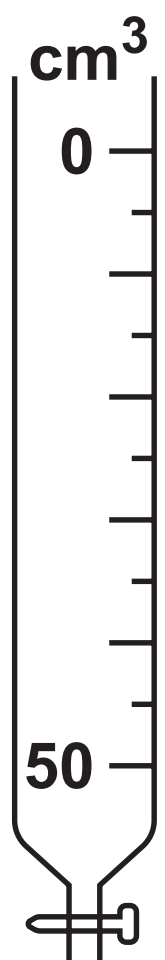
**X**



**Y**



**Z**



Question 7(c)

TABLE 1

titration number	1	2	3	4
volume of NaOH added in cm <sup>3</sup>	30·35	30·25	30·00	30·30
concordant results				

Question 7(c) (Spare copy)

TABLE 1

titration number	1	2	3	4
volume of NaOH added in cm <sup>3</sup>	30·35	30·25	30·00	30·30
concordant results				



## Question 7(d)

TABLE 2

<b>volume of phosphoric acid used in cm<sup>3</sup></b>	<b>25·0</b>
<b>concentration of sodium hydroxide solution in mol/dm<sup>3</sup></b>	<b>0·525</b>
<b>mean volume of sodium hydroxide added in cm<sup>3</sup></b>	<b>30·40</b>