

**Paper Reference(s) 4CH1/1CR 4SD0/1CR  
Pearson Edexcel International GCSE (9–1)**

**Chemistry**

**UNIT: 4CH1**

**Science (Double Award) 4SD0**

**PAPER: 1CR**

## **Diagram Booklet**

**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.**

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

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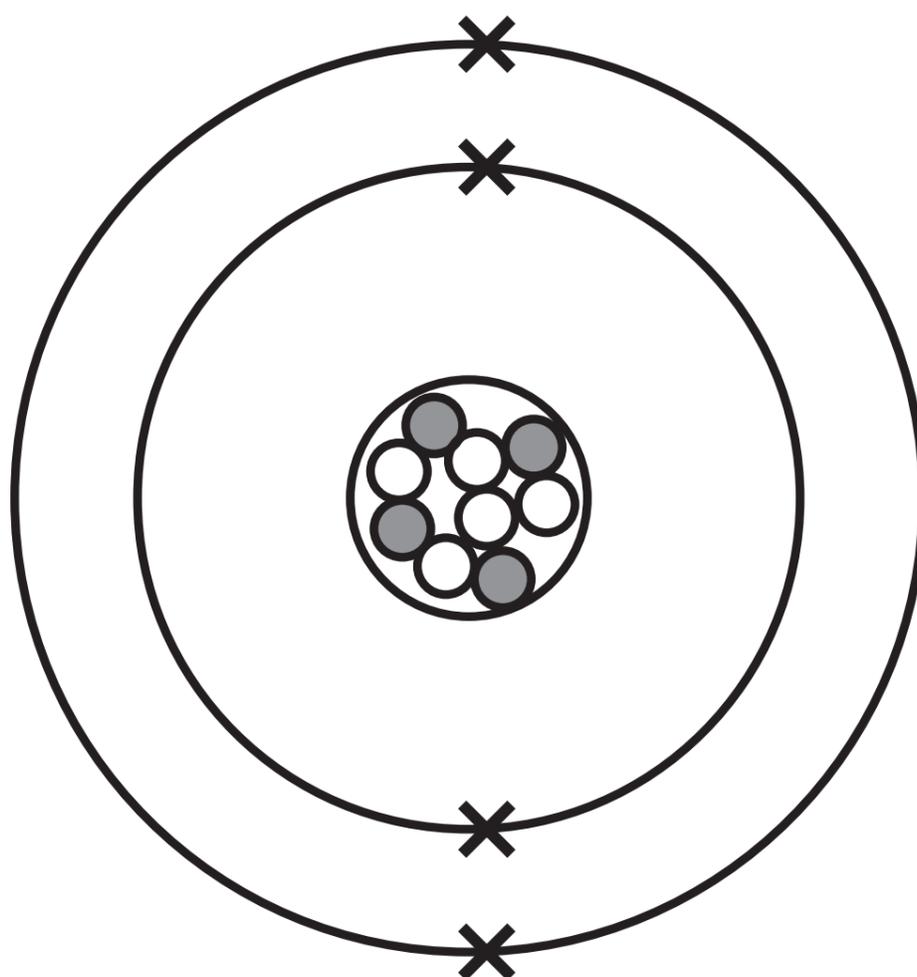
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### Question 1(a)

- proton
- neutron
- × electron

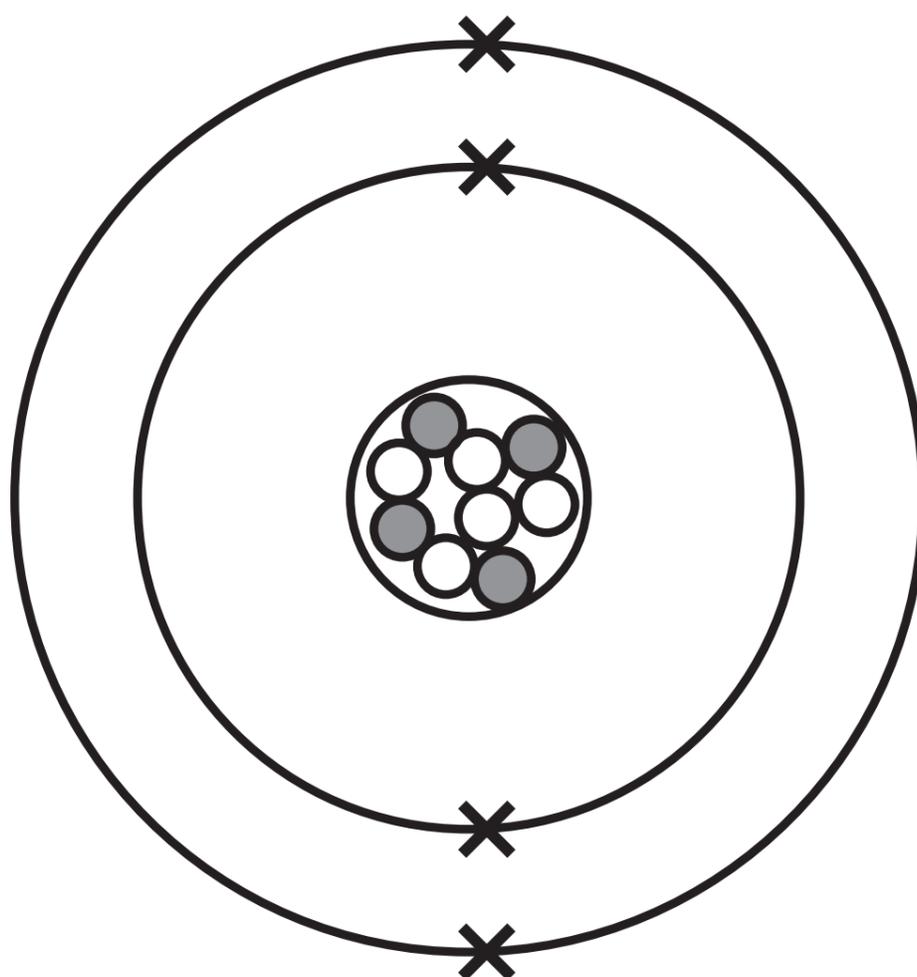


<b>Atomic number of this atom</b>	
<b>Mass number of this atom</b>	
<b>Period number of this element</b>	
<b>Number of electrons in the 2+ ion formed from this atom</b>	

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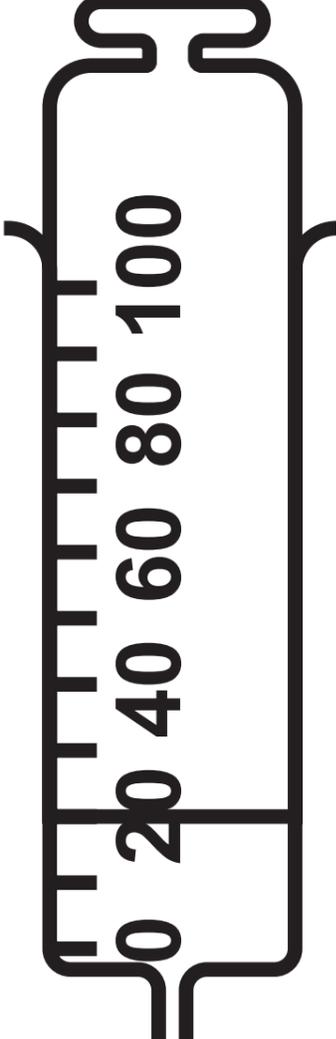
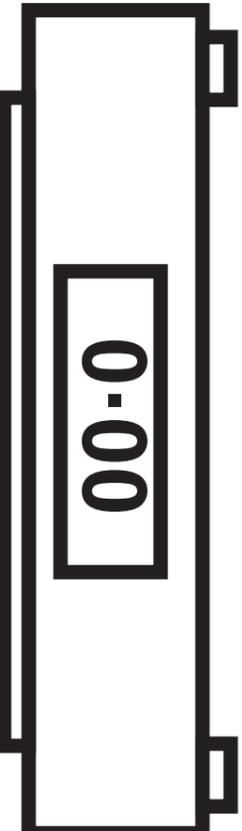
### Question 1(a)

- proton
- neutron
- × electron

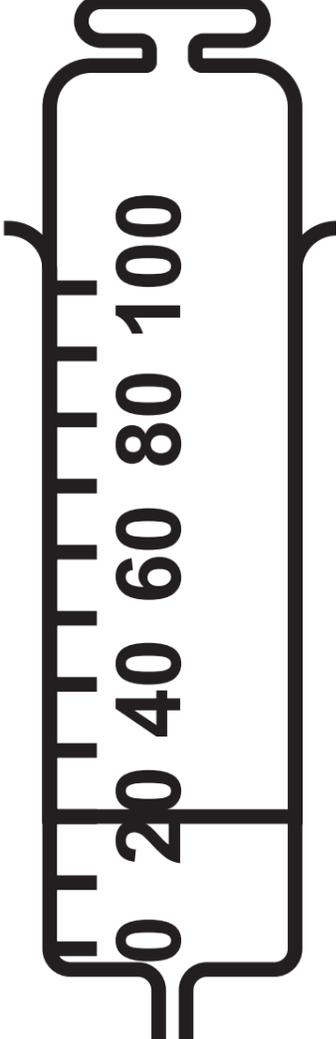
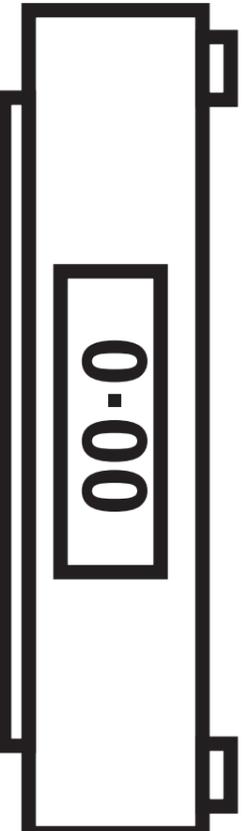


<b>Atomic number of this atom</b>	
<b>Mass number of this atom</b>	
<b>Period number of this element</b>	
<b>Number of electrons in the 2+ ion formed from this atom</b>	

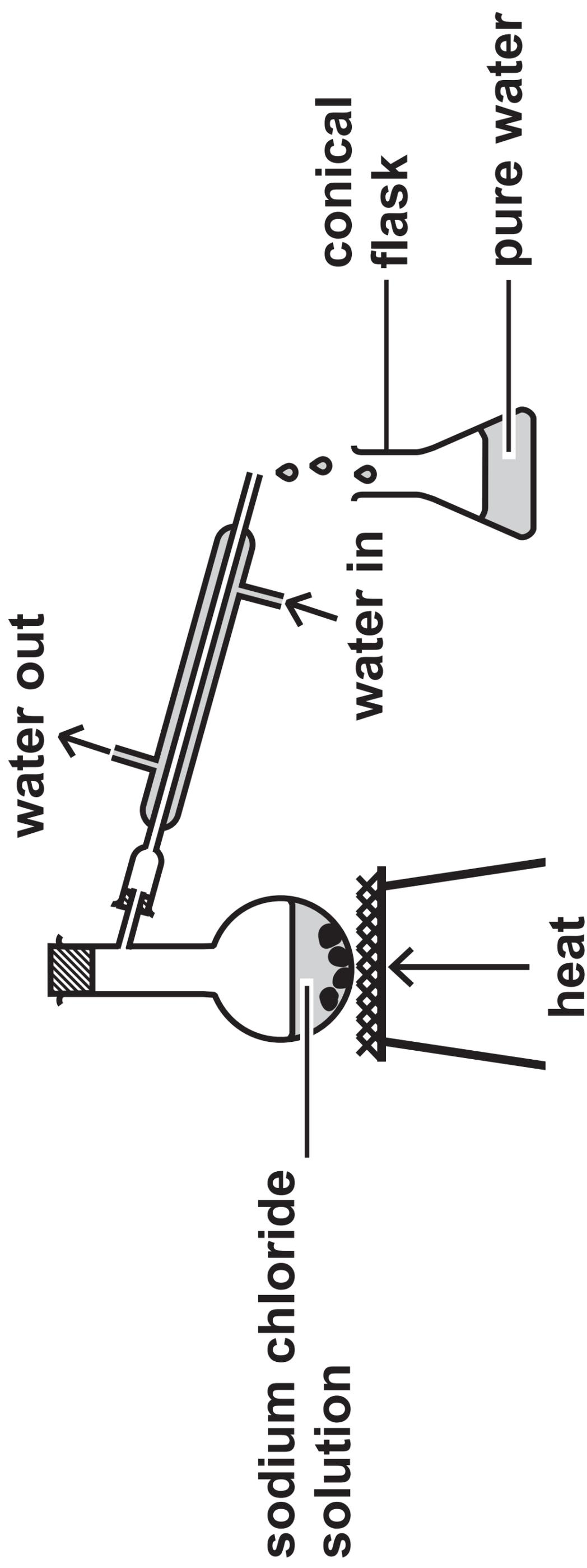
## Question 2(a)

Apparatus	Name	Unit
		
		

## Question 2(a)

Apparatus	Name	Unit
		
		

Question 2(b)

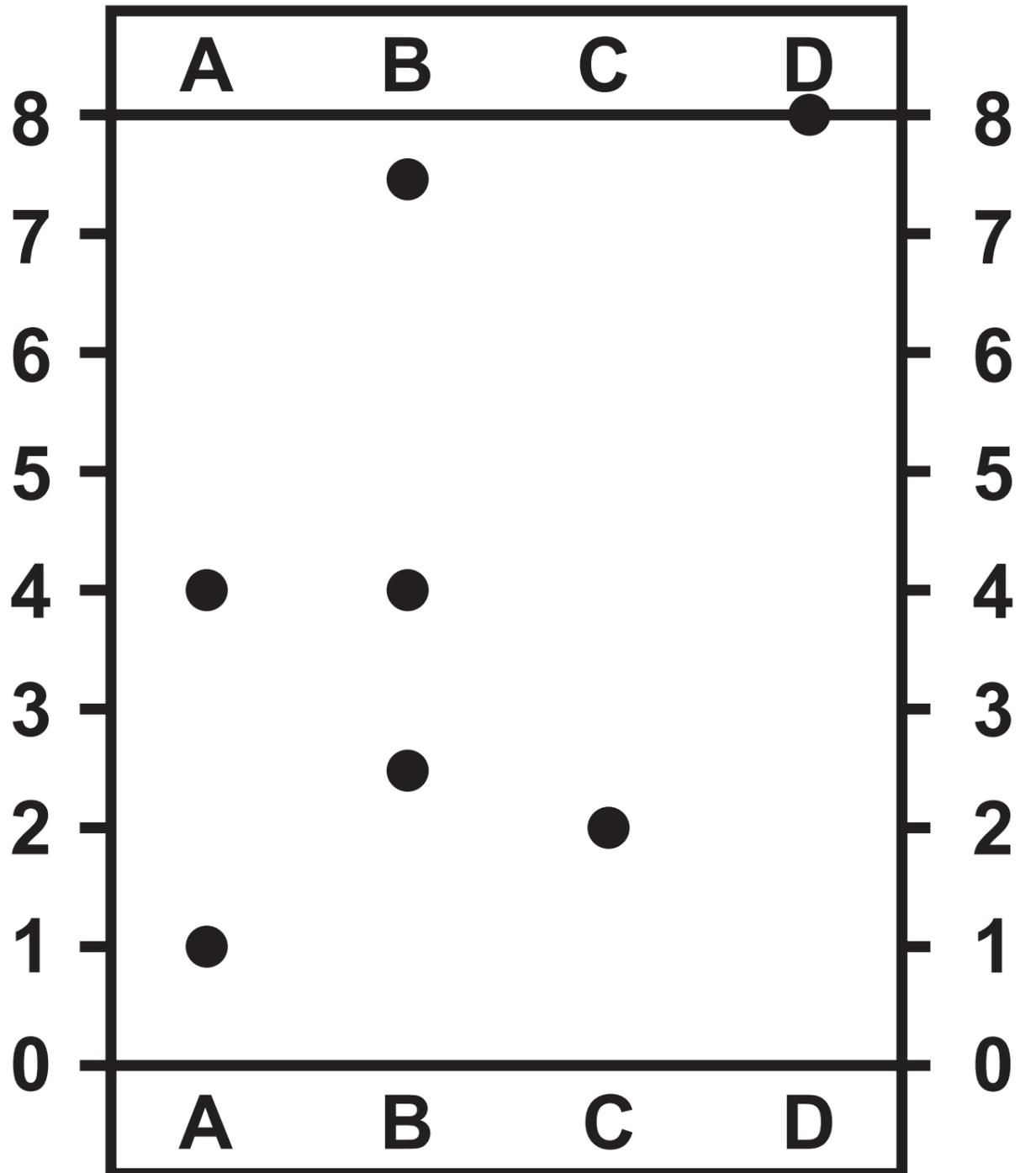


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Question 3

solvent front

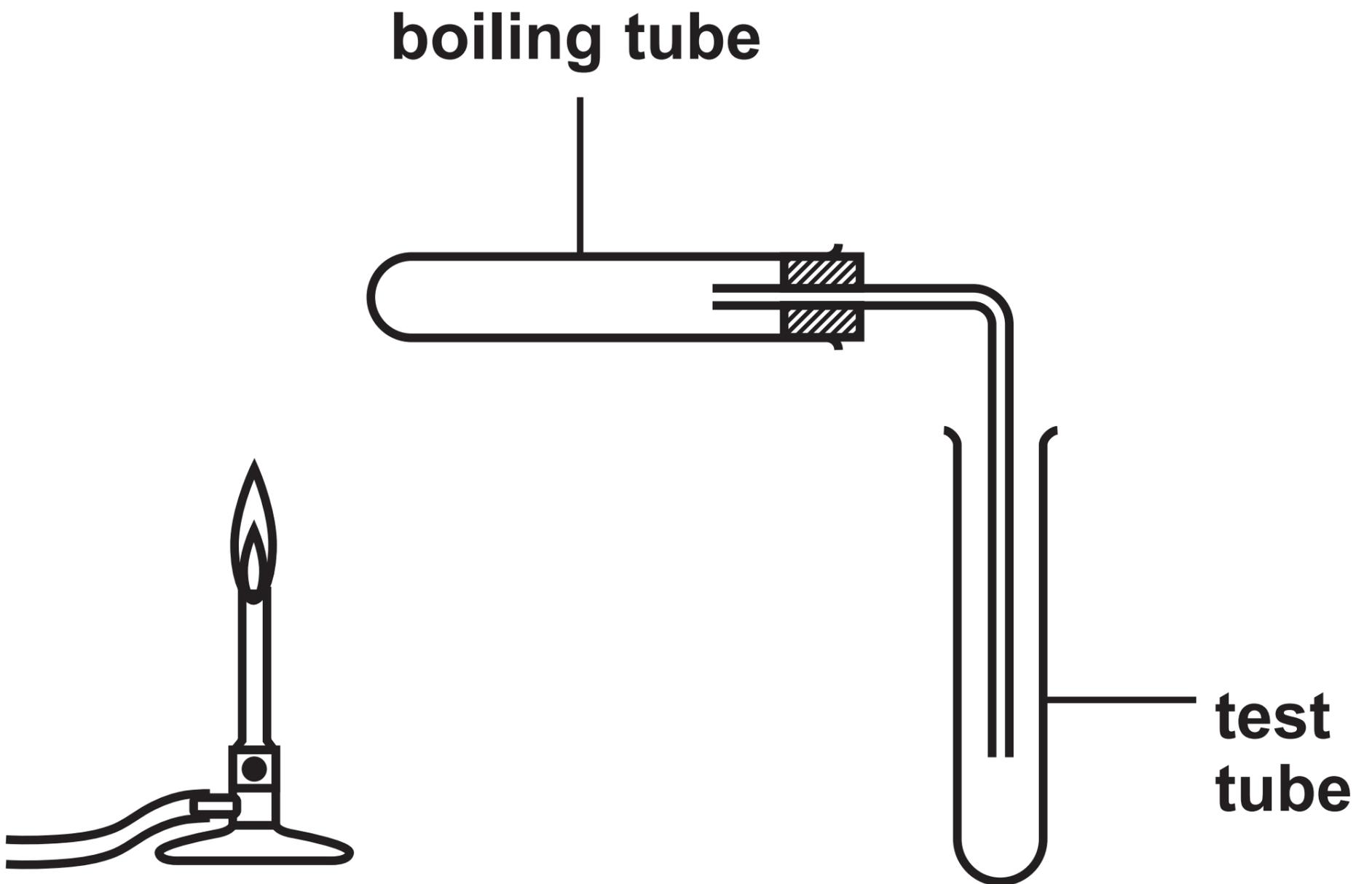
start line





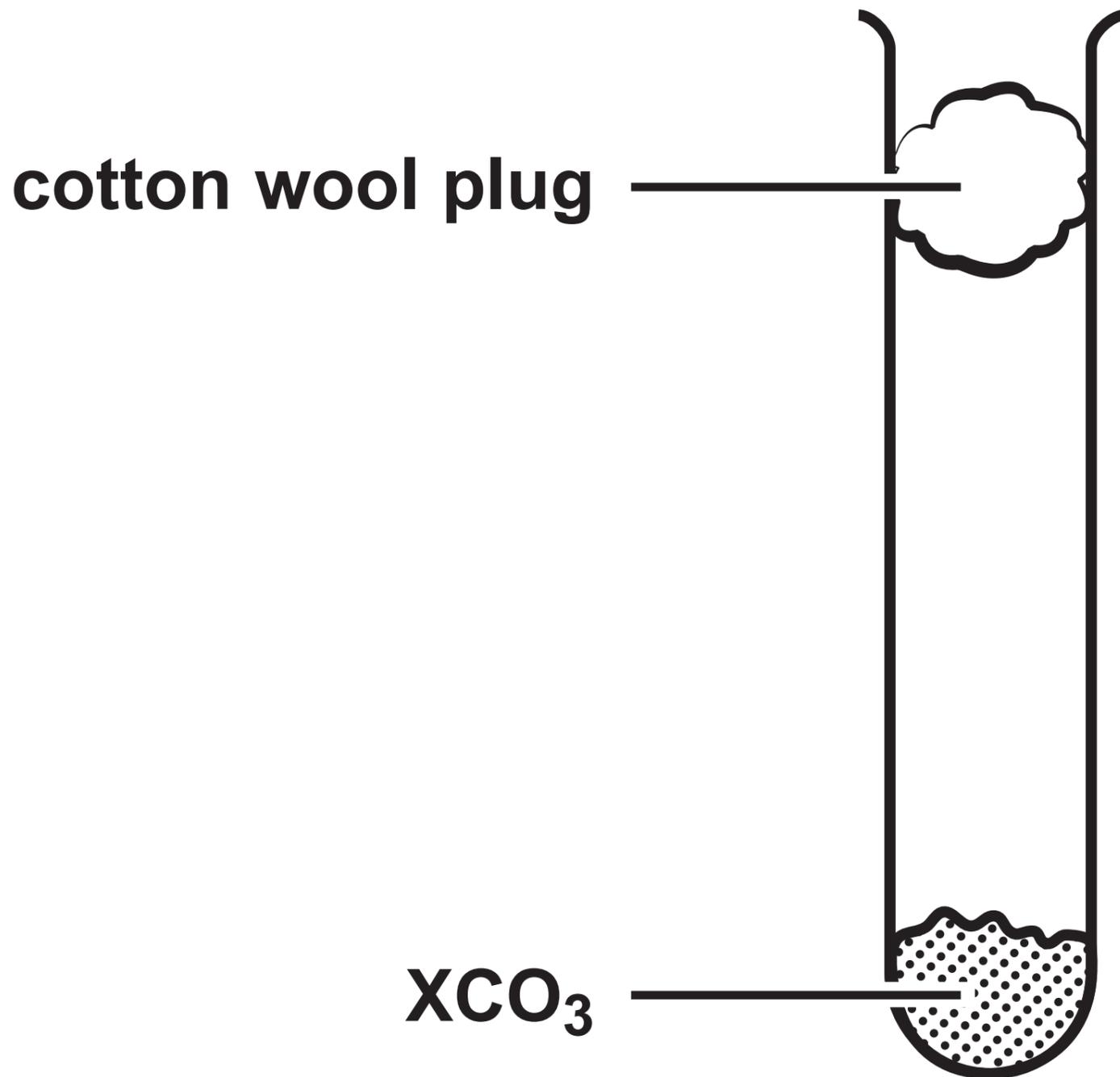
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Question 5(a)



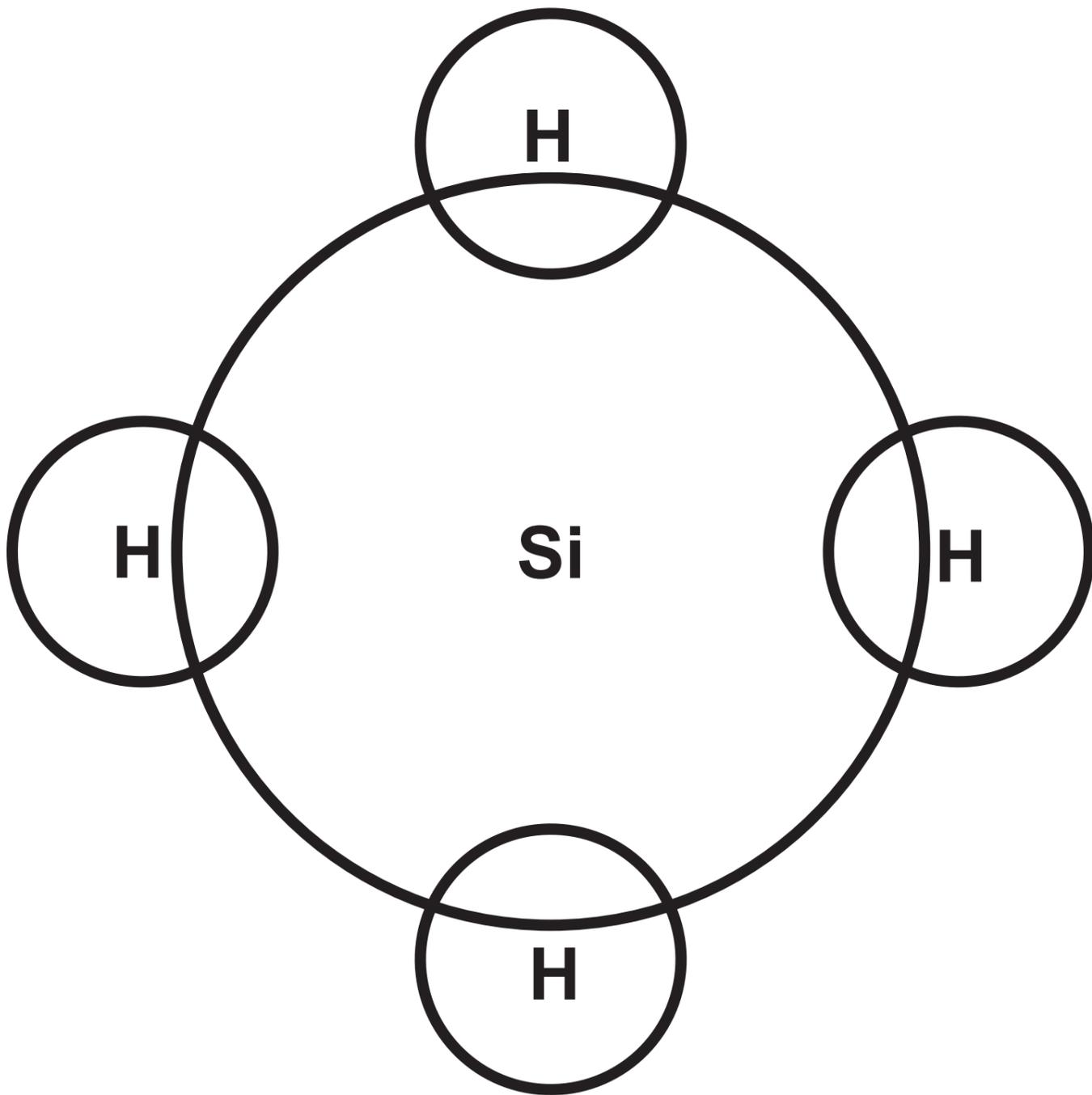
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Question 5(b)



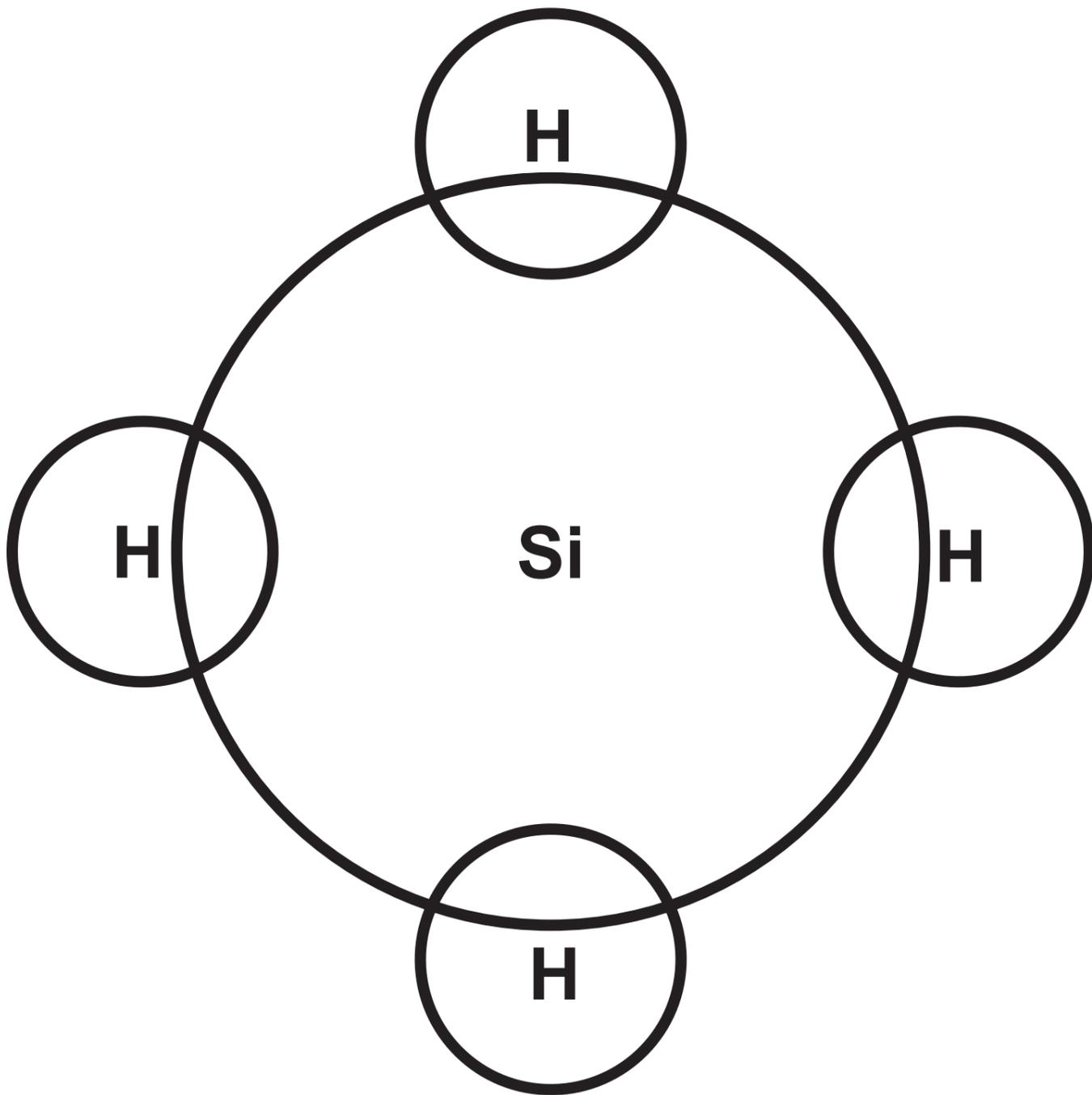
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Question 6(b)



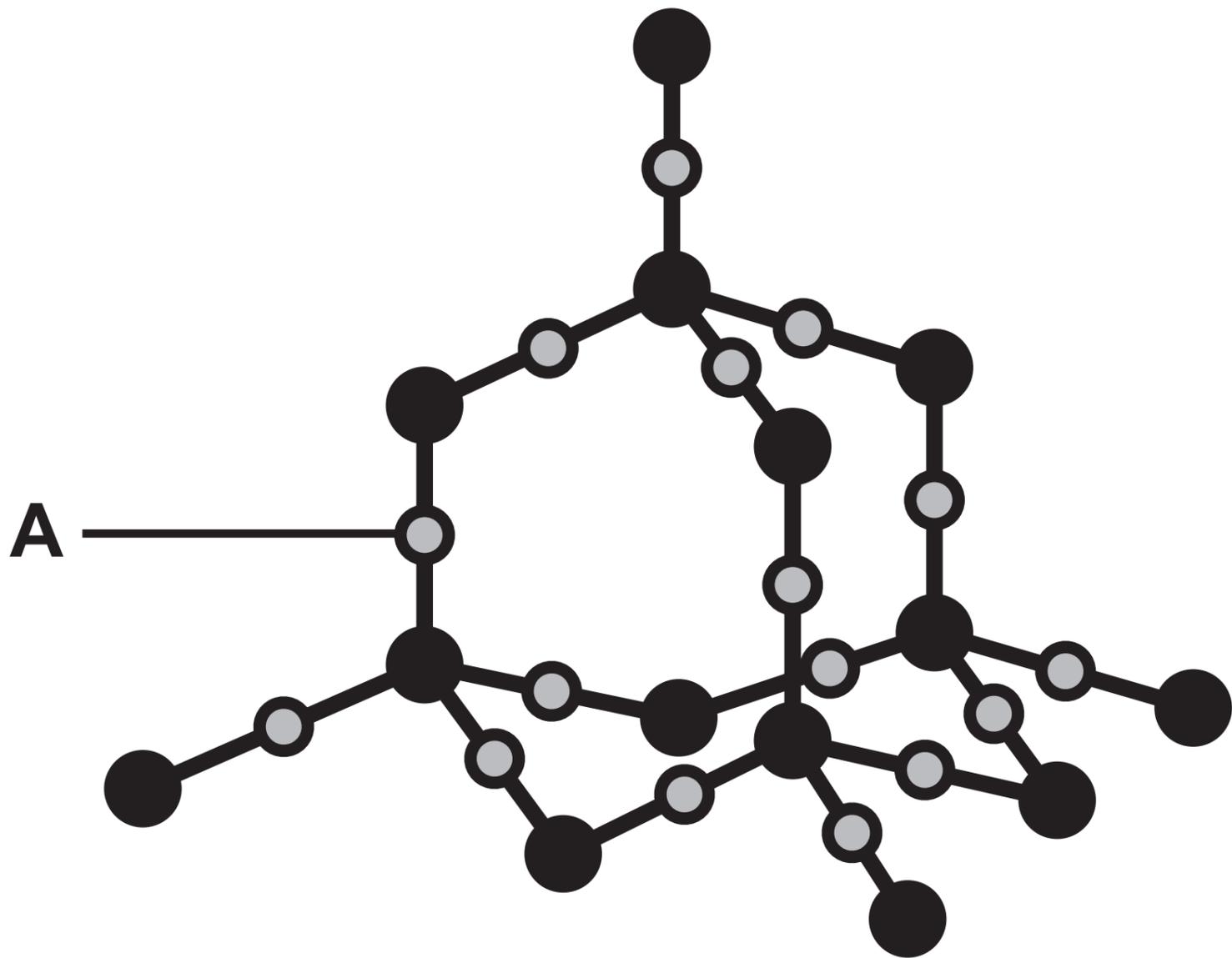
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Question 6(b)

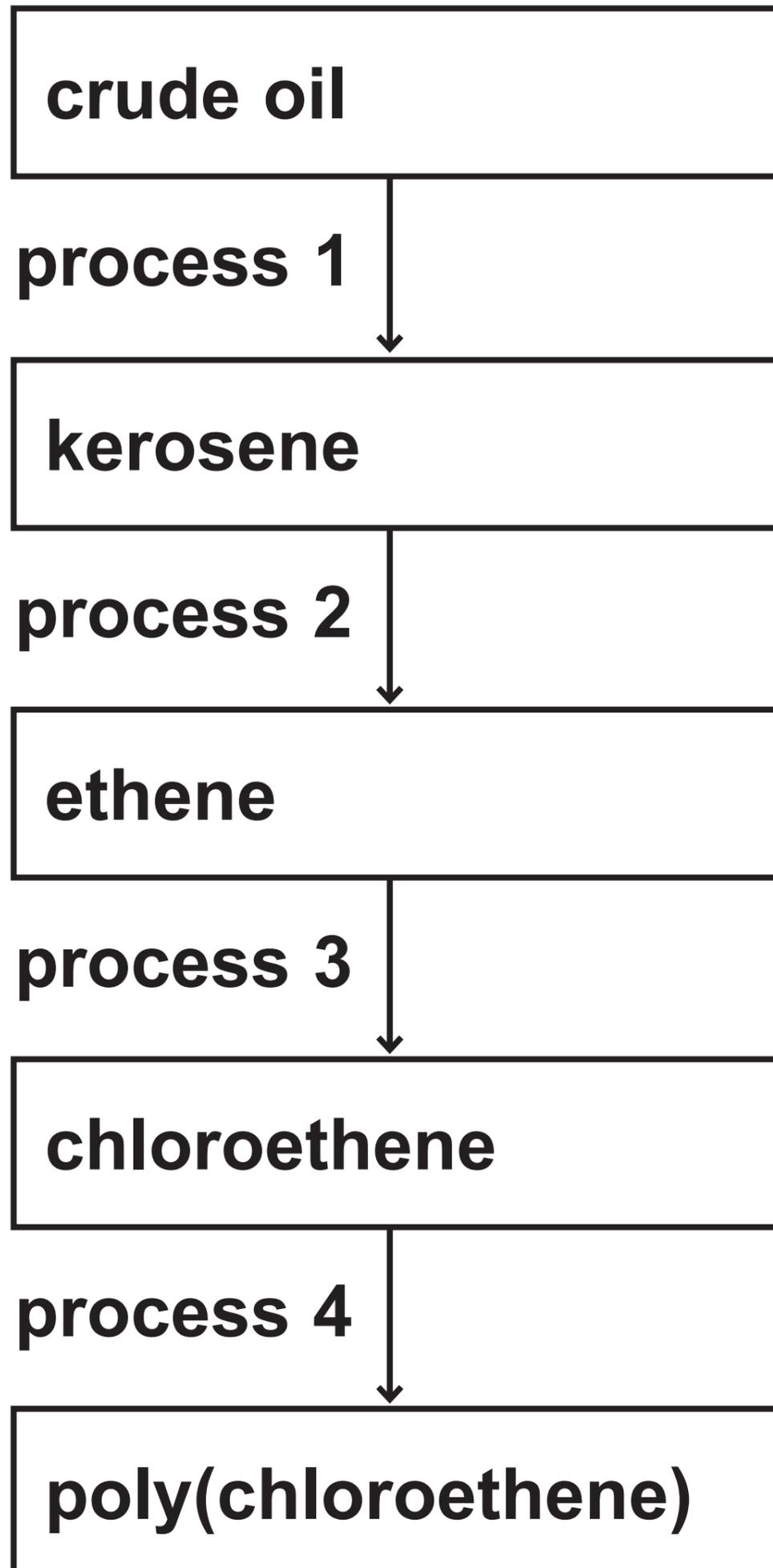


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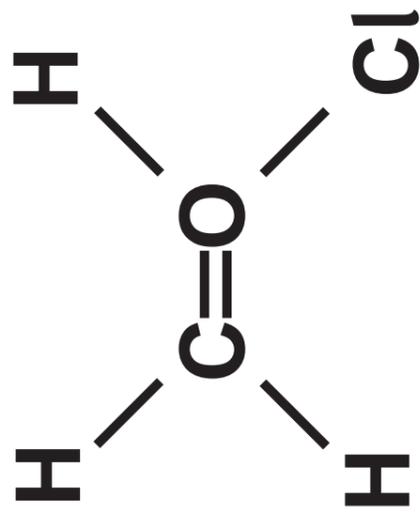
Question 6(c)



Question 7



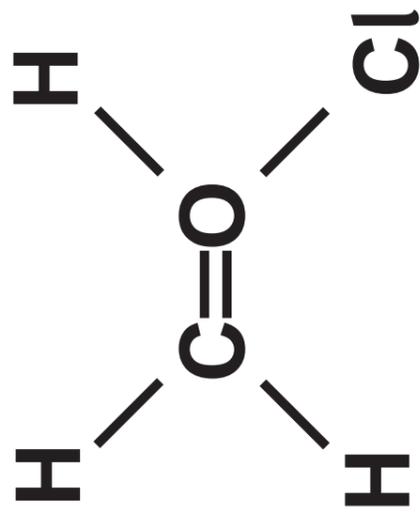
## Question 7(d)(i)



n



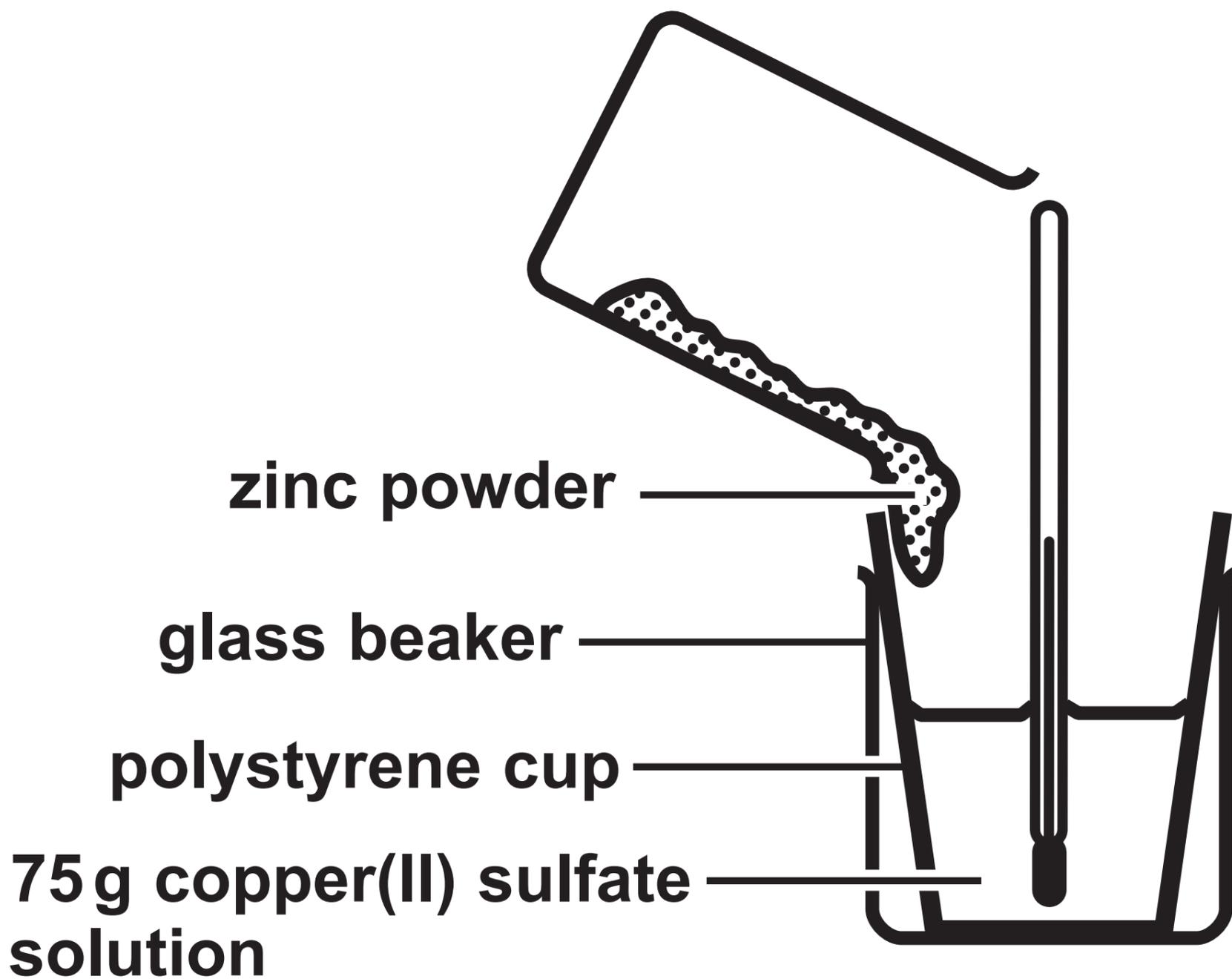
## Question 7(d)(i)



n



Question 8(a)



## Question 9

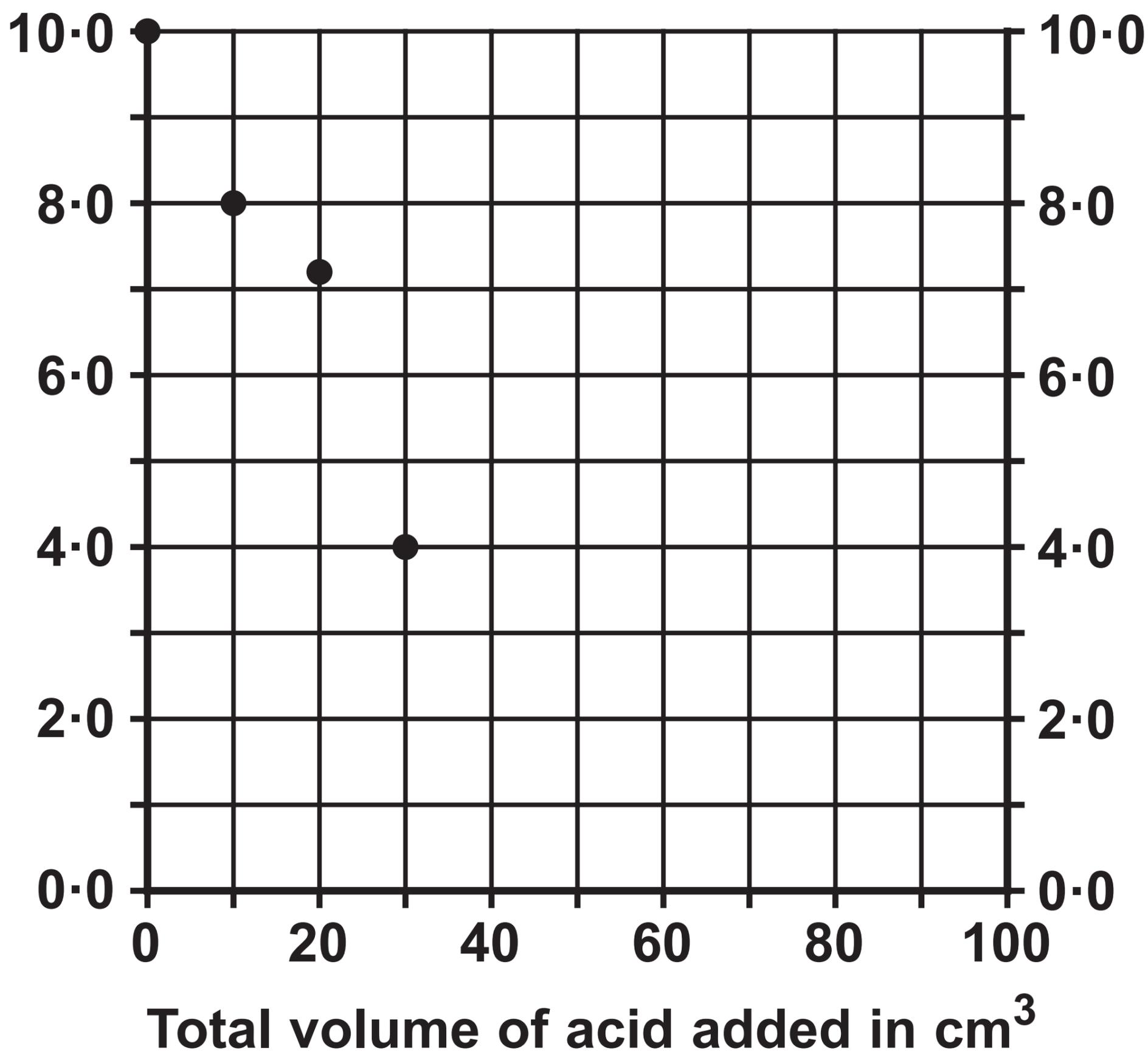
<b>Catalyst</b>	<b>Time for mixture to become colourless in s</b>
<b>no catalyst</b>	<b>55</b>
<b>cobalt(II) chloride solution</b>	<b>32</b>
<b>copper(II) sulfate solution</b>	<b>8</b>
<b>iron(II) sulfate solution</b>	<b>27</b>
<b>zinc nitrate solution</b>	<b>75</b>

## Question 10

<b>Total volume of acid added in cm<sup>3</sup></b>	<b>Electrical conductivity in arbitrary units</b>
<b>0·0</b>	<b>10·0</b>
<b>10·0</b>	<b>8·0</b>
<b>20·0</b>	<b>7·2</b>
<b>30·0</b>	<b>4·0</b>
<b>40·0</b>	<b>2·0</b>
<b>50·0</b>	<b>0·0</b>
<b>60·0</b>	<b>1·4</b>
<b>70·0</b>	<b>2·8</b>
<b>80·0</b>	<b>4·2</b>
<b>90·0</b>	<b>5·6</b>
<b>100·0</b>	<b>7·0</b>

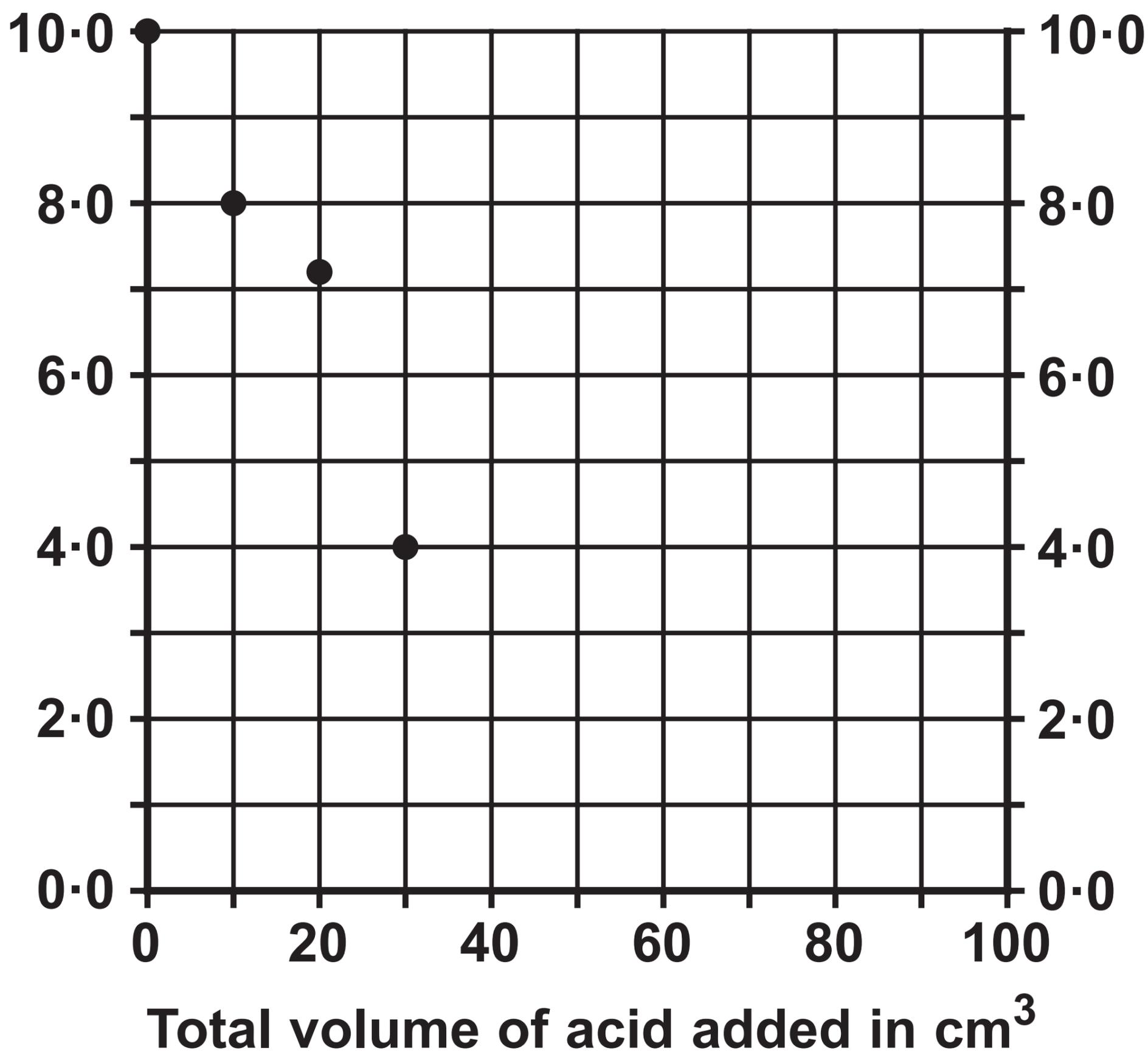
## Question 10(a)

**Electrical conductivity  
in arbitrary units**

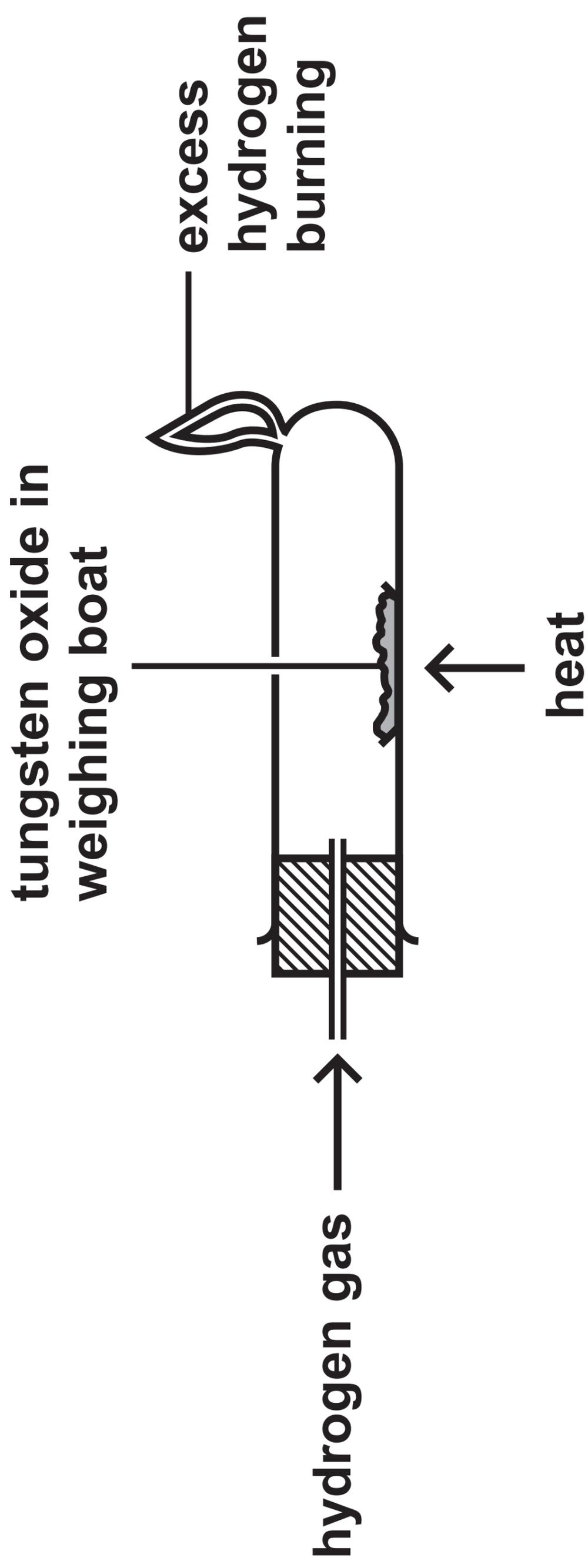


## Question 10(a)

**Electrical conductivity  
in arbitrary units**



Question 11(a)



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**Question 11(a)(iii)**

	<b>Mass in g</b>
<b>empty weighing boat</b>	<b>14.72</b>
<b>weighing boat and tungsten oxide</b>	<b>17.04</b>
<b>weighing boat and tungsten</b>	<b>16.56</b>