

Chemistry  
UNIT: 4CH1  
PAPER: 2C

Tuesday 13 June 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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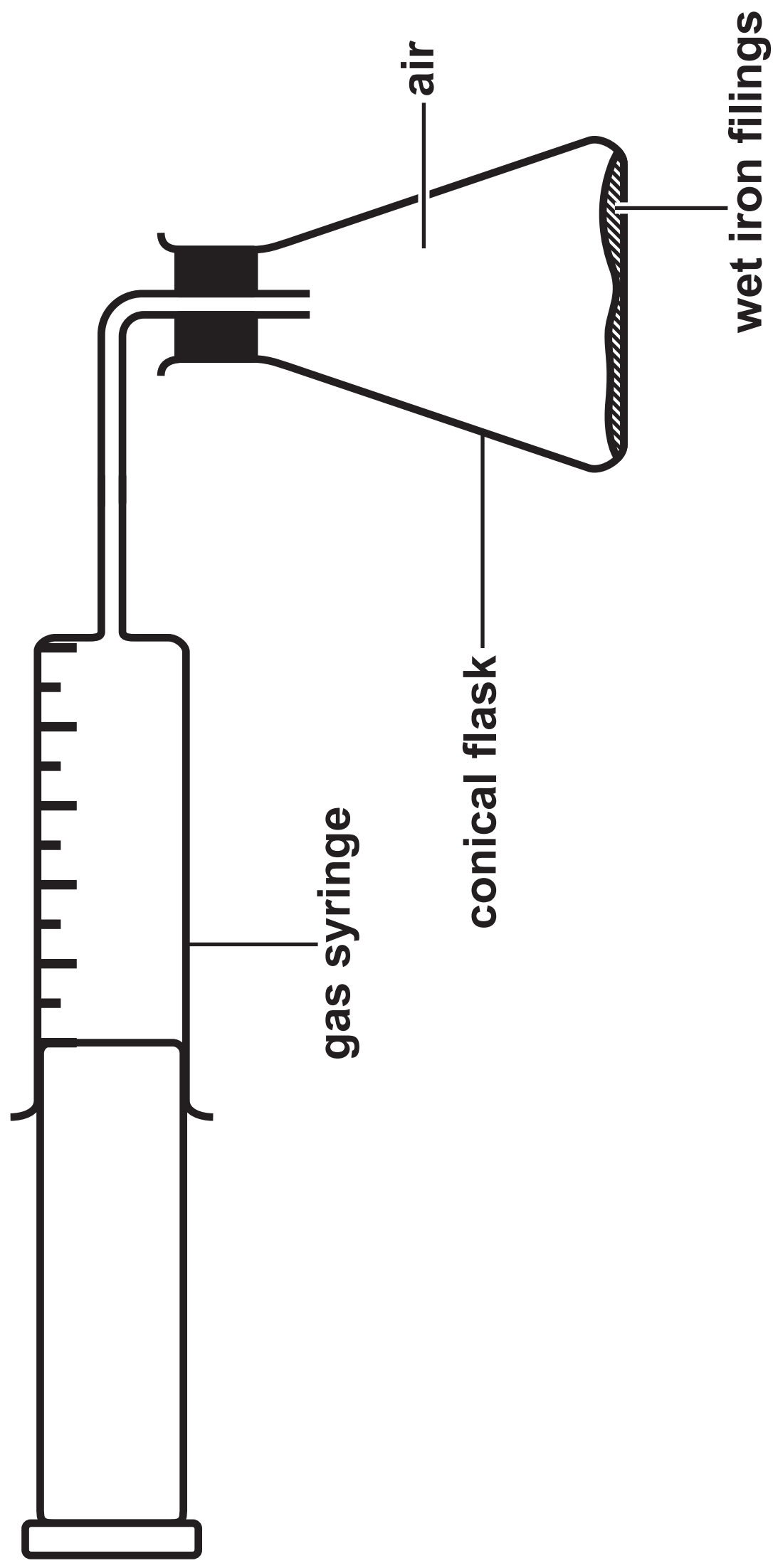
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Question 2(c)

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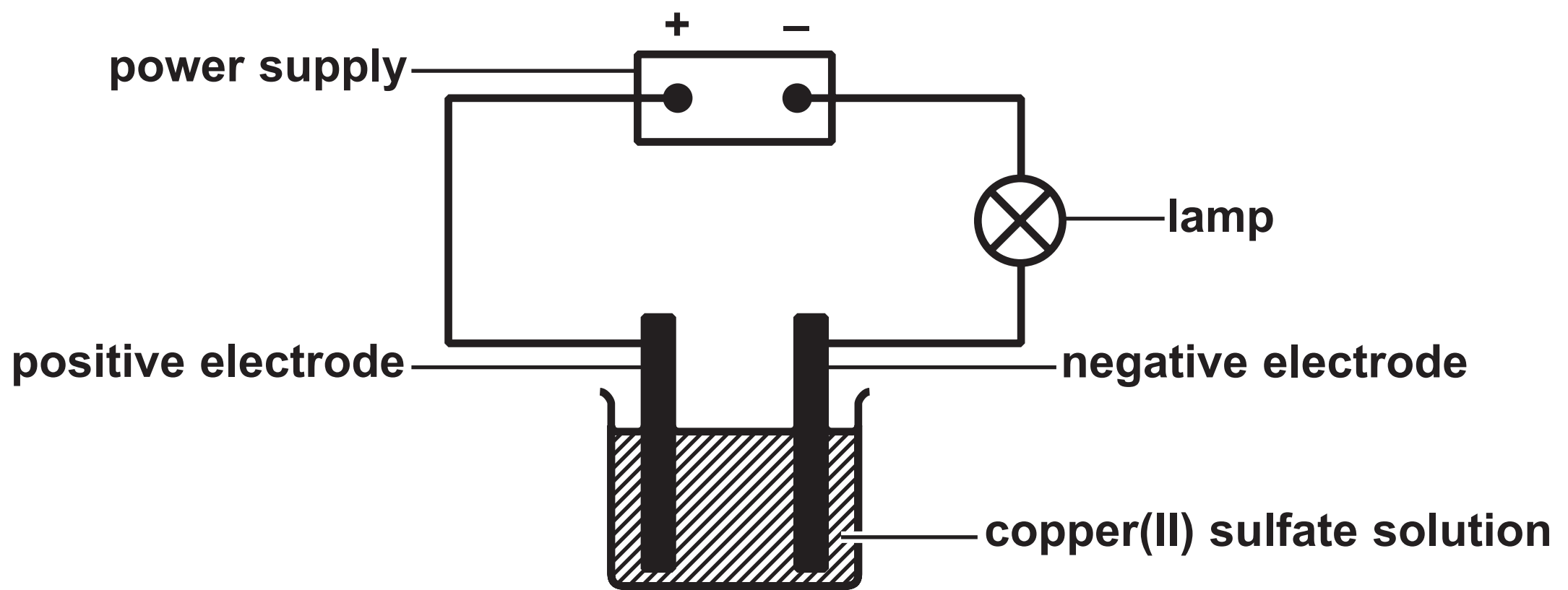


**Question 3(a)**

Question 3(b)

	Hydration	Fermentation
Reagents	ethene and steam	aqueous glucose
Catalyst		enzymes in yeast
Temperature in °C	300	
Pressure in atmospheres		1
Rate of process	fast	slow
Purity of product	pure	impure

## Question 5

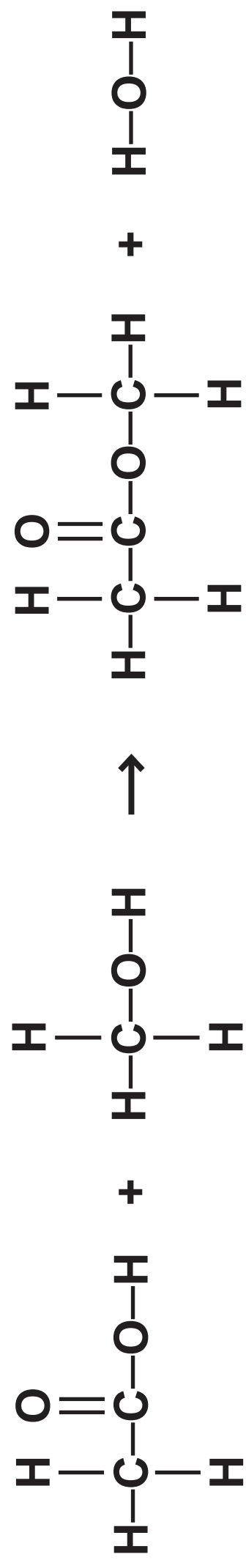


Question 5(d)(ii)





## Question 6



## Question 6(b)

Bond	C—H	C—C	C—O	C=O	O—H
Number of bonds in reactants	6	1	2	1	2
Number of bonds in products	6	1	2	1	2

## Question 3(a)



## Question 3(b)

	Hydration	Fermentation
Reagents	ethene and steam	aqueous glucose
Catalyst		enzymes in yeast
Temperature in °C	300	
Pressure in atmospheres		1
Rate of process	fast	slow
Purity of product	pure	impure

Question 5(d)(ii)

