

Paper Reference(s) 4CH1/2CR  
Pearson Edexcel International GCSE (9–1)

**Chemistry**  
UNIT: 4CH1  
PAPER: 2CR

Tuesday 13 June 2023 – Morning

## 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.**

## Contents

### Page

4	Question 1(b)
5	Question 2(a)
6	Question 3(a)
7	Question 3(b)
8	Question 4(a)
9	Question 5(c)
10	Question 5(d)
11	Question 7(b)
12	Question 7(c)(i)

### Spare Copies

13	Question 2(a)
14	Question 5(c)
15	Question 7(c)(i)



## Question 2(a)

<b>Halogen</b>	<b>Physical state at room temperature</b>	<b>Colour</b>	<b>Colour of dilute aqueous solution of halogen</b>
<b>fluorine</b>	<b>gas</b>		<b>colourless</b>
<b>chlorine</b>	<b>gas</b>	<b>green</b>	<b>colourless</b>
<b>bromine</b>		<b>red-brown</b>	<b>orange</b>
<b>iodine</b>	<b>solid</b>	<b>grey</b>	<b>brown</b>

**Question 3(a)**

**aluminium**

**calcium**

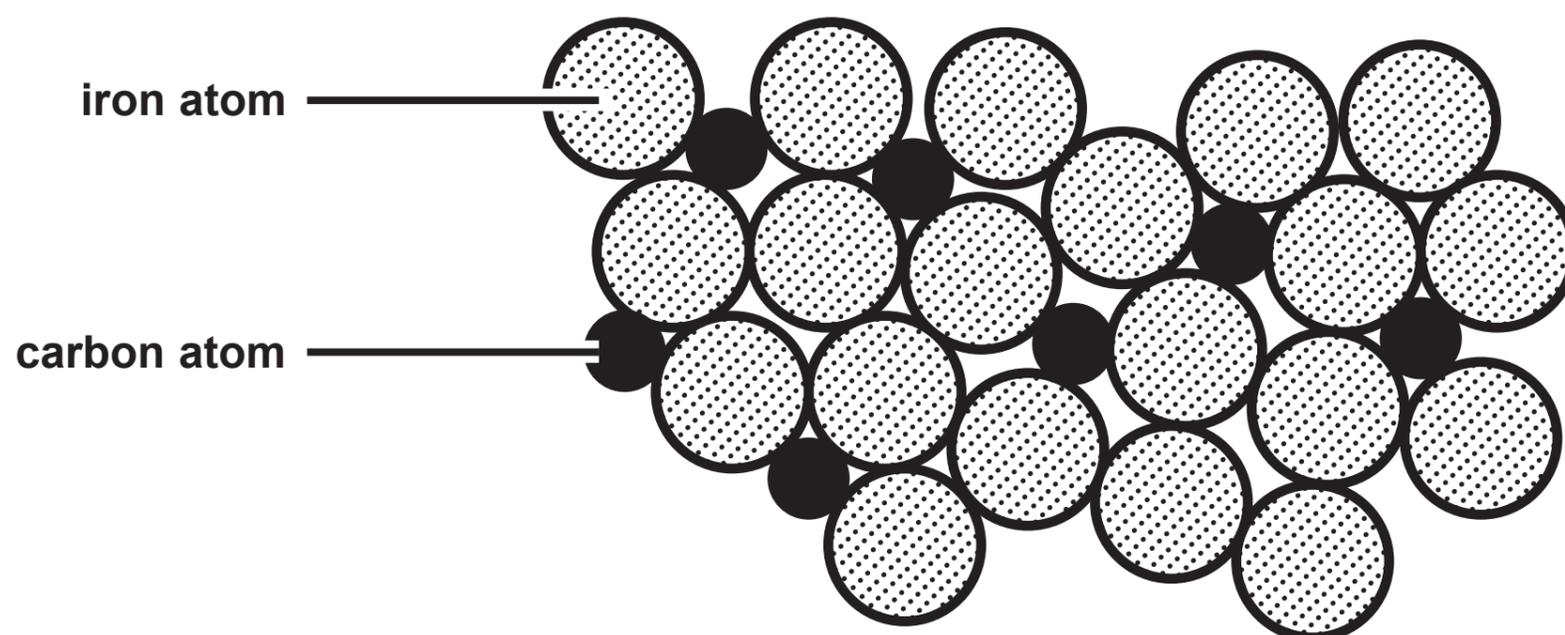
**gold**

**magnesium**

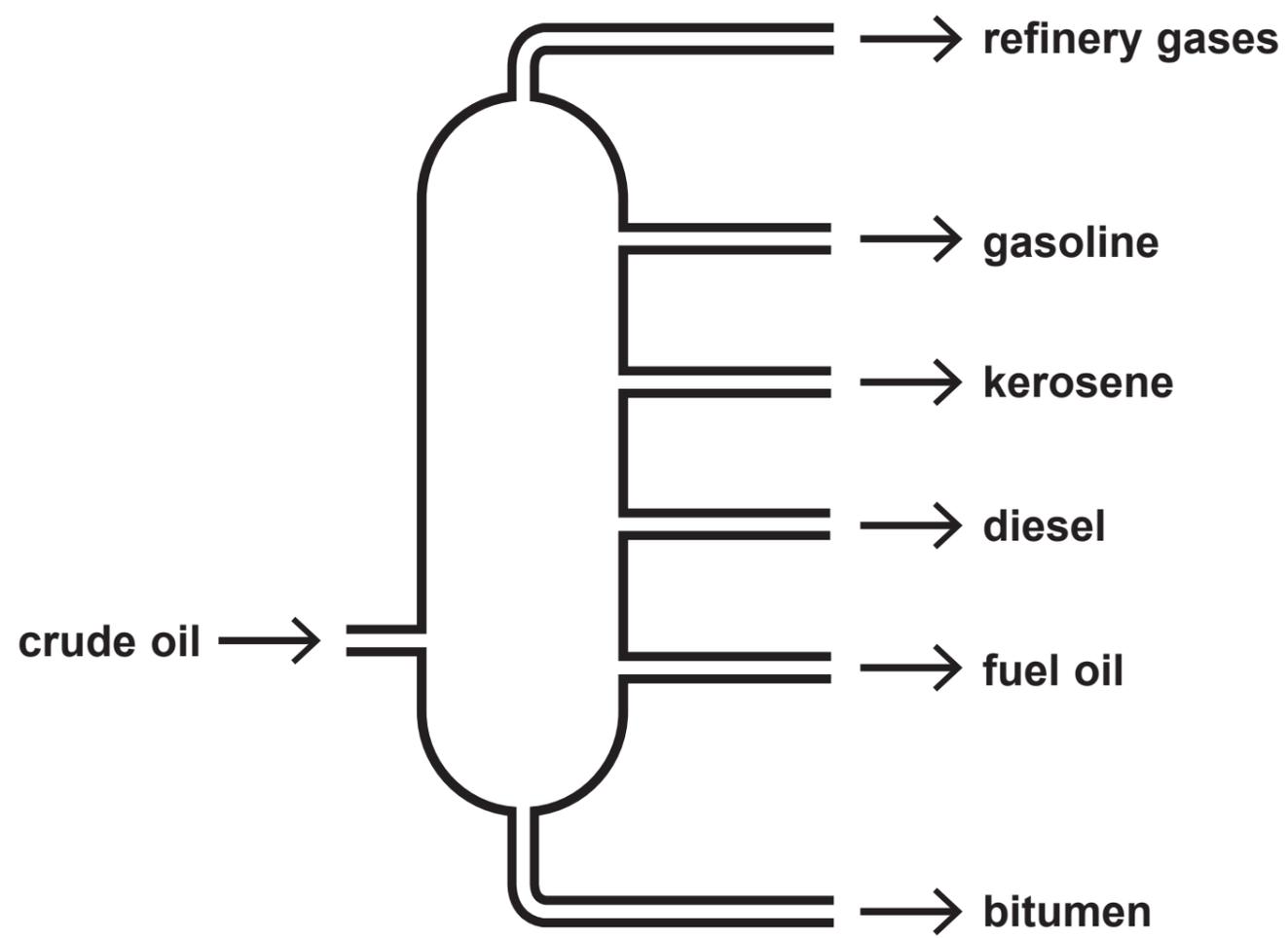
**silver**

**zinc**

## Question 3(b)

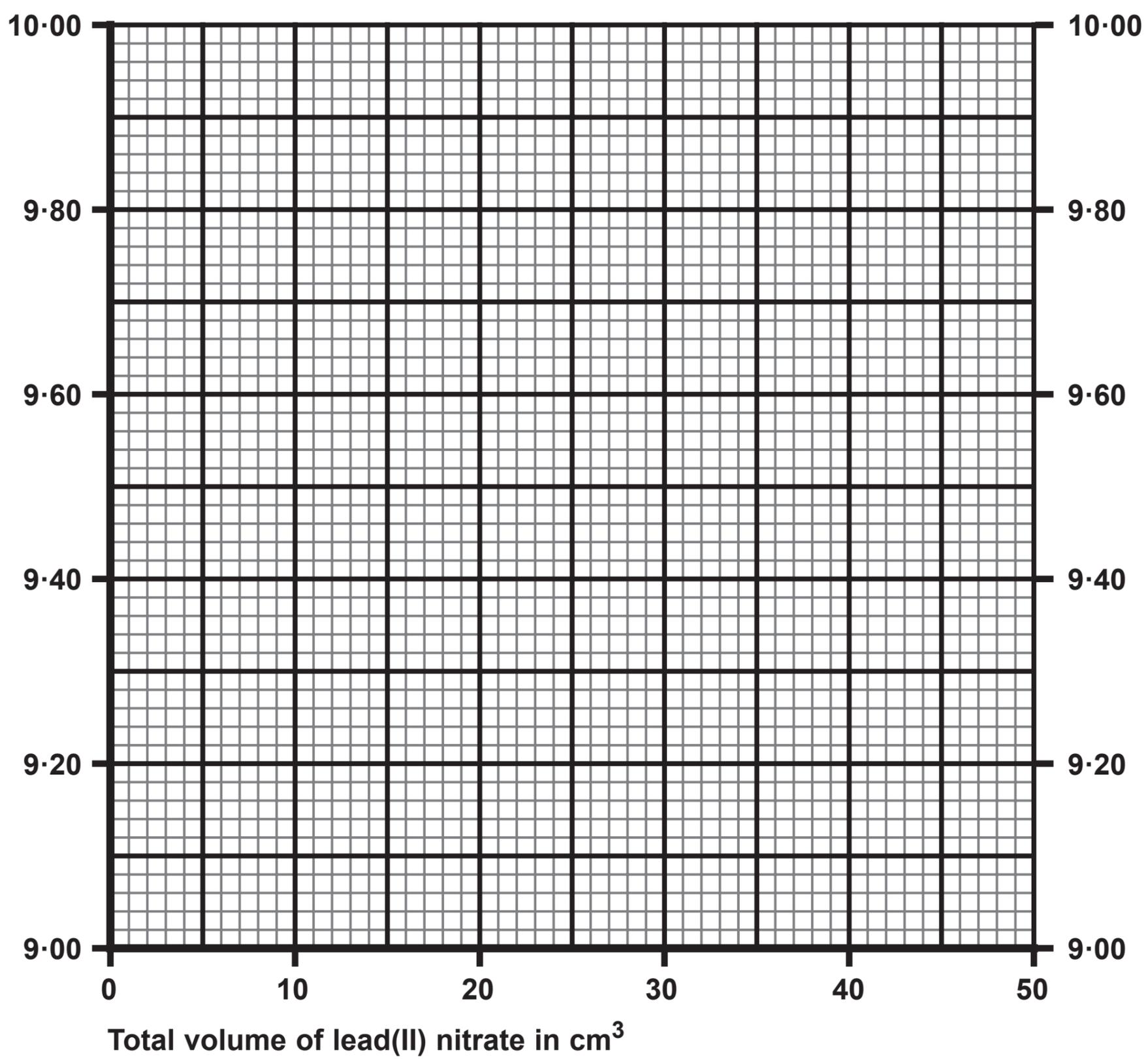


## Question 4(a)

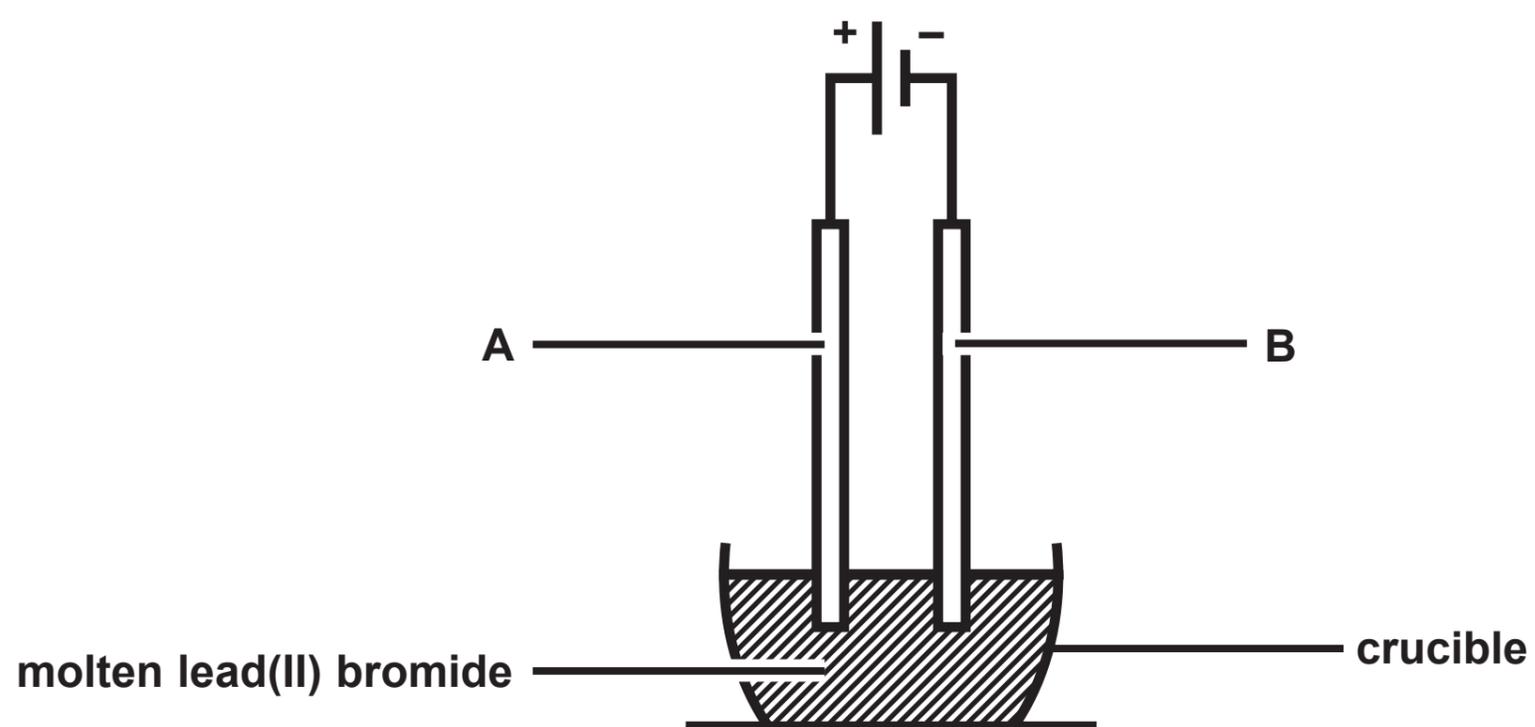


## Question 5(c)

Electrical conductivity  
in arbitrary units



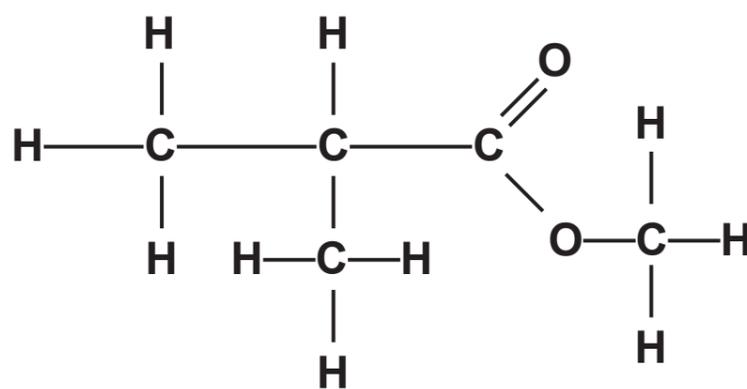
## Question 5(d)



## Question 7(b)

<b>Bond</b>	<b>Bond energy in kJ/mol</b>
<b>H—H</b>	<b>436</b>
<b>C≡O</b>	<b>1072</b>
<b>C—H</b>	<b>414</b>
<b>C—O</b>	<b>358</b>
<b>O—H</b>	<b>463</b>

## Question 7(c)(i)

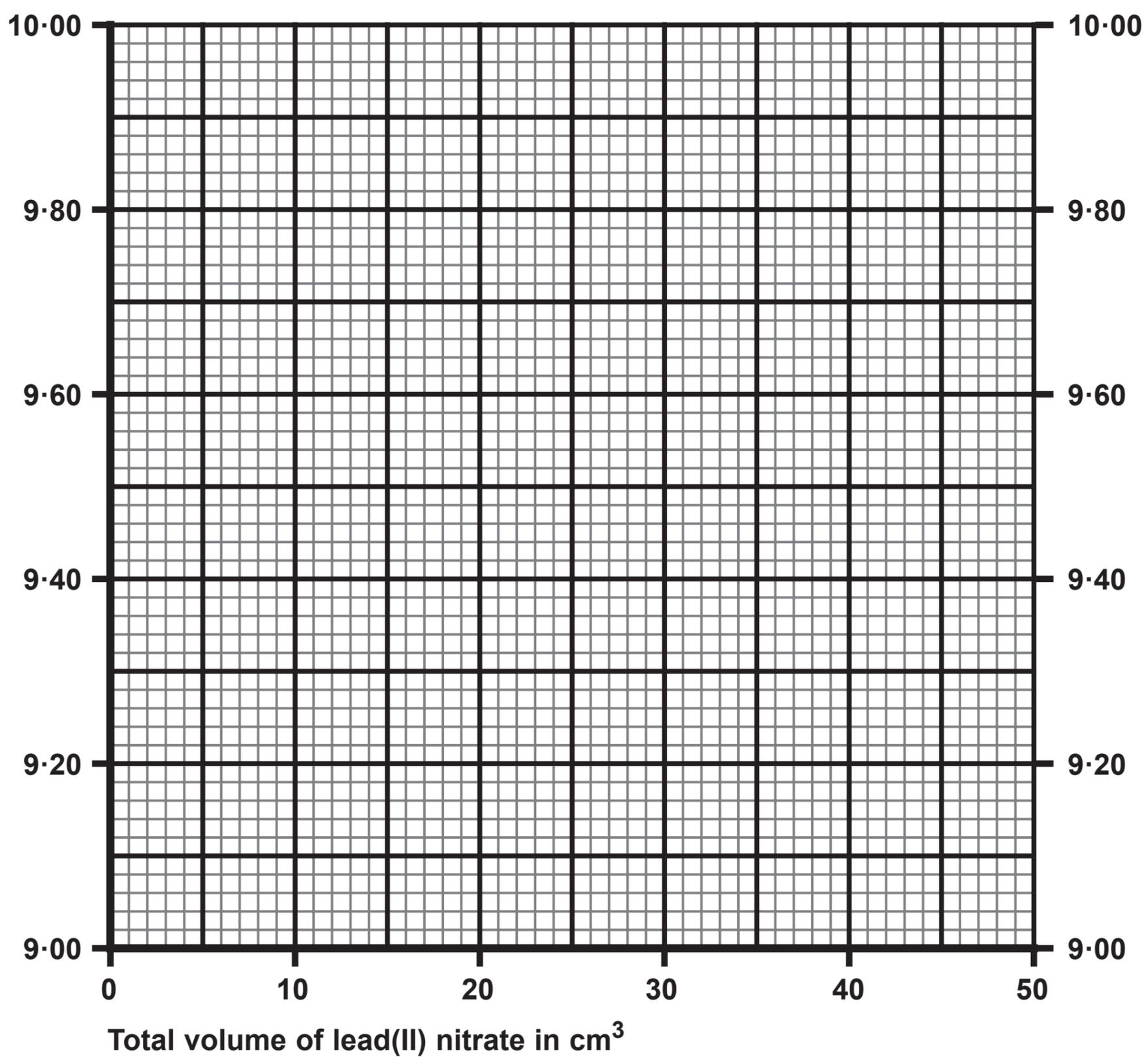


## Question 2(a)

<b>Halogen</b>	<b>Physical state at room temperature</b>	<b>Colour</b>	<b>Colour of dilute aqueous solution of halogen</b>
<b>fluorine</b>	<b>gas</b>		<b>colourless</b>
<b>chlorine</b>	<b>gas</b>	<b>green</b>	<b>colourless</b>
<b>bromine</b>		<b>red-brown</b>	<b>orange</b>
<b>iodine</b>	<b>solid</b>	<b>grey</b>	<b>brown</b>

## Question 5(c)

Electrical conductivity  
in arbitrary units



## Question 7(c)(i)

