

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

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

Friday 17 May 2024 – Morning

Time: 2 hours

Diagram Booklet

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

**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.

CONTENTS

Page

4	Question 1(a)
5	Question 2(a)
6	Question 2(b)
7	Question 3
8	Question 3(c)
9	Question 4(b)
10	Question 4(c)
11	Question 5
12	Question 7(b)
13	Question 8(a)(ii)
14	Question 8(e)(i)
15	Question 9(a)

(continued on the next page)

16 Question 9(b)

17 Question 10(a)

18 Question 10(b)

Spare Copies

19 Question 1(a)

20 Question 7(b)

21 Question 8(a)(ii)

22 Question 8(e)(i)

23 Question 9(b)

24 Question 10(a)

25 Question 10(b)

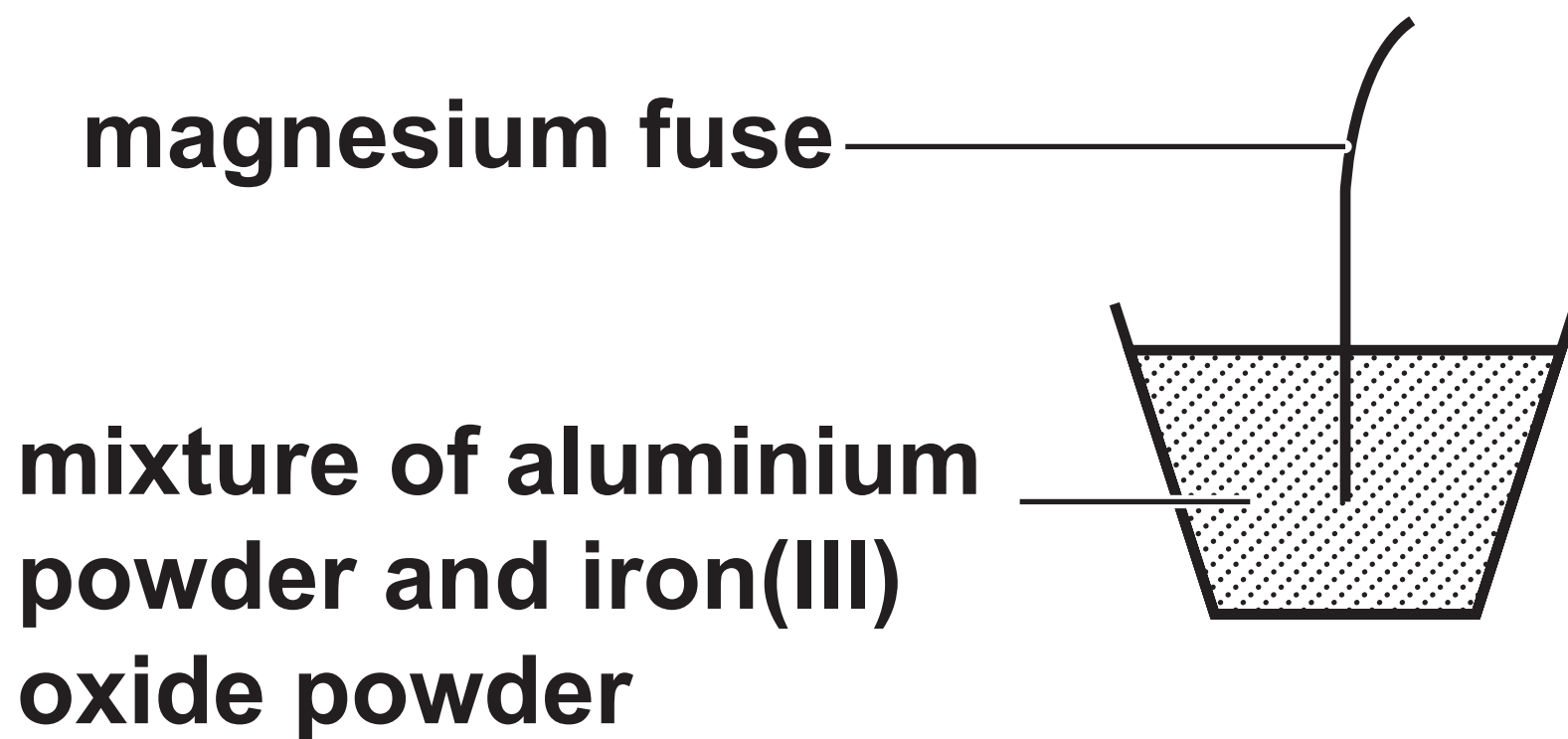
Question 1(a)

Description	Substance
a good conductor of electricity	
an element that is a liquid at room temperature	
a substance that can be used to form a polymer	
an element that forms a basic oxide	
a substance that has a giant covalent structure	

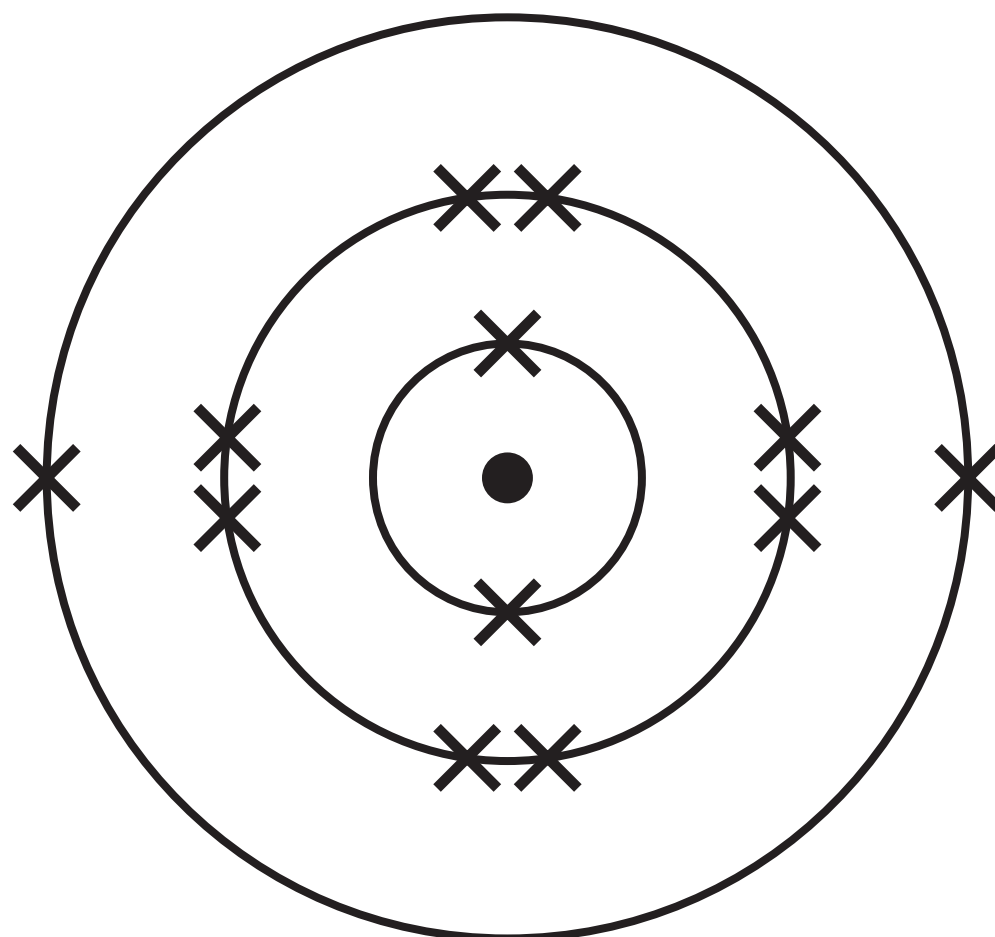
Question 2(a)

Metal	Reaction with water	Reaction with dilute hydrochloric acid
P	no reaction	no reaction
Q	very fast reaction	(not done)
R	no reaction	slow reaction
S	slow reaction	fast reaction

Question 2(b)



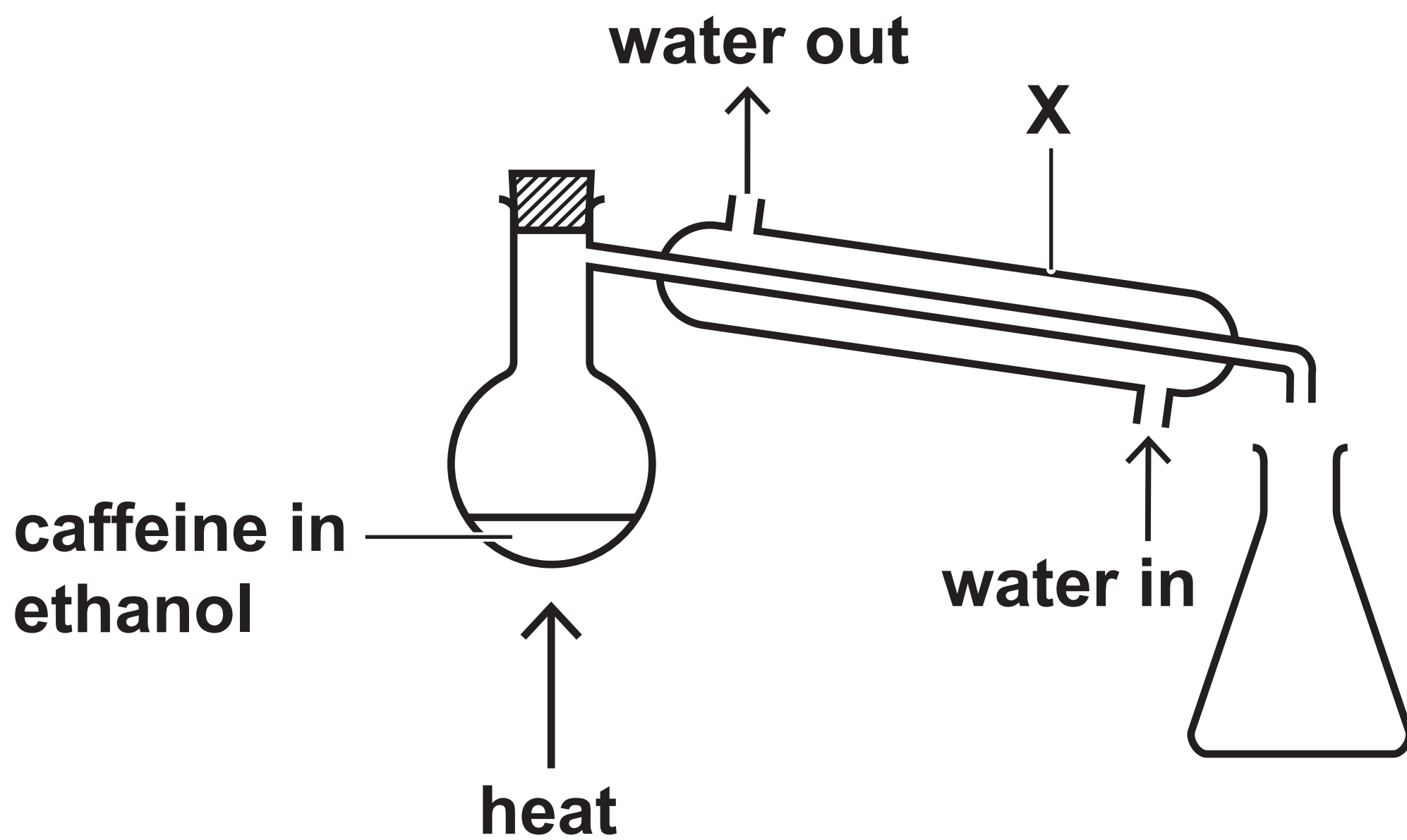
Question 3



Question 3(c)

Isotope	Number of protons	Number of neutrons	Percentage abundance
1	12	12	79.0
2	12	13	10.0
3	12	14	11.0

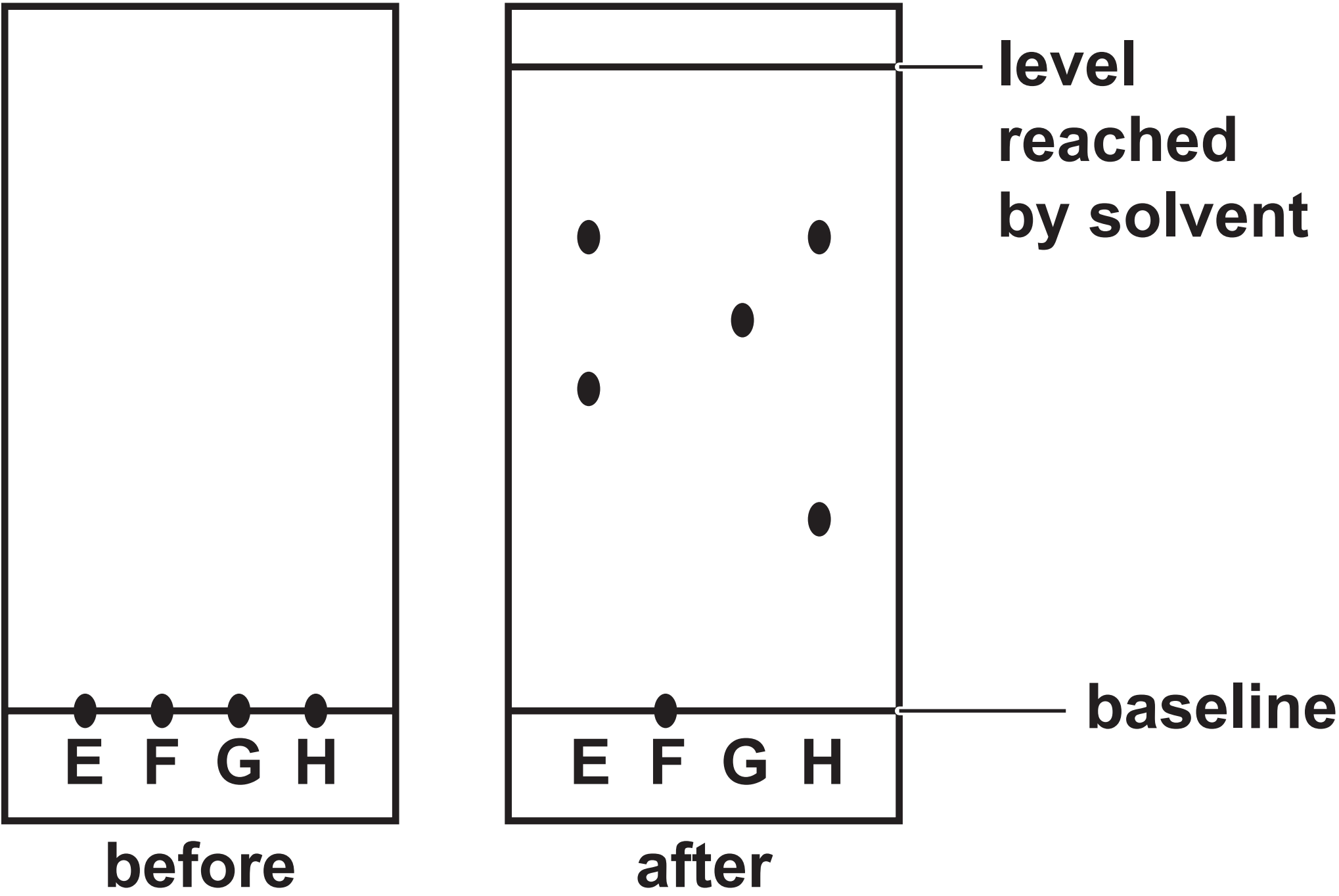
Question 4(b)



Question 4(c)

Name	Formula	Melting point in °C
caffeine	$\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$	235
calcium bromide	CaBr_2	730

Question 5



Question 7(b)

N

N

Question 8(a)(ii)

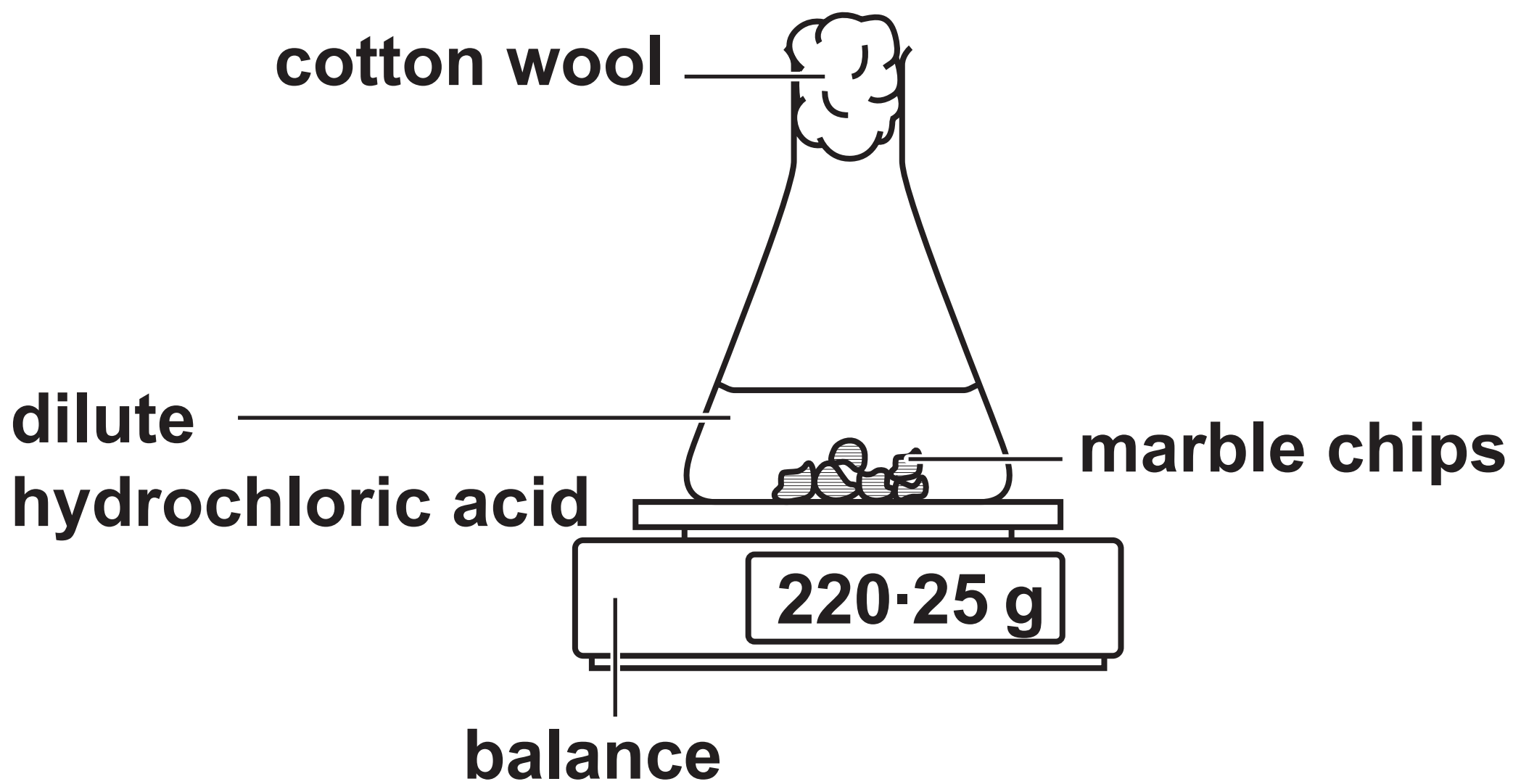
alkene isomer 1

alkene isomer 2

Question 8(e)(i)

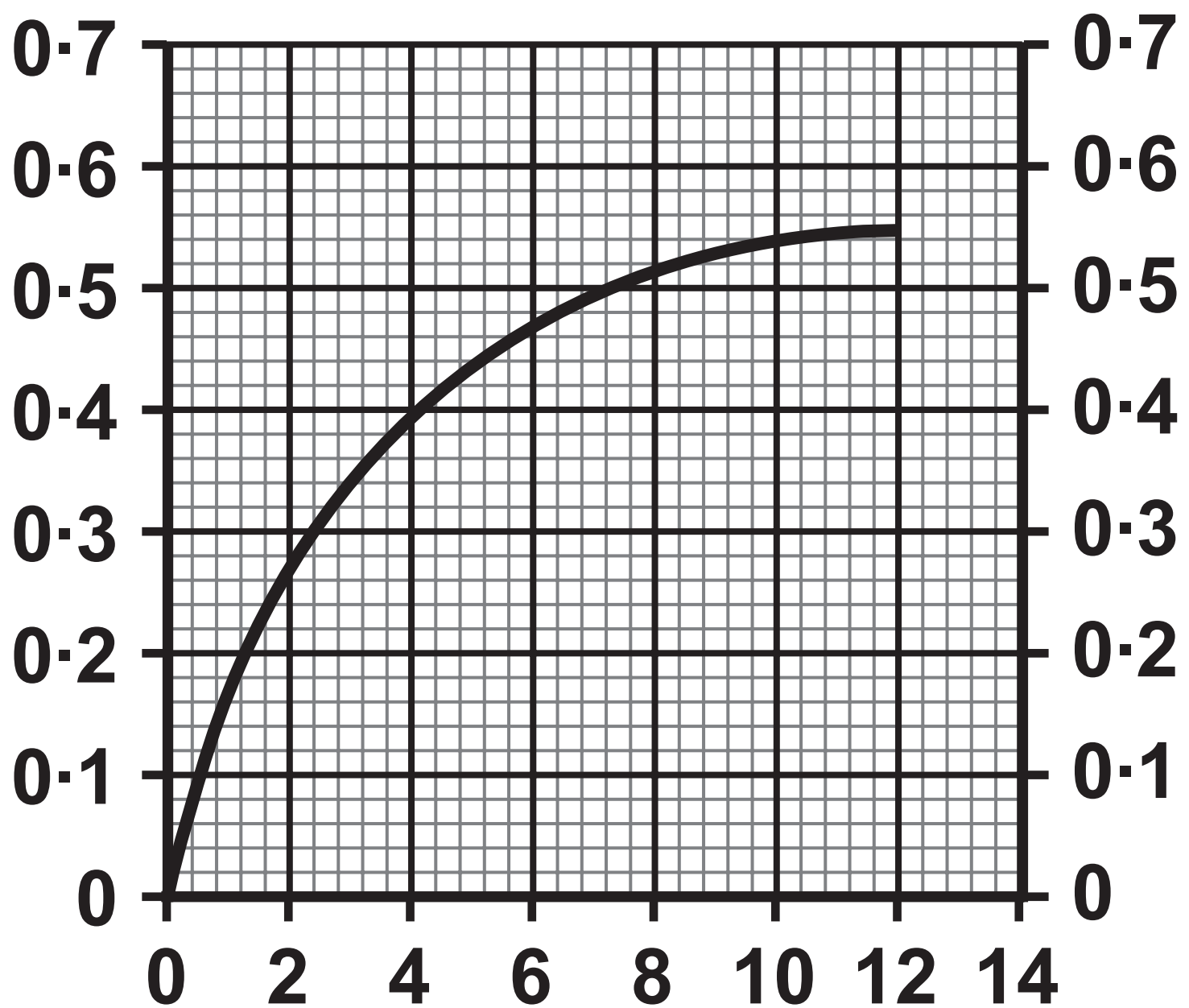


Question 9(a)



Question 9(b)

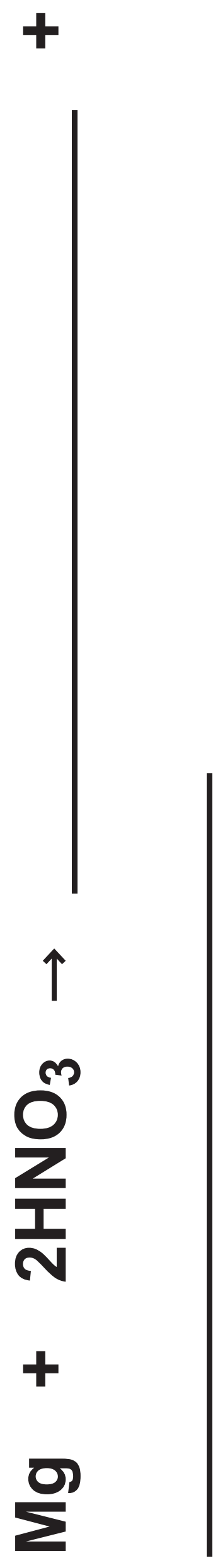
Loss in mass in g



Time in minutes

Question 10(a)

17



Question 10(b)

starting temperature of the acid in °C	
highest temperature reached in °C	
temperature rise in °C	16.4

Question 1(a)

Description	Substance
a good conductor of electricity	
an element that is a liquid at room temperature	
a substance that can be used to form a polymer	
an element that forms a basic oxide	
a substance that has a giant covalent structure	

Question 7(b)

N

N

Question 8(a)(ii)

alkene isomer 1

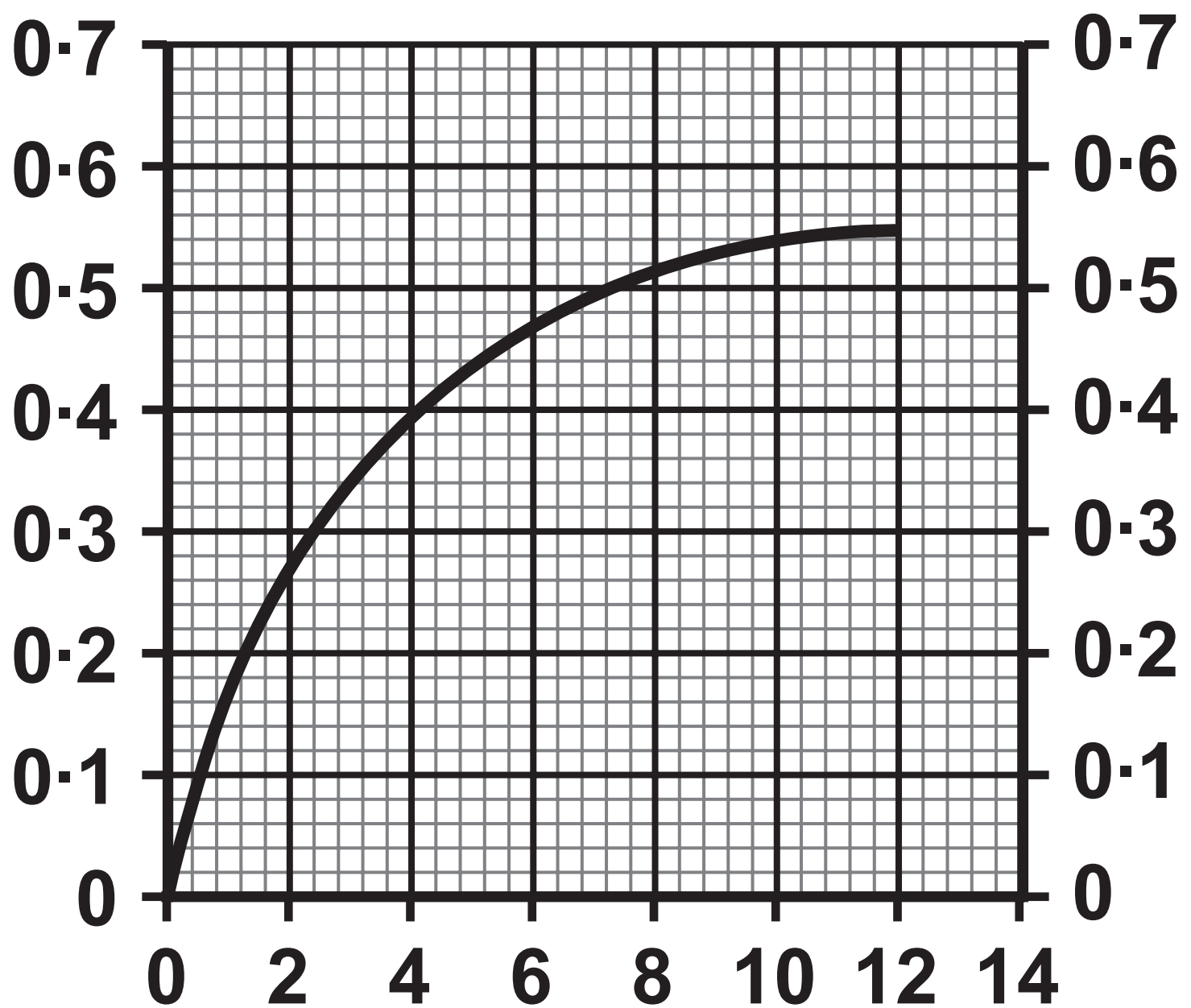
alkene isomer 2

Question 8(e)(i)



Question 9(b)

Loss in mass in g



Time in minutes

Question 10(a)

24



Question 10(b)

25

starting temperature of the acid in °C	
highest temperature reached in °C	
temperature rise in °C	16·4