Paper Reference(s) 1SC0/1CH
Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Combined Science
PAPER 2
Higher Tier

Friday 17 May 2024 – Morning

Time: 1 hour 10 minutes

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						

V74438A

Pearson

INSTRUCTIONS

There may be spare copies of some diagrams in case you need them.

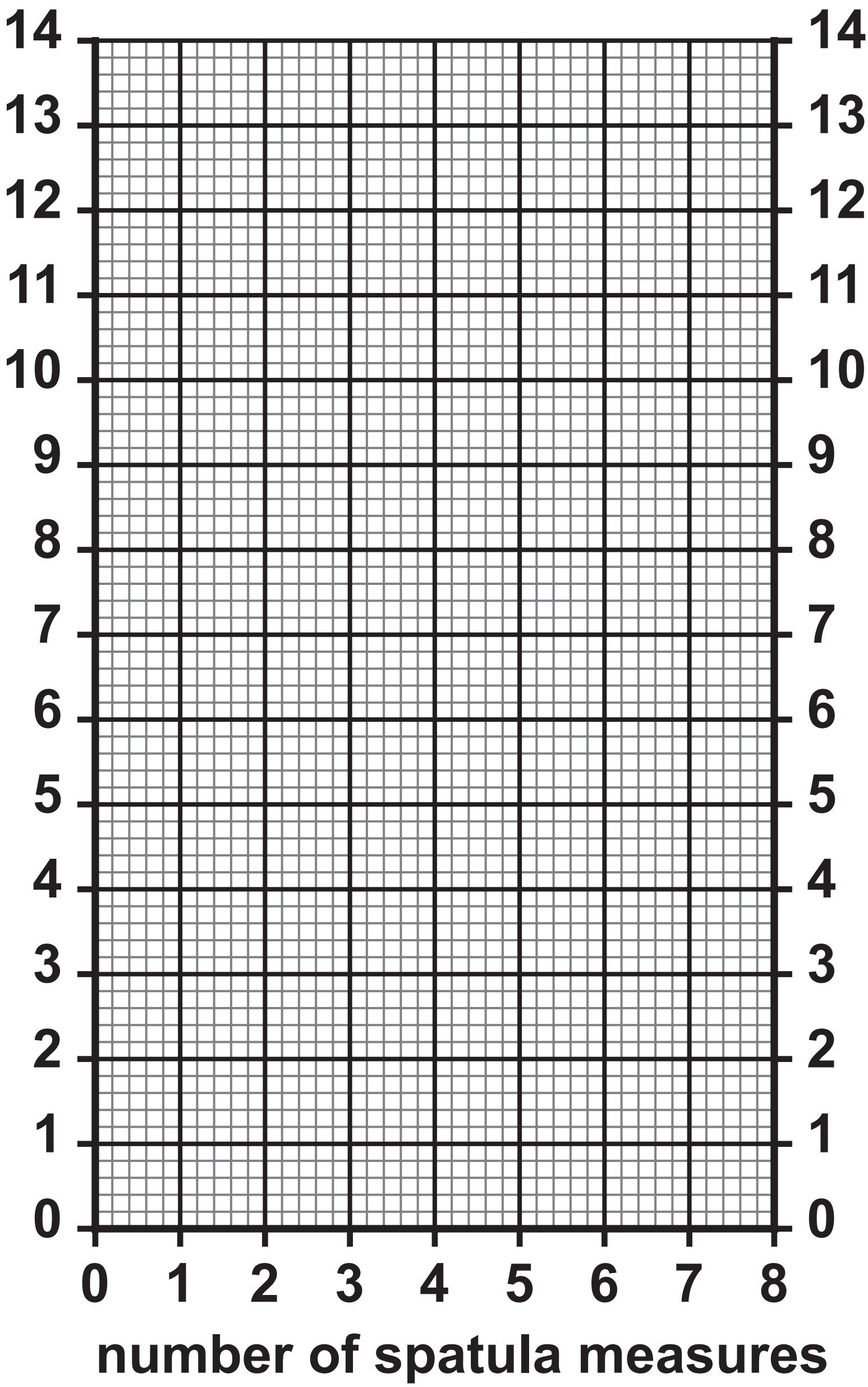
CONTENTS

Question 1(a)(i)

$$Ba(OH)_2(s) + \_\_\_\_\_HCl(aq) \longrightarrow BaCl_2(aq) + 2H_2O(l)$$

Question 1(b)(iii)

pH of mixture



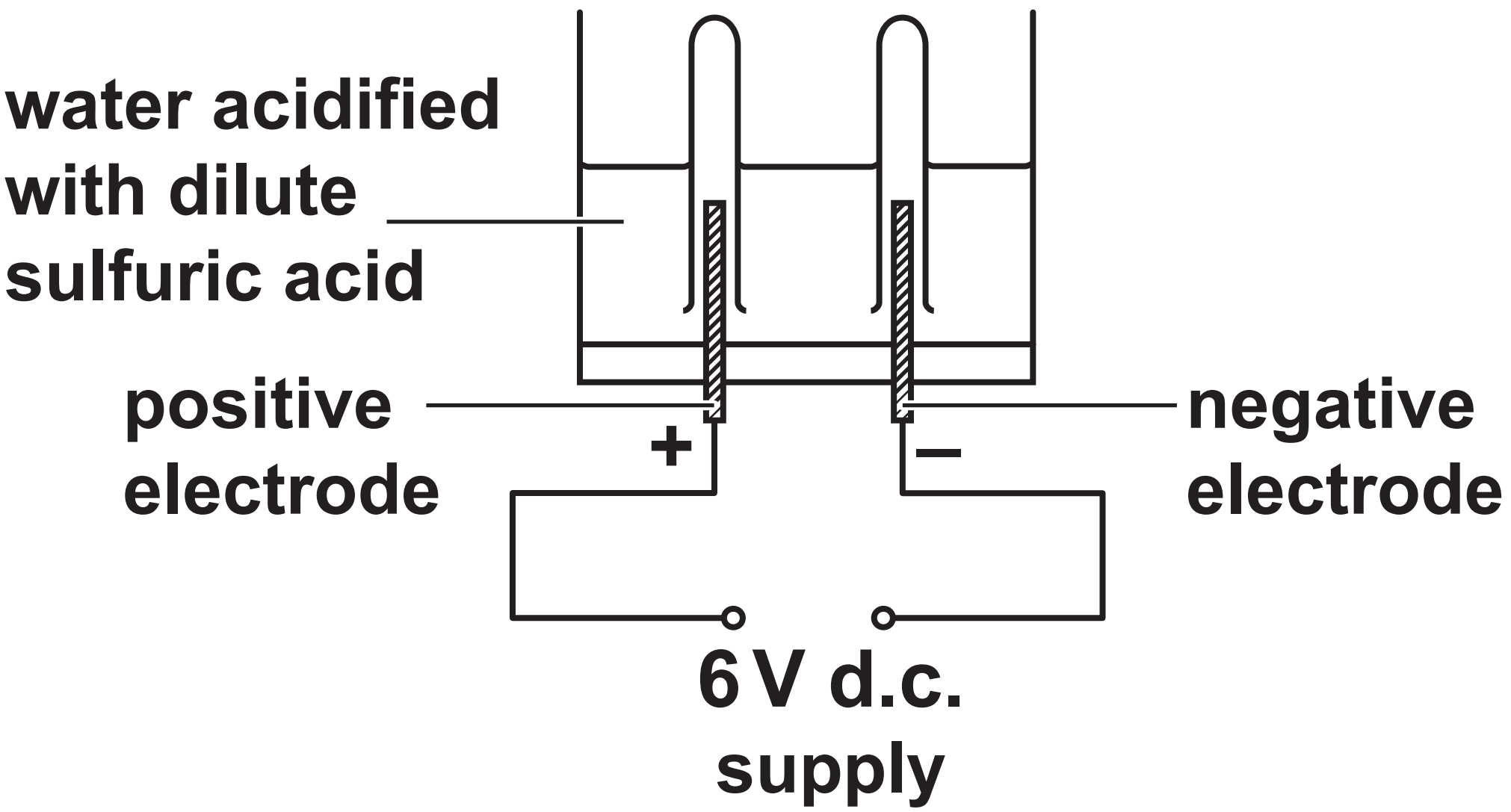
Question 2(b)

$$\text{percentage by mass of element} = \frac{\text{total relative atomic mass of element}}{\text{relative formula mass of compound}} \times 100$$

(relative atomic masses:
C = 12, O = 16, Na = 23)

Question 4(a)

FIGURE 2



Question 4(a)(ii)

diagram A

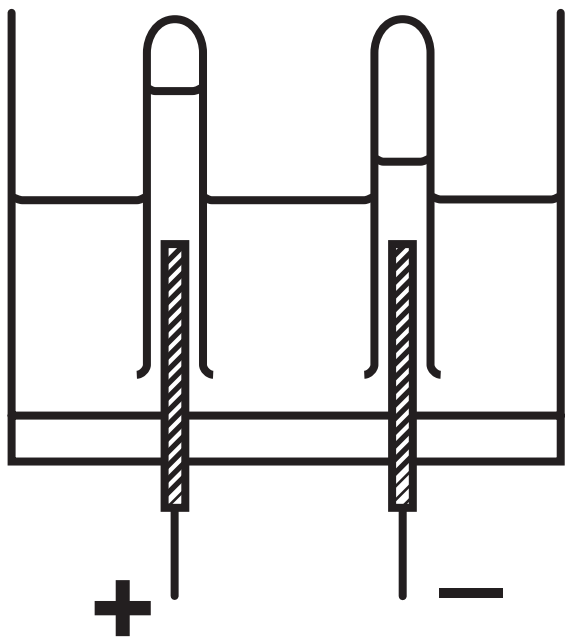


diagram B

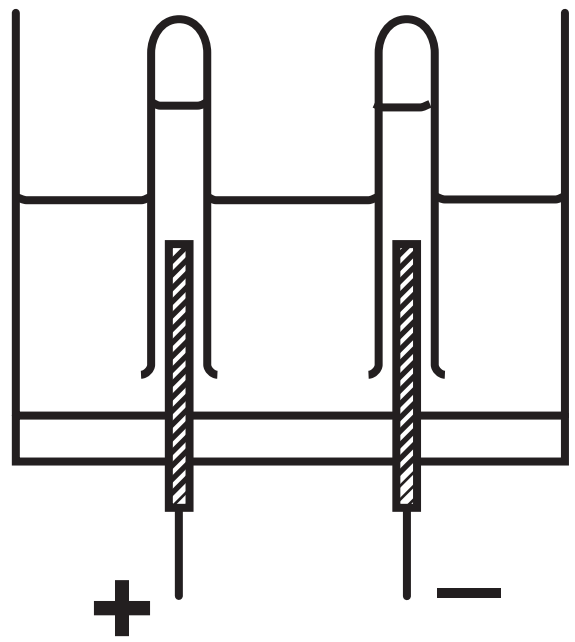


diagram C

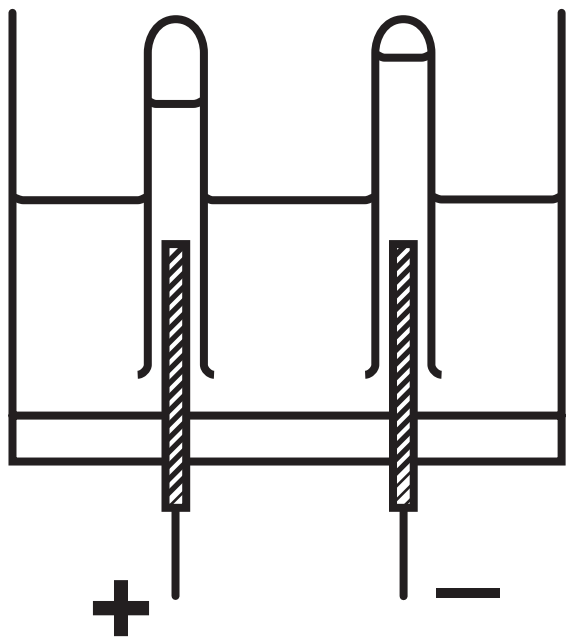
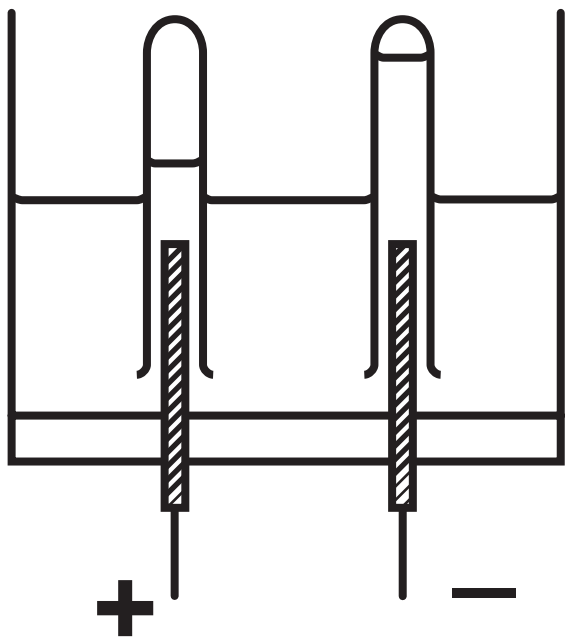


diagram D



Question 4(b)

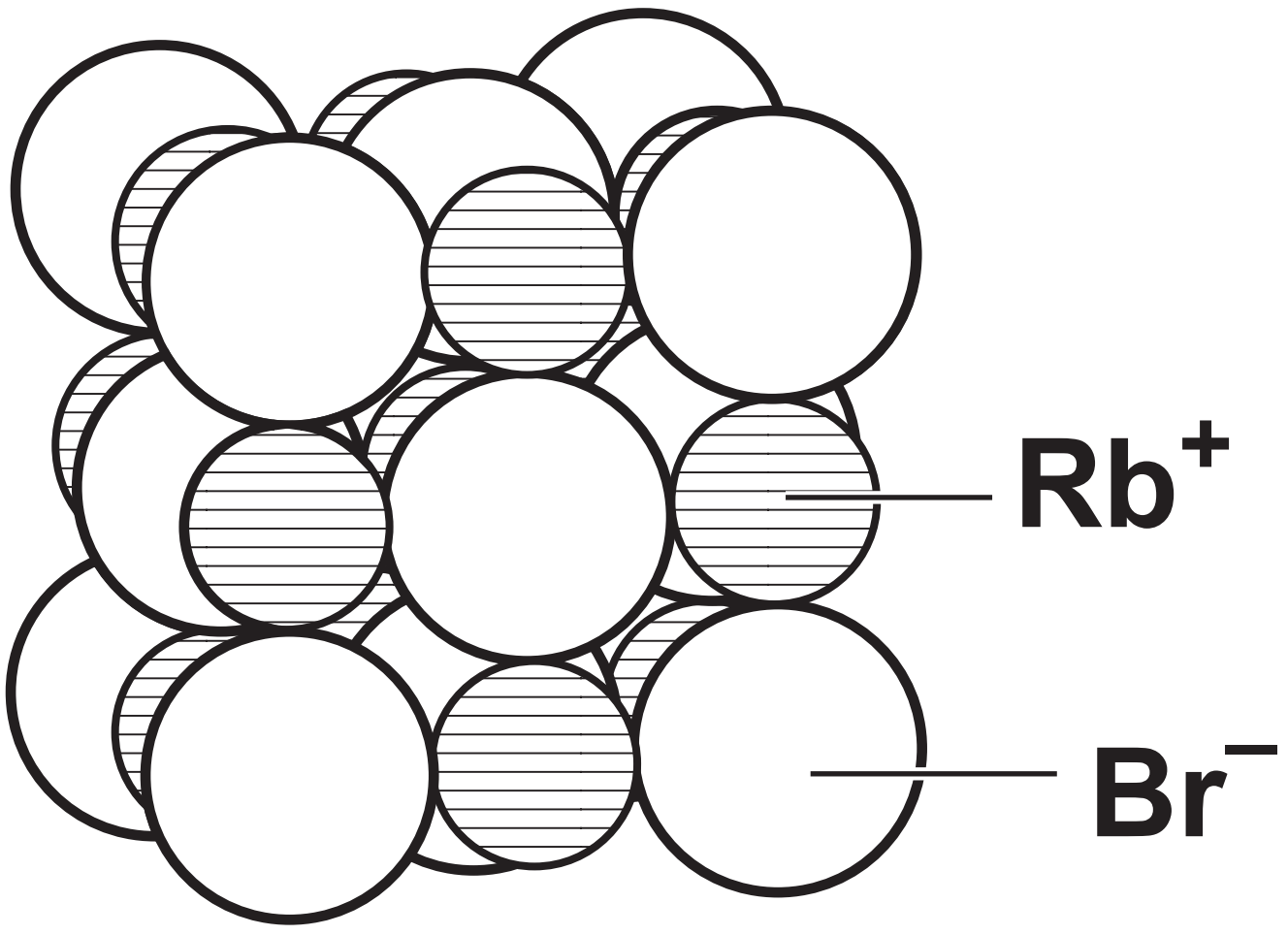
FIGURE 3

	mass of cathode in g	appearance of copper sulfate solution
before electrolysis	5·32	pale blue solution
after electrolysis	5·87	pale blue solution

Question 5(a)(i) – Blank

Question 5(b)

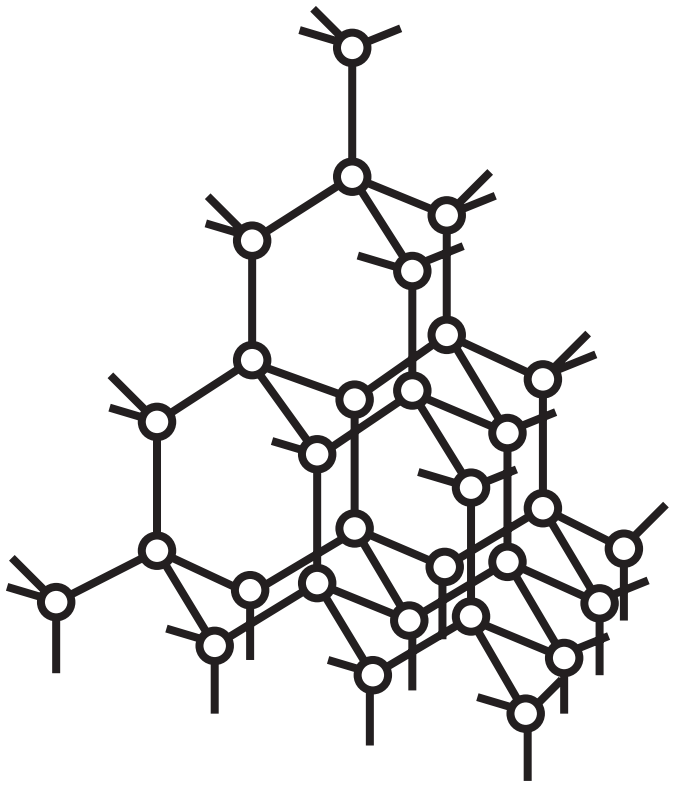
FIGURE 4



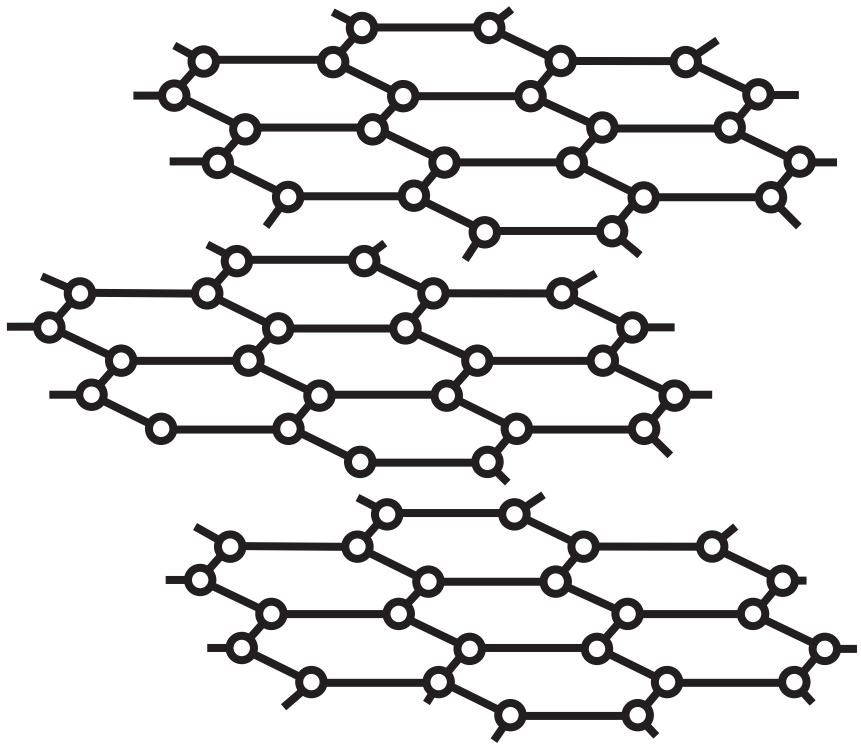
Question 5(c)

FIGURE 5

diamond



graphite



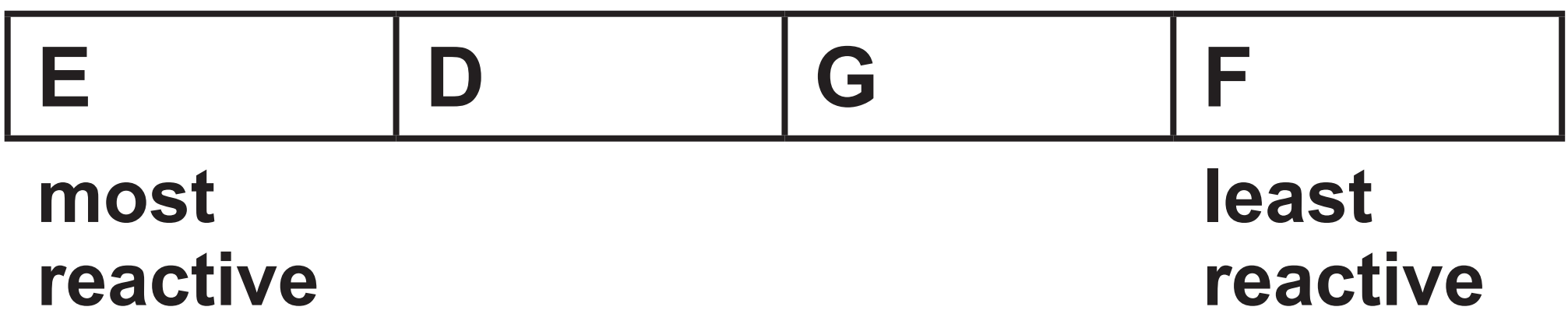
Question 6(a)

FIGURE 6

metal	observations with dilute hydrochloric acid
D	Bubbles formed quickly. After three minutes all the metal had reacted.
E	Bubbles formed very quickly. No metal remaining after three minutes.
F	A few bubbles were seen to form. The metal looked unchanged after three minutes.
G	

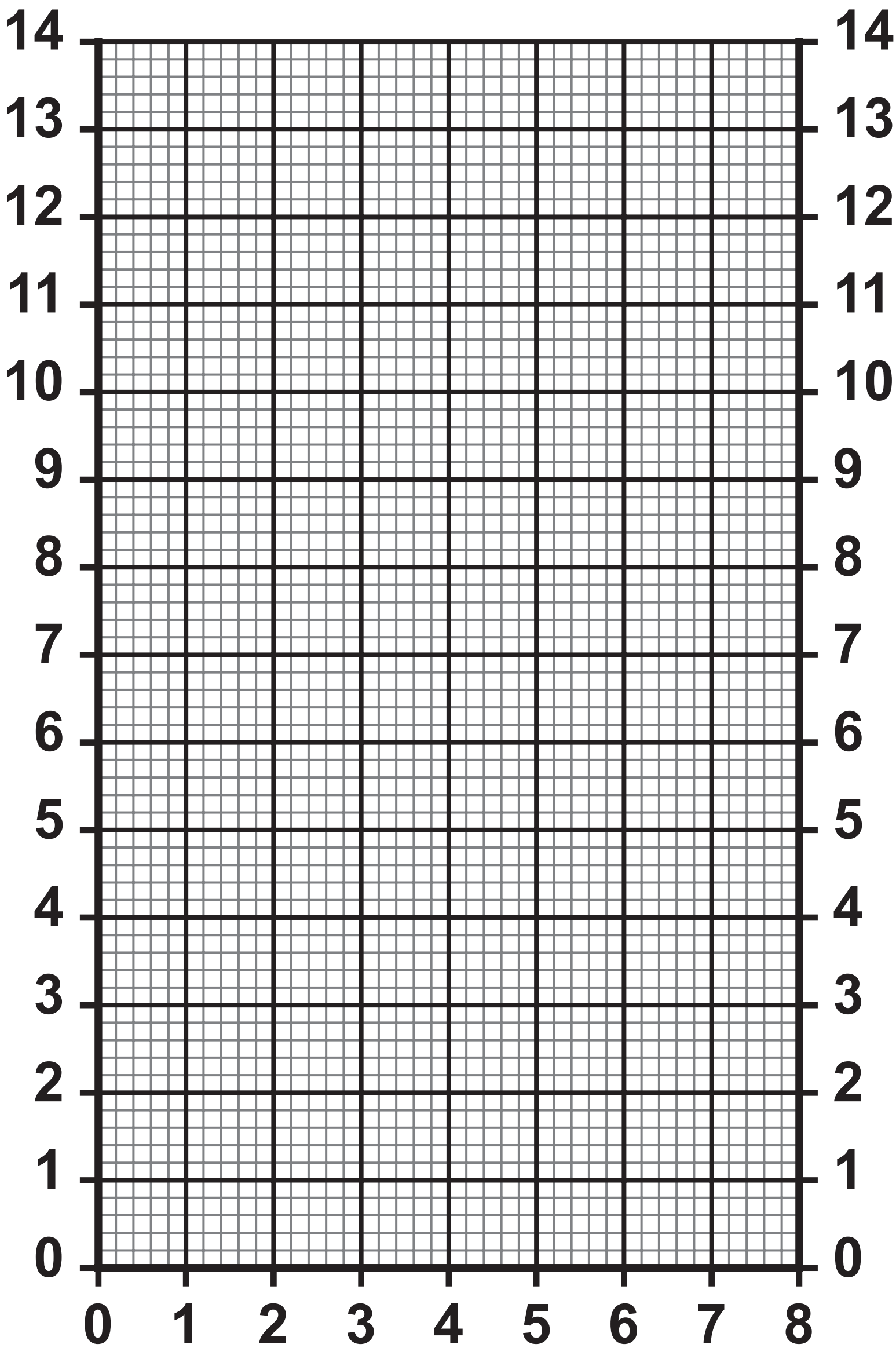
Question 6(a)

FIGURE 7



Question 1(b)(iii)

pH of mixture



Question 5(a)(i) – Blank