

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

Combined Science
PAPER 5
Foundation Tier

Tuesday 11 June 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 | | | | | |

INSTRUCTIONS

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

CONTENTS

Page

| | |
|-----------|--------------------------|
| 3 | Question 1(a) |
| 4 | Question 1(b) |
| 5 | Question 2(b) |
| 6 | Question 2(b)(iv) |
| 7 | Question 3(a) |
| 8 | Question 3(b) |
| 9 | Question 4(b)(i) |
| 10 | Question 4(c) |
| 11 | Question 5(a) |
| 12 | Question 5(b) |
| 13 | Question 6(d) |

Spare Copies

| | |
|-----------|--------------------------|
| 14 | Question 2(b)(iv) |
| 15 | Question 4(b)(i) |
| 16 | Question 5(a) |

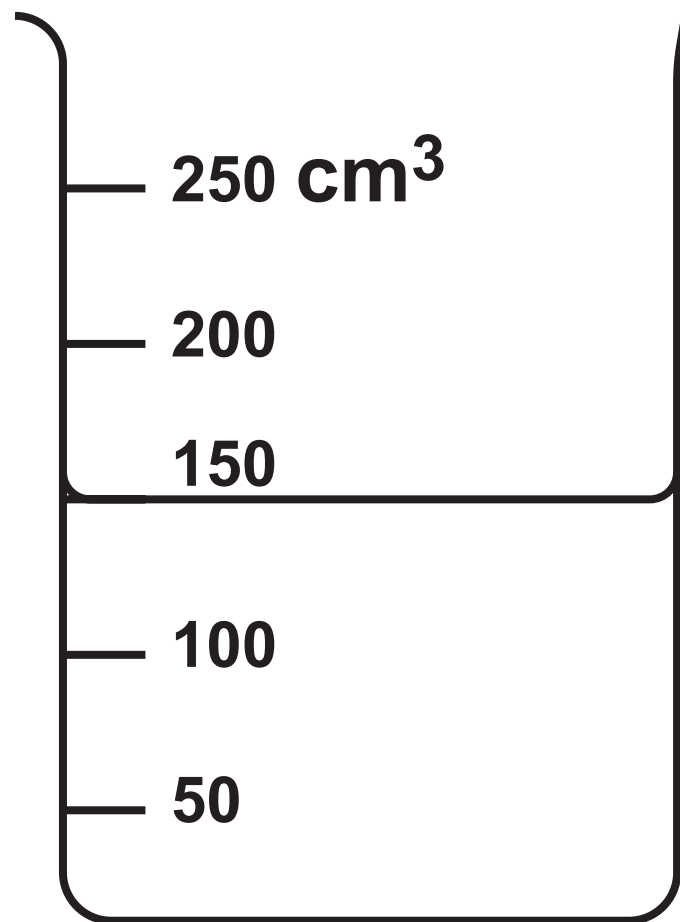
Question 1(a)

FIGURE 1

| symbol | atomic number | melting point in °C |
|--------|---------------|---------------------|
| Na | 11 | 98 |
| Mg | 12 | 650 |
| Al | 13 | 660 |
| Si | 14 | 1410 |
| P | 15 | 44 |
| Cl | 17 | −101 |
| Ar | 18 | −189 |

Question 1(b)

FIGURE 2



Question 2(b)

FIGURE 3

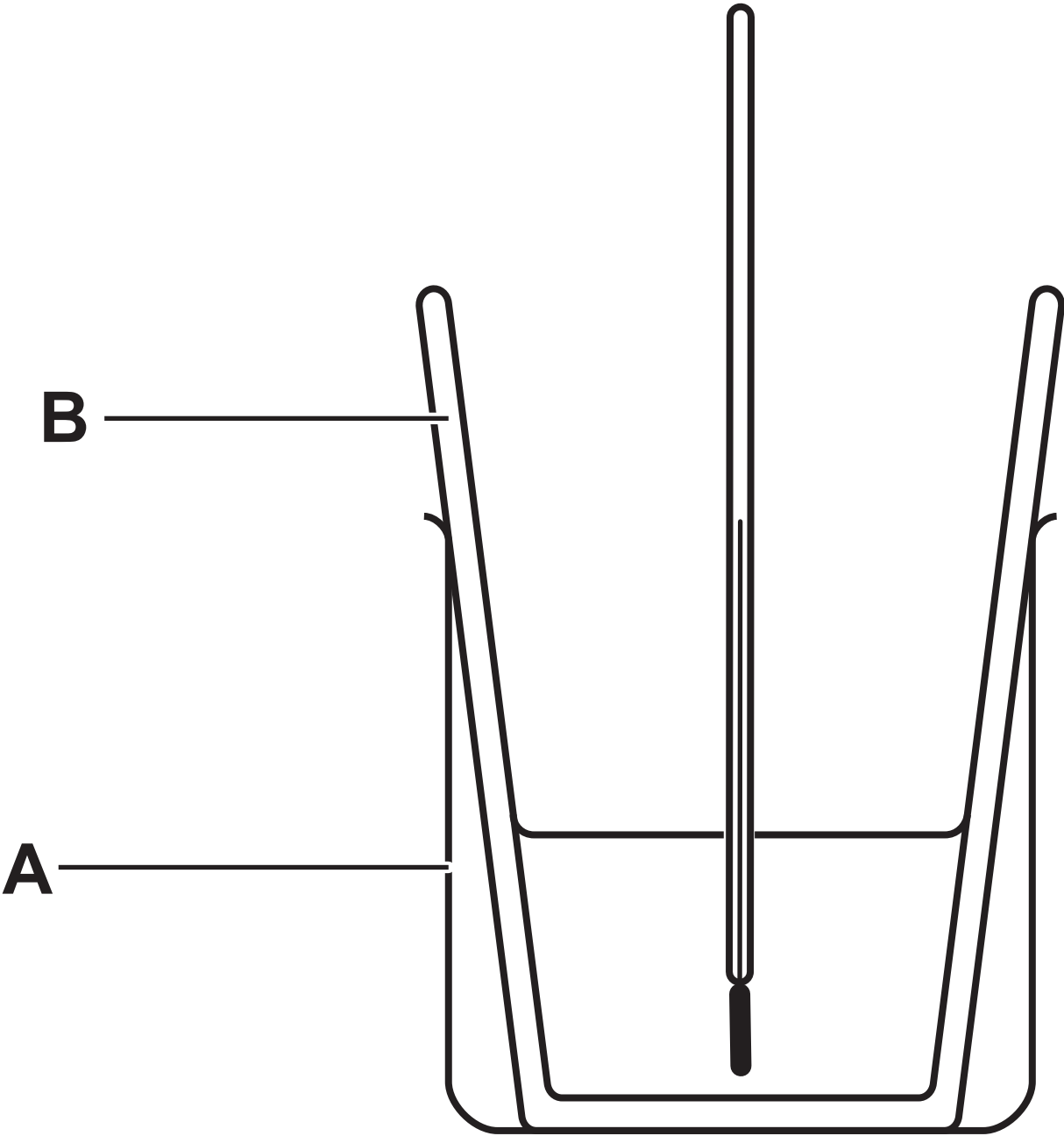
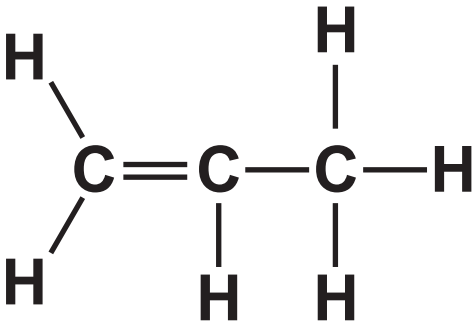
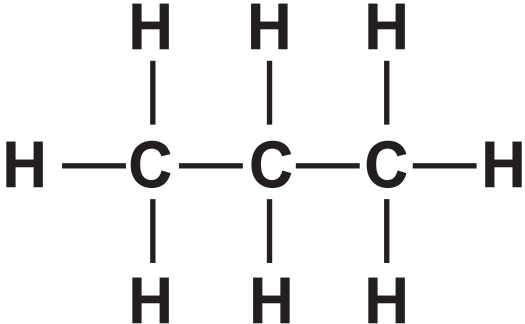
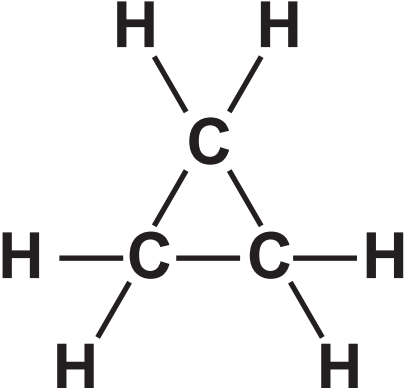


FIGURE 4

| | salt P | salt Q | salt R | salt S |
|---|--------|--------|--------|--------|
| starting temperature in °C | 20·0 | 20·0 | 20·0 | 20·0 |
| final temperature in °C | 22·4 | 19·5 | 23·0 | 18·5 |
| temperature change in °C | +2·4 | −0·5 | | |
| salt that absorbed most heat energy when it dissolved | | | | |

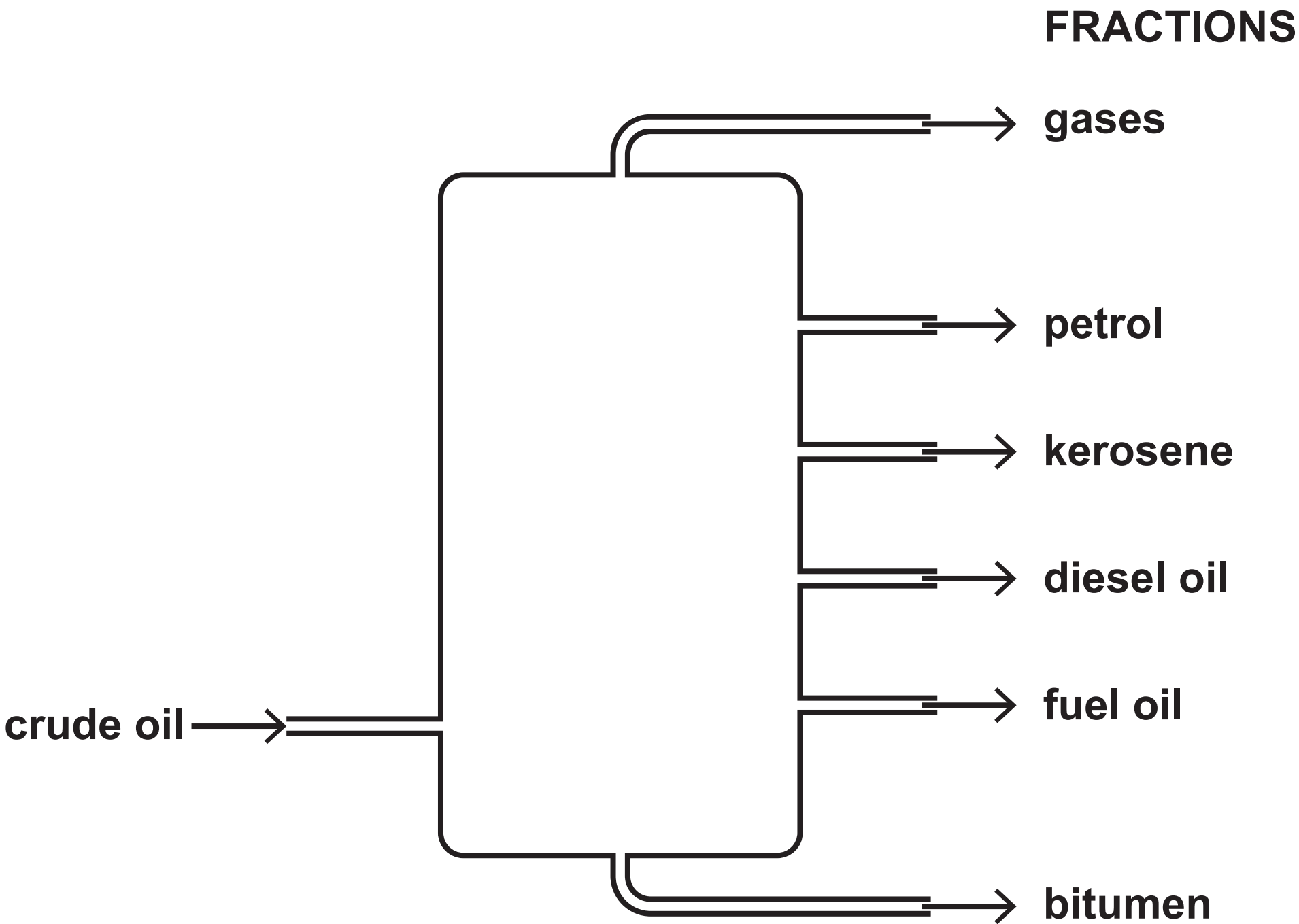
Question 3(a)

FIGURE 5

| X | Y | Z |
|---|---|---|
|  <chem>C=CC</chem> |  <chem>CCC</chem> |  <chem>C1CC1</chem> |

Question 3(b)

FIGURE 6



+

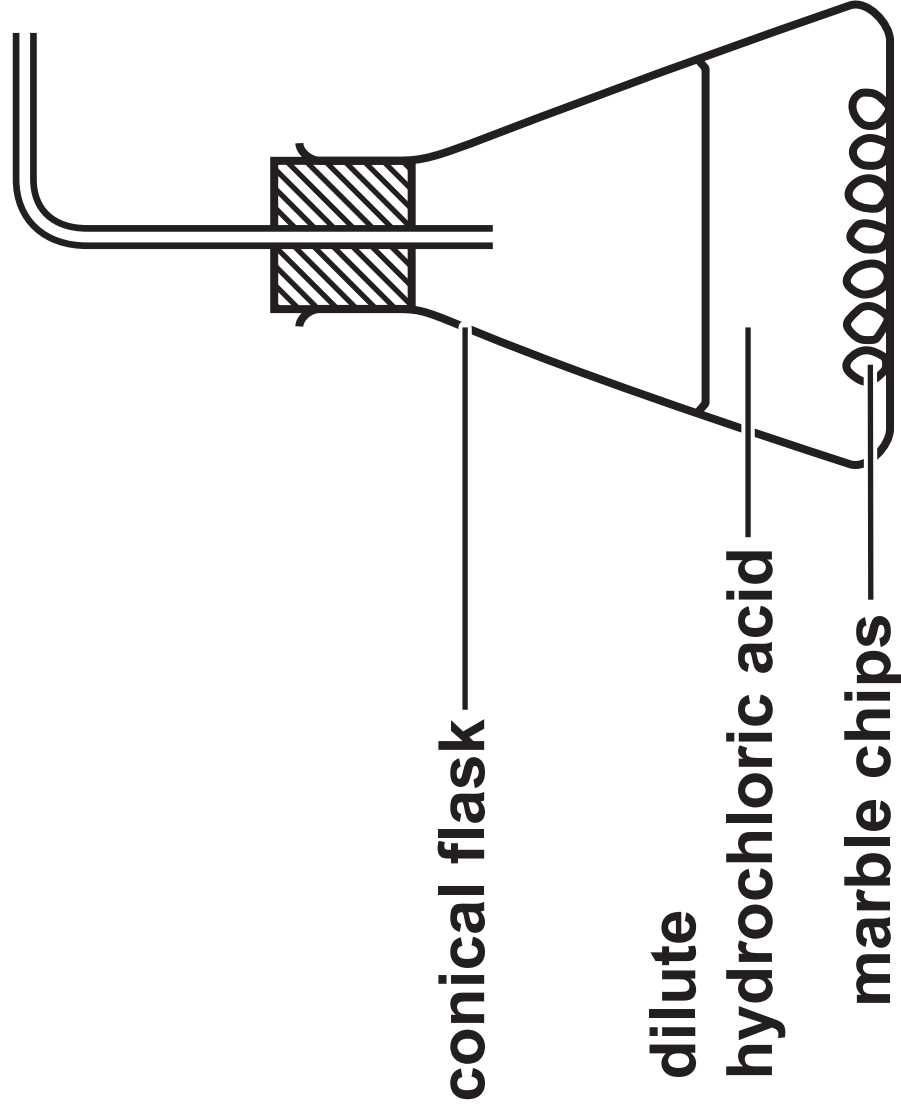
↑

Question 4(c)

FIGURE 7

| halogen | relative speed of reaction |
|----------|----------------------------|
| fluorine | |
| chlorine | reacts very quickly |
| bromine | reacts quickly |
| iodine | reacts slowly |

FIGURE 8



Question 5(b)

FIGURE 9

volume of carbon dioxide
in cm^3

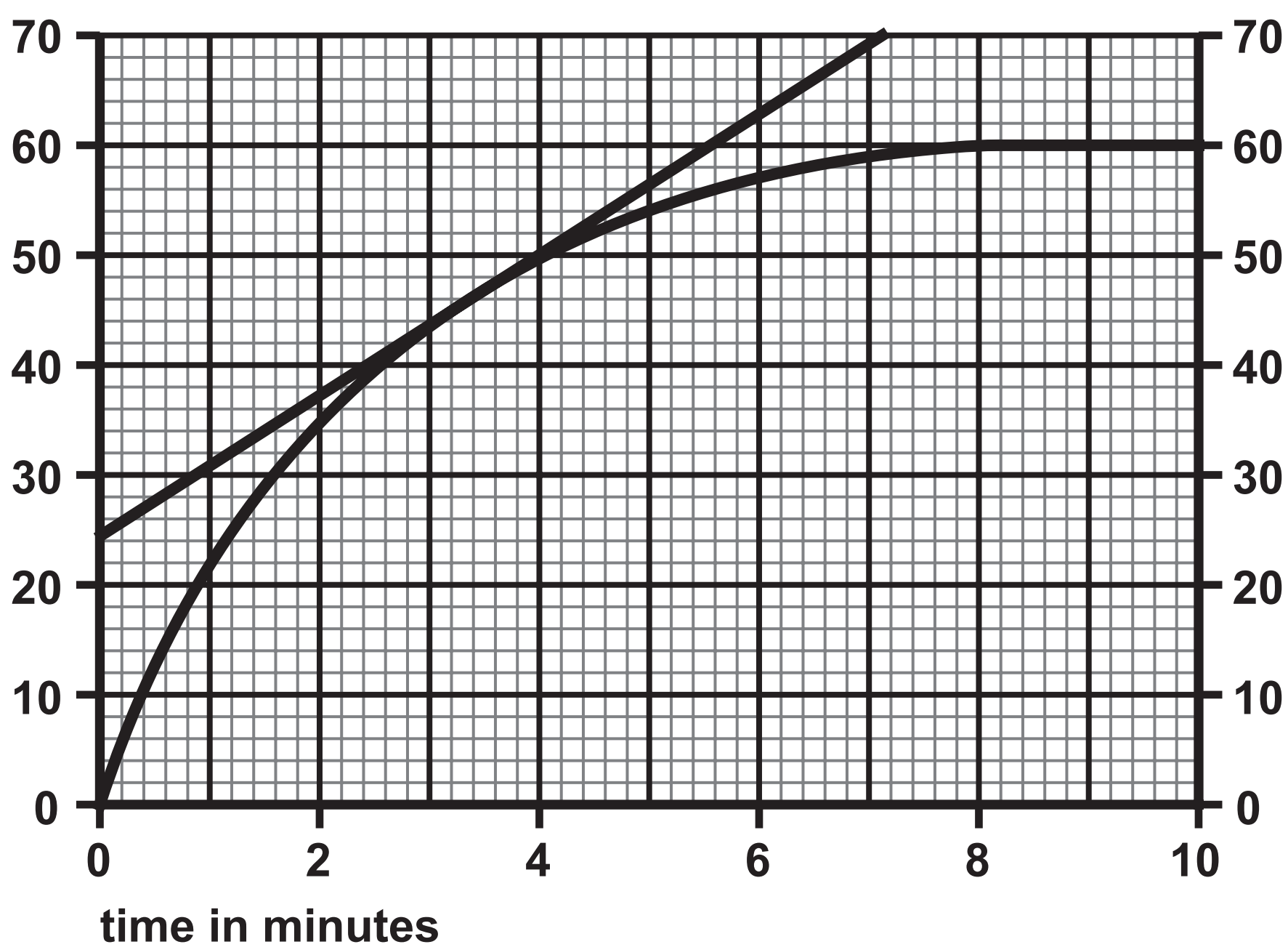


FIGURE 10

| period of time | plant life | amount of carbon dioxide in atmosphere | amount of oxygen in atmosphere |
|-------------------------------|--|--|--------------------------------|
| the earliest Earth | no plant life | very high | none |
| about 3,500 million years ago | plant life evolved | high | very low |
| about 10,000 years ago | about 60% of land covered by trees | 0·03% | about 21% |
| today | less than 40% of land covered by trees | 0·04% | about 21% |

FIGURE 4

| | salt P | salt Q | salt R | salt S |
|---|--------|--------|--------|--------|
| starting temperature in °C | 20·0 | 20·0 | 20·0 | 20·0 |
| final temperature in °C | 22·4 | 19·5 | 23·0 | 18·5 |
| temperature change in °C | +2·4 | −0·5 | | |
| salt that absorbed most heat energy when it dissolved | | | | |

+

↑

FIGURE 8

