

Combined Science
PAPER 2
Foundation Tier

Diagram Booklet

In the boxes below, write your name, centre number and candidate number.

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|------------------|--|--|--|--|--|
| 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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Question 1

FIGURE 2

| substance | before heating | when hot | after cooling |
|--------------------|-----------------------|-----------------|----------------------|
| metal spoon | solid | solid | solid |
| chocolate | solid | liquid | solid |
| egg white | liquid | solid | solid |

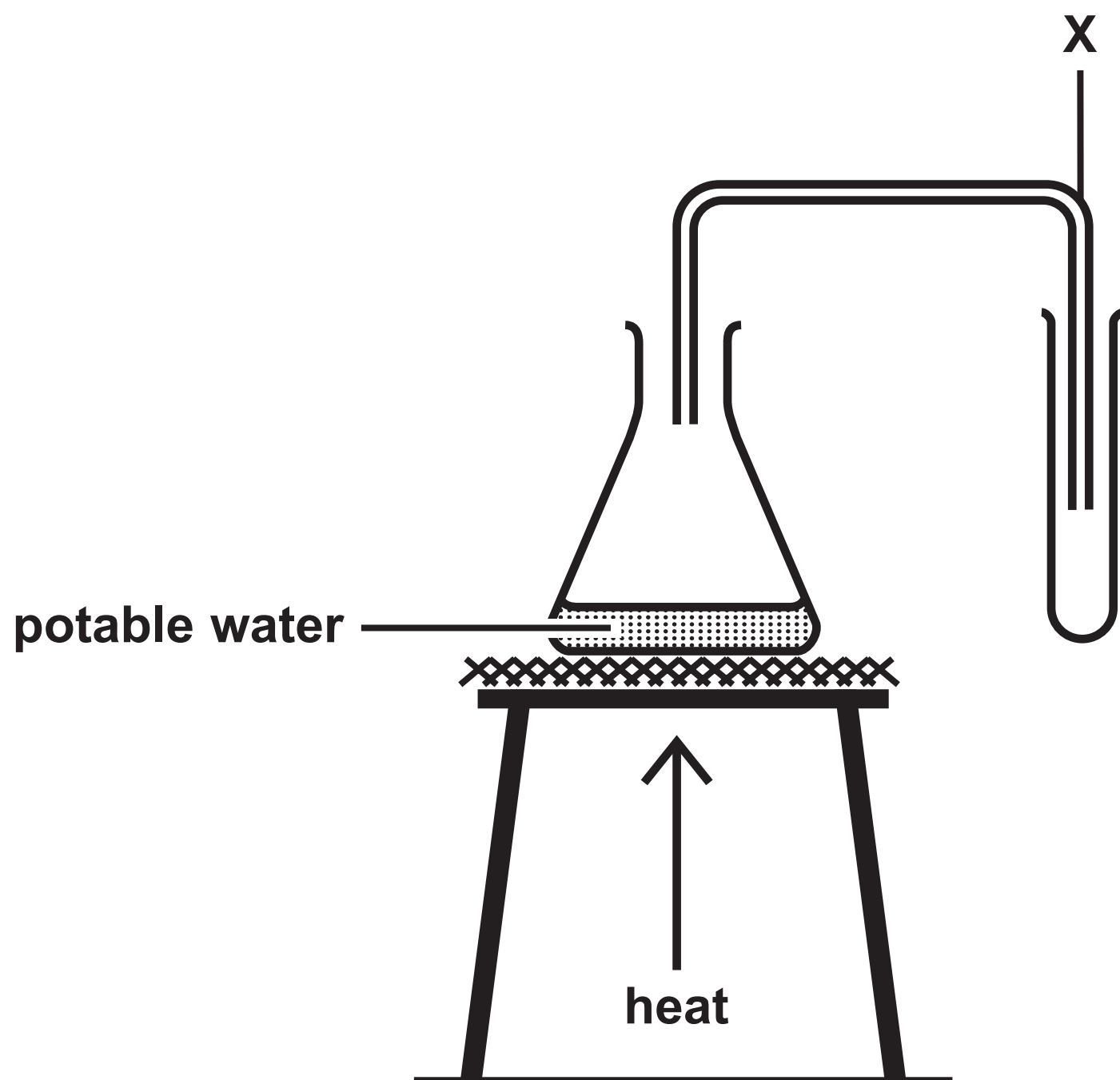
Question 2(a)(iv)

FIGURE 3

| ion | concentration in mg dm ⁻³ |
|-----------|--------------------------------------|
| chloride | 60·70 |
| fluoride | 0·24 |
| nitrate | 24·90 |
| sulfate | 71·40 |
| copper | 0·05 |
| magnesium | 9·10 |

Question 2(b)

FIGURE 4



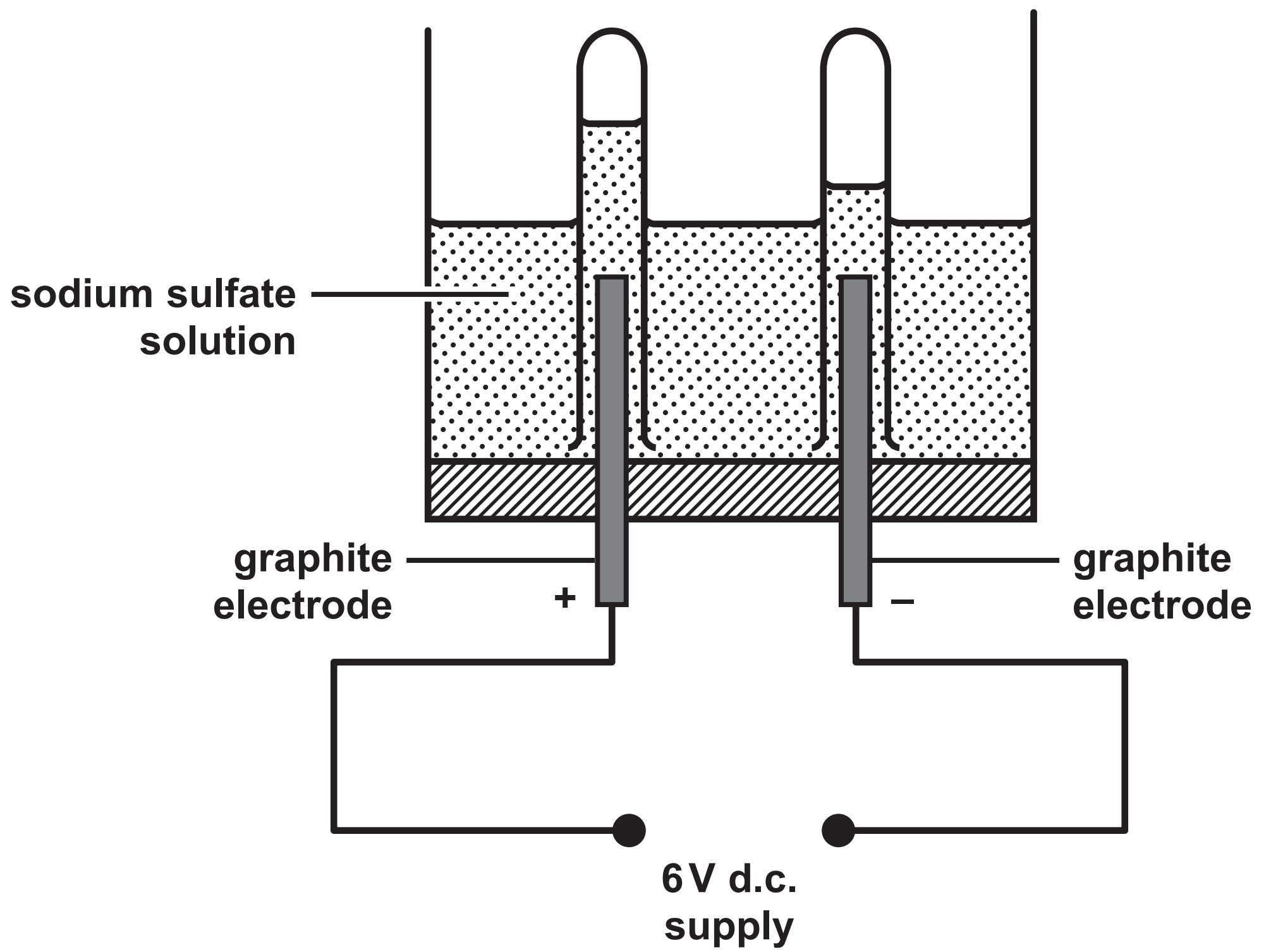
Question 3(c)(ii)

FIGURE 5

| property | predicted property | actual property |
|---|---------------------------|------------------------|
| relative atomic mass | about 68 | 70 |
| density in g/cm³ | about 6·0 | 5·9 |
| melting point | lower than 40 °C | 29·8 °C |
| density of oxide in g/cm³ | about 5·5 | 5·9 |

Question 4(c)

FIGURE 6



Question 4(c)(i)

FIGURE 7



Question 4(c)(i)

FIGURE 7



Question 5(b)(iv)

pH of the
mixture

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mass of barium hydroxide in g

Question 5(b)(iv)

pH of the
mixture

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mass of barium hydroxide in g

Question 5(c)

FIGURE 9

