

Paper Reference(s) 4BI1 / 1B 4SD0 / 1B
Pearson Edexcel International GCSE (9–1)

Biology
UNIT: 4BI1
Science (Double Award) 4SD0
PAPER: 1B

Friday 10 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

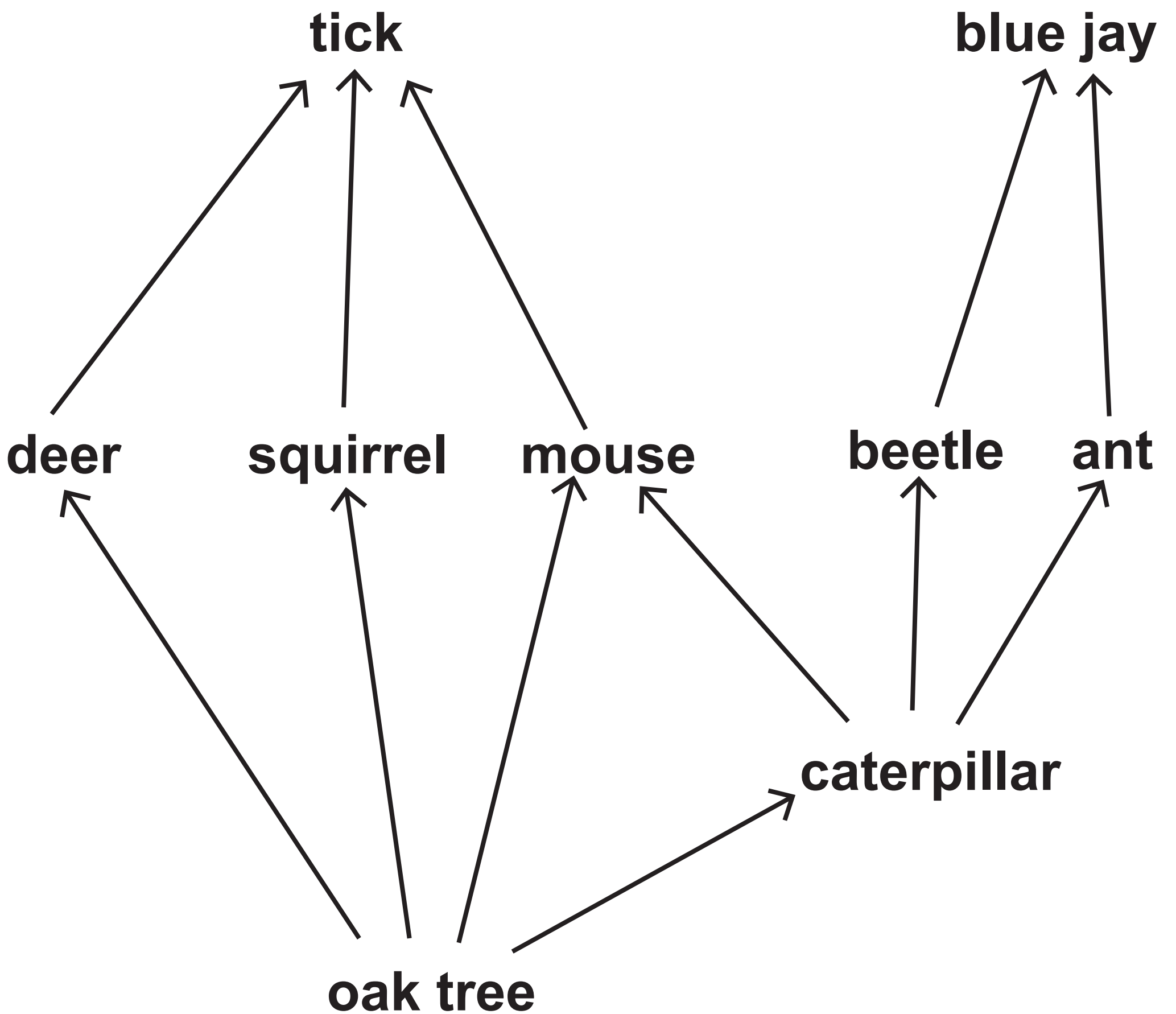
2

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

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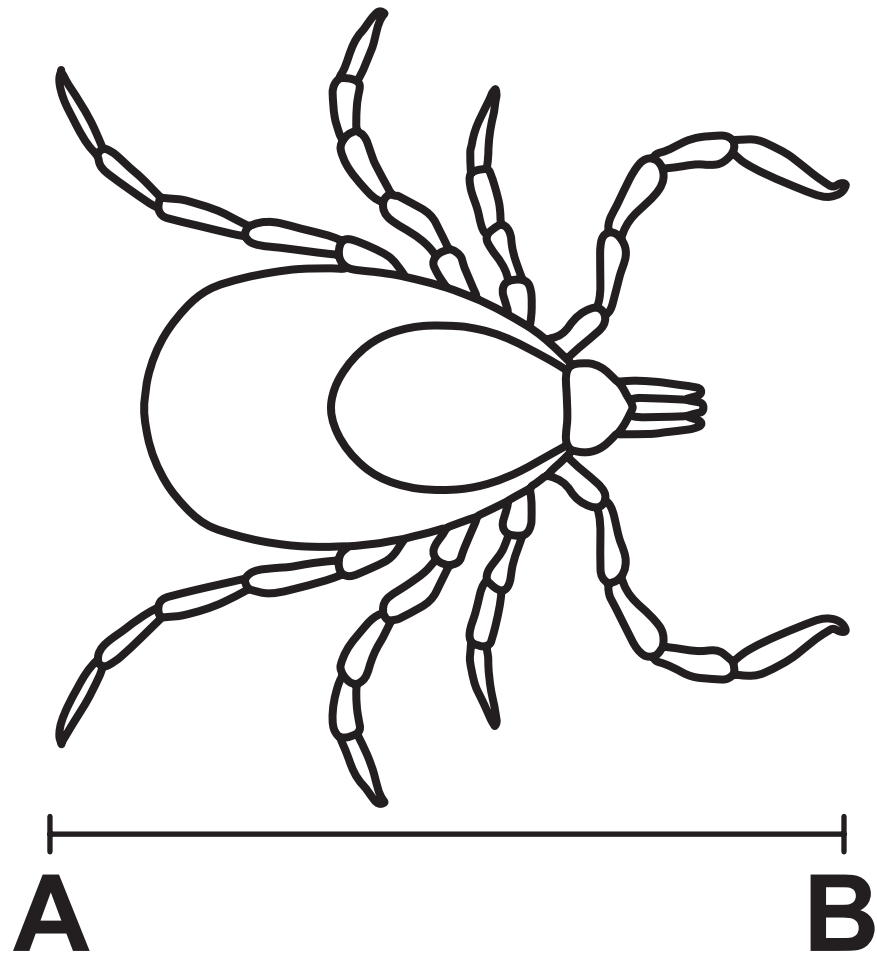
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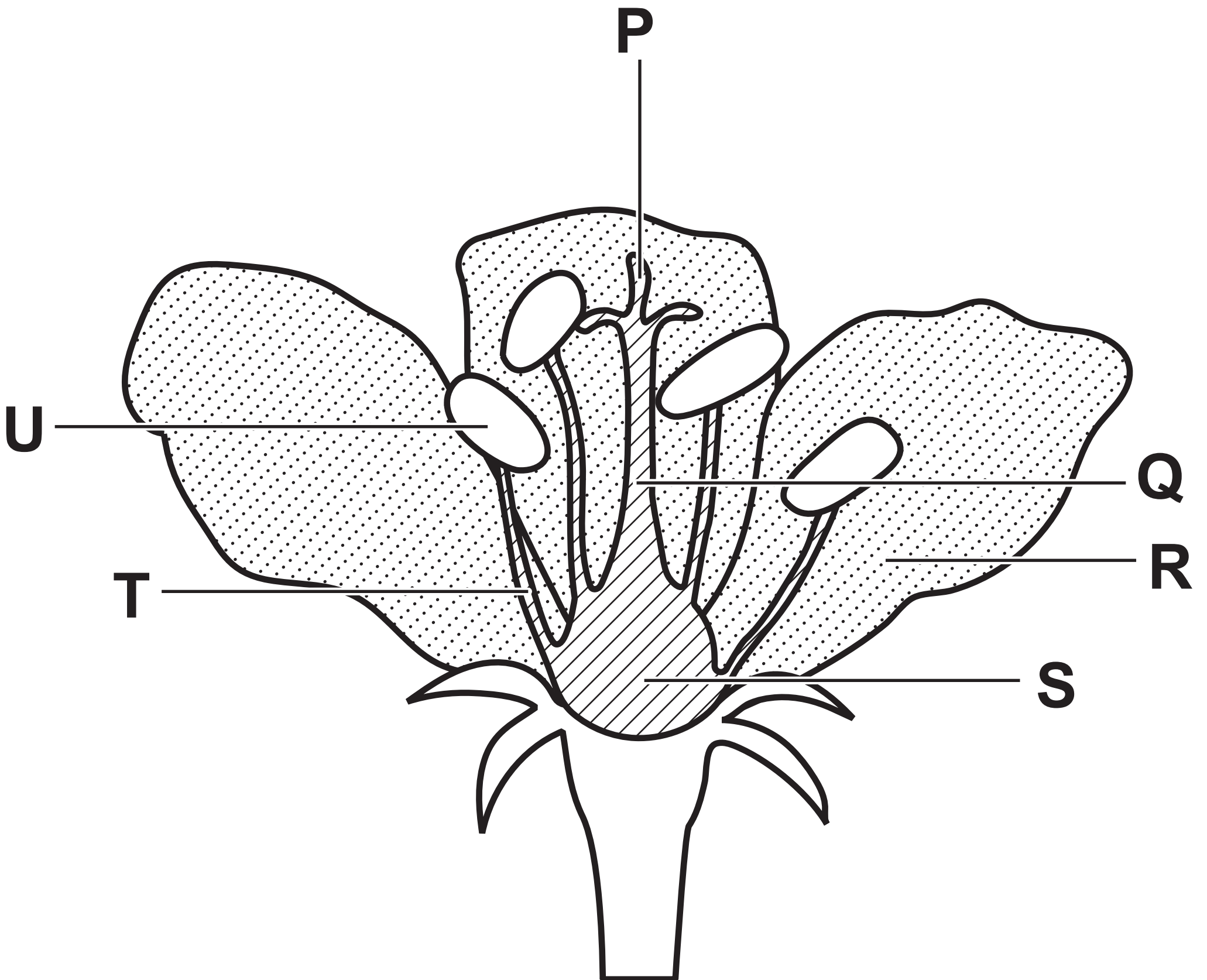
Question 1(a)(i)

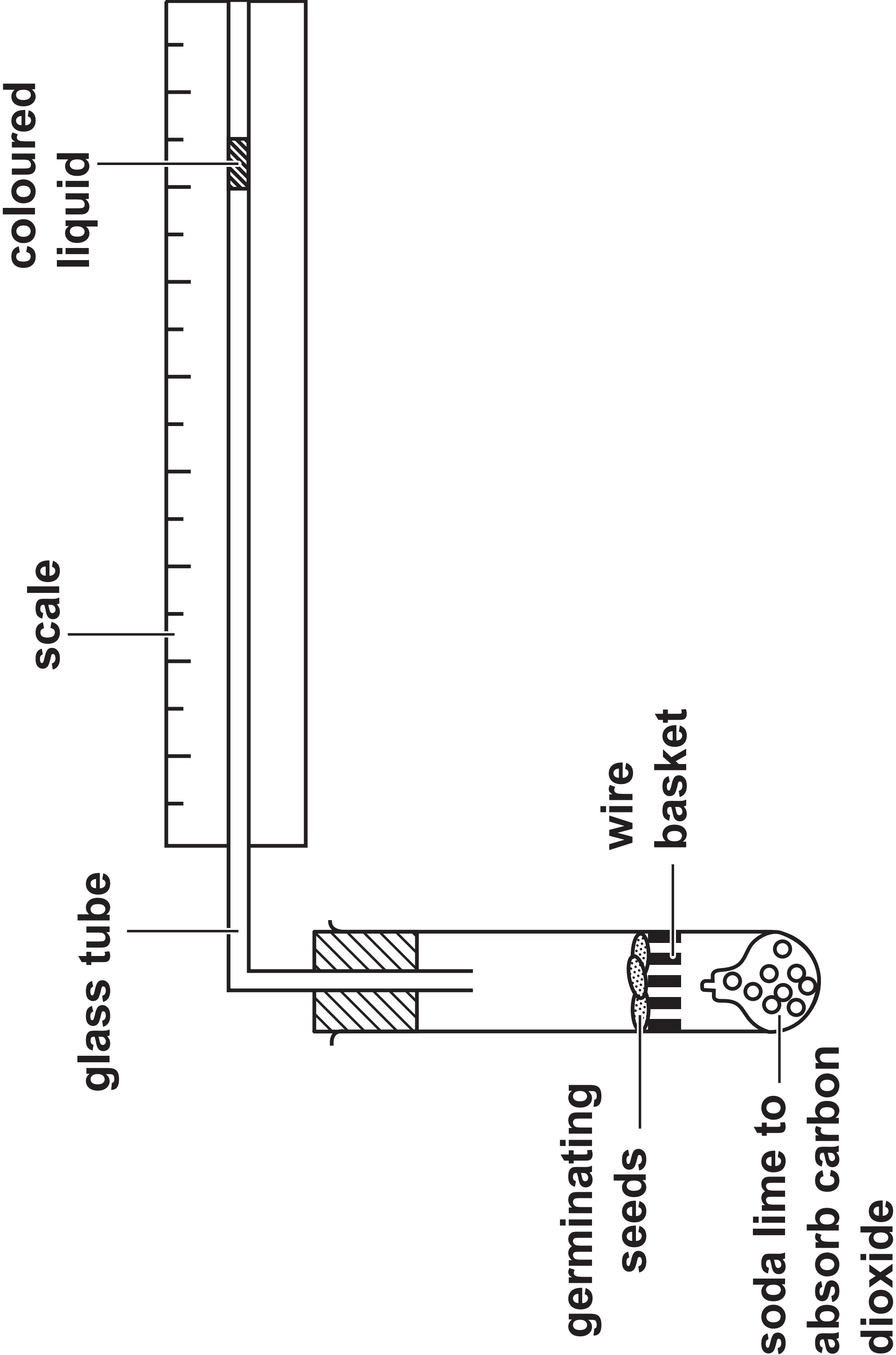
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Question 1(b)



Question 2





Question 4(c)

8

Temperature in °C	Distance moved by bubble in one minute in mm			
	reading 1	reading 2	reading 3	mean
20	14	12	14	13
30	22	25	24	

KEY

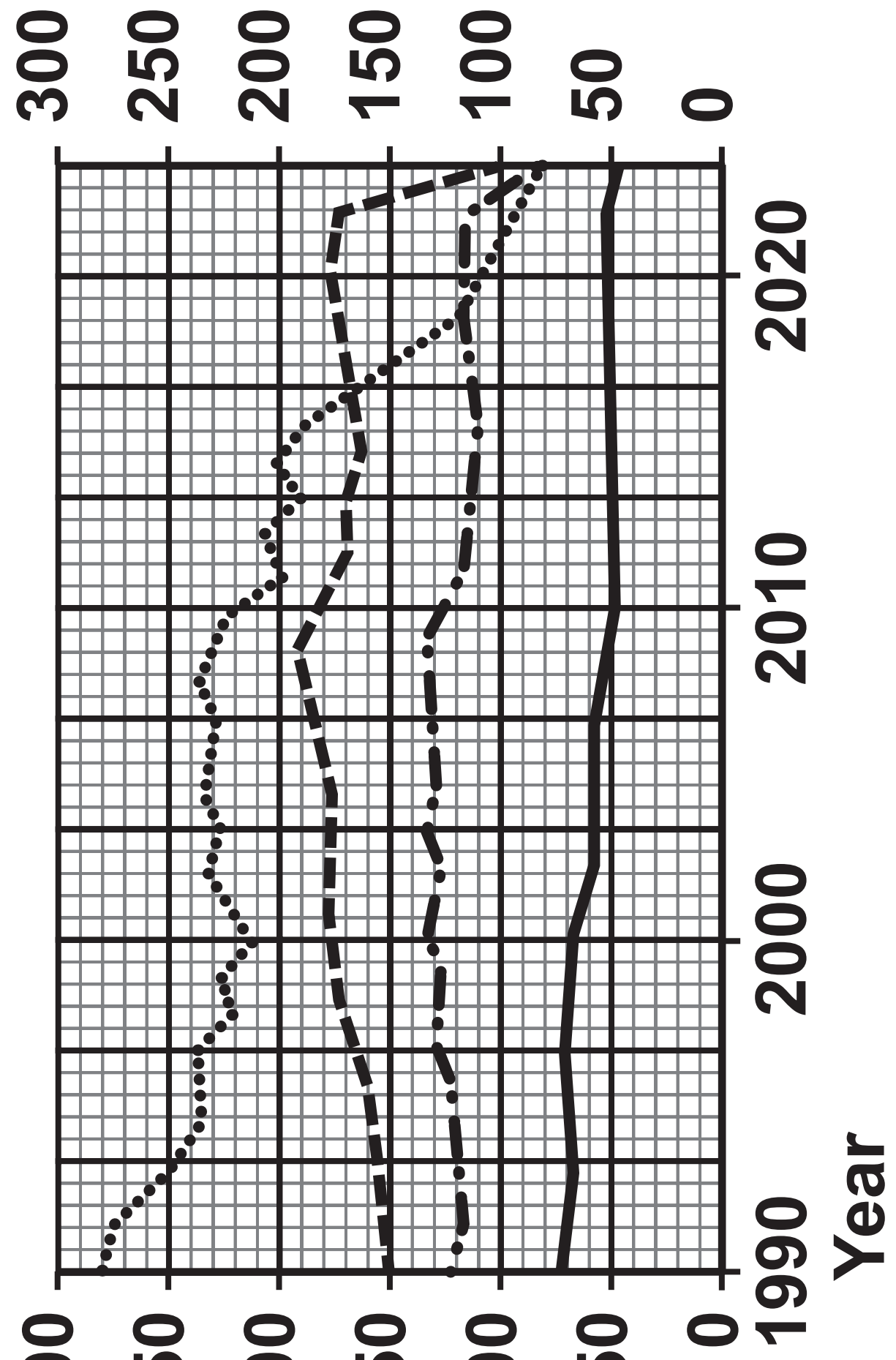
---- transport (including international)

...-- business

..... energy production

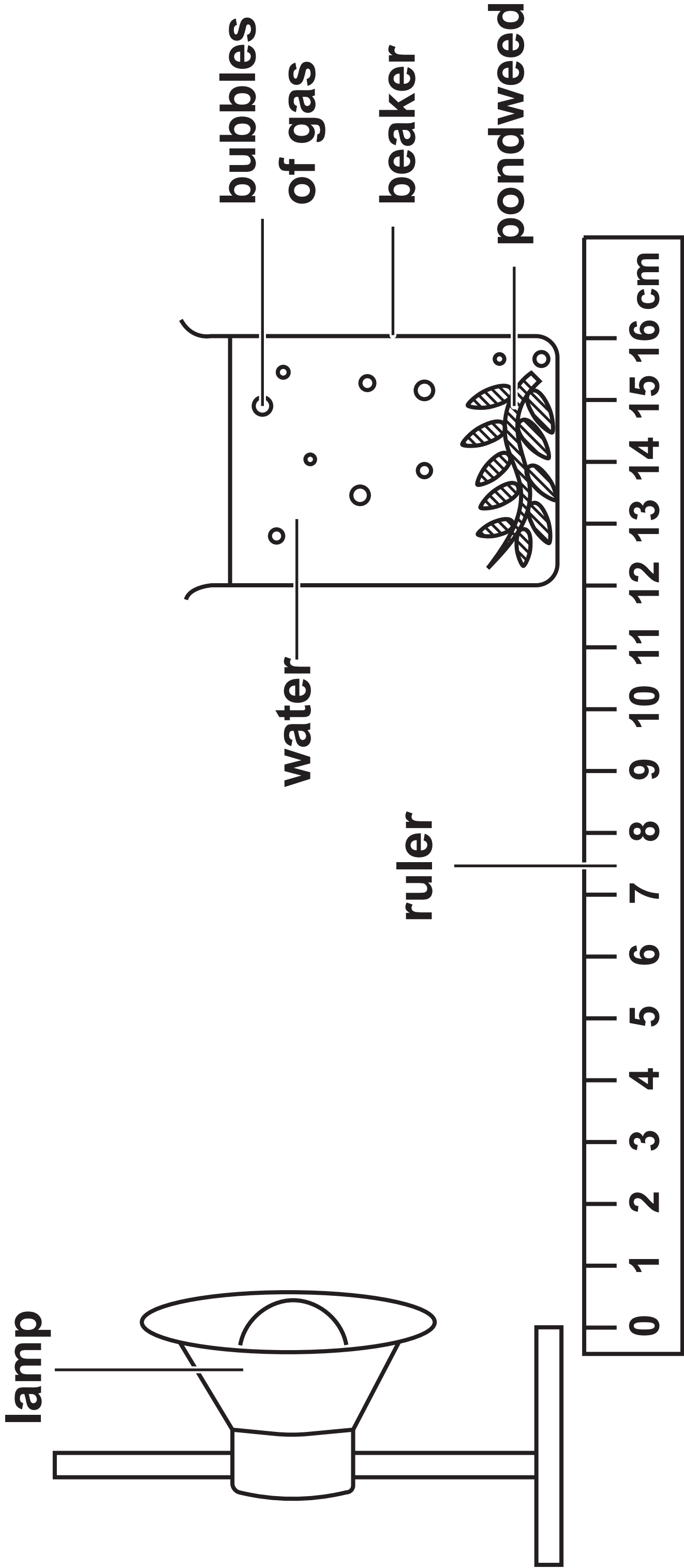
— agriculture

Mass of greenhouse gas in million tonnes



Question 6

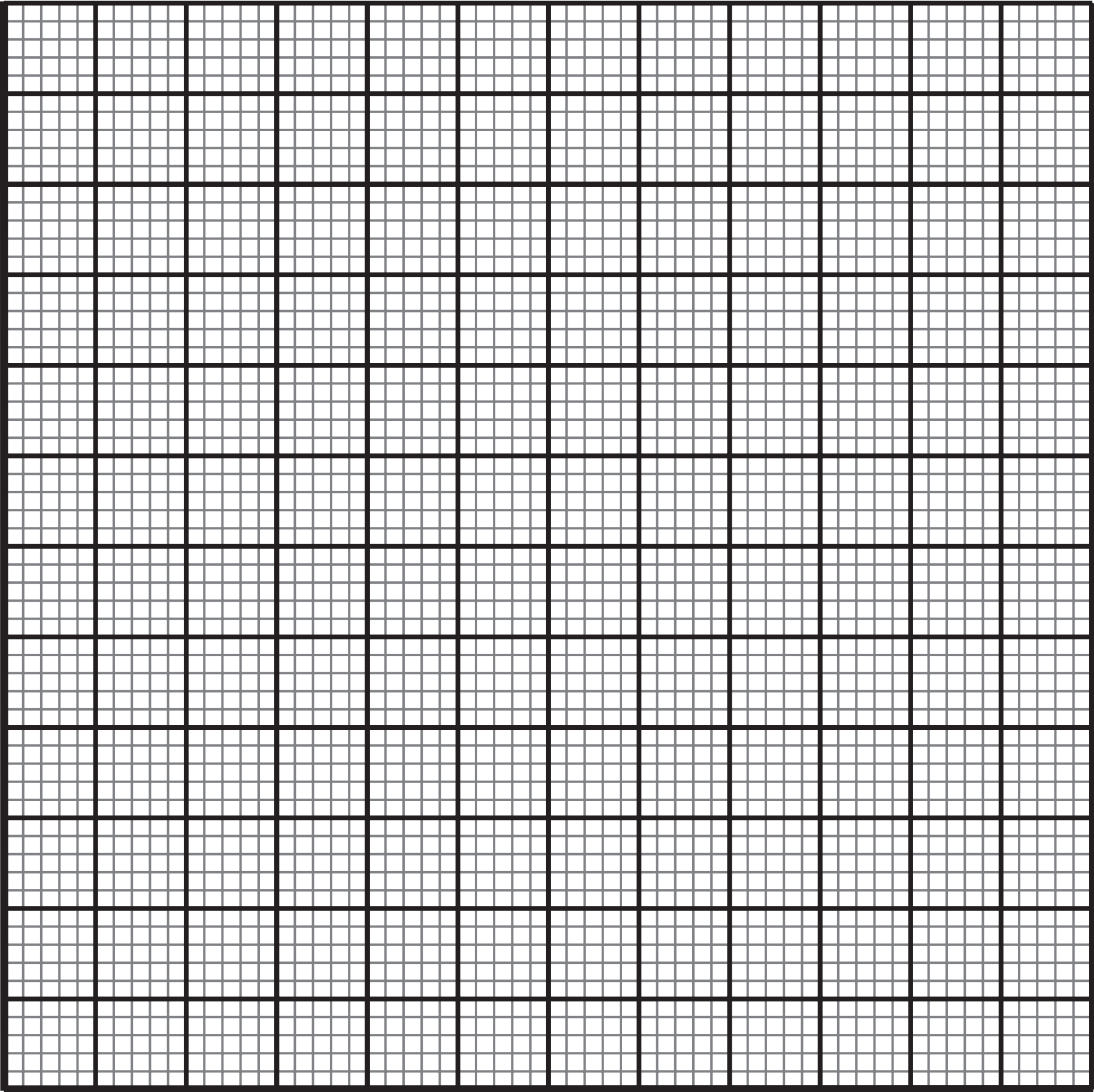
10



Question 6(b)

Distance of lamp from beaker in cm	Number of bubbles released per minute			
	count 1	count 2	count 3	mean (average)
2	20	18	20	19
4	16	15	15	15
6	12	14	13	13
8	10	9	8	9
10	8	7	8	8
12	5	6	4	5

Question 6(b)(i)

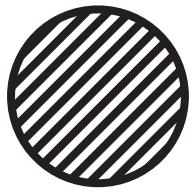


Question 7(b)

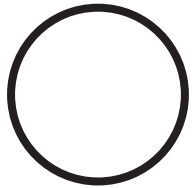
Altitude in m	Mean mass of haemoglobin in 1 litre of blood in g		Mean number of red blood cells in 1 litre $\times 10^{12}$		Number of people in sample	
	men	women	men	women	men	women
0 (sea level)	148	138	5·15	4·84	18 453	27 559
1890	152	147	5·37	5·20	2175	3510
2270	151	142	5·18	4·88	2023	2943

Question 8(b)

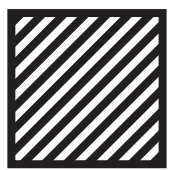
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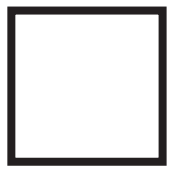
female with CF



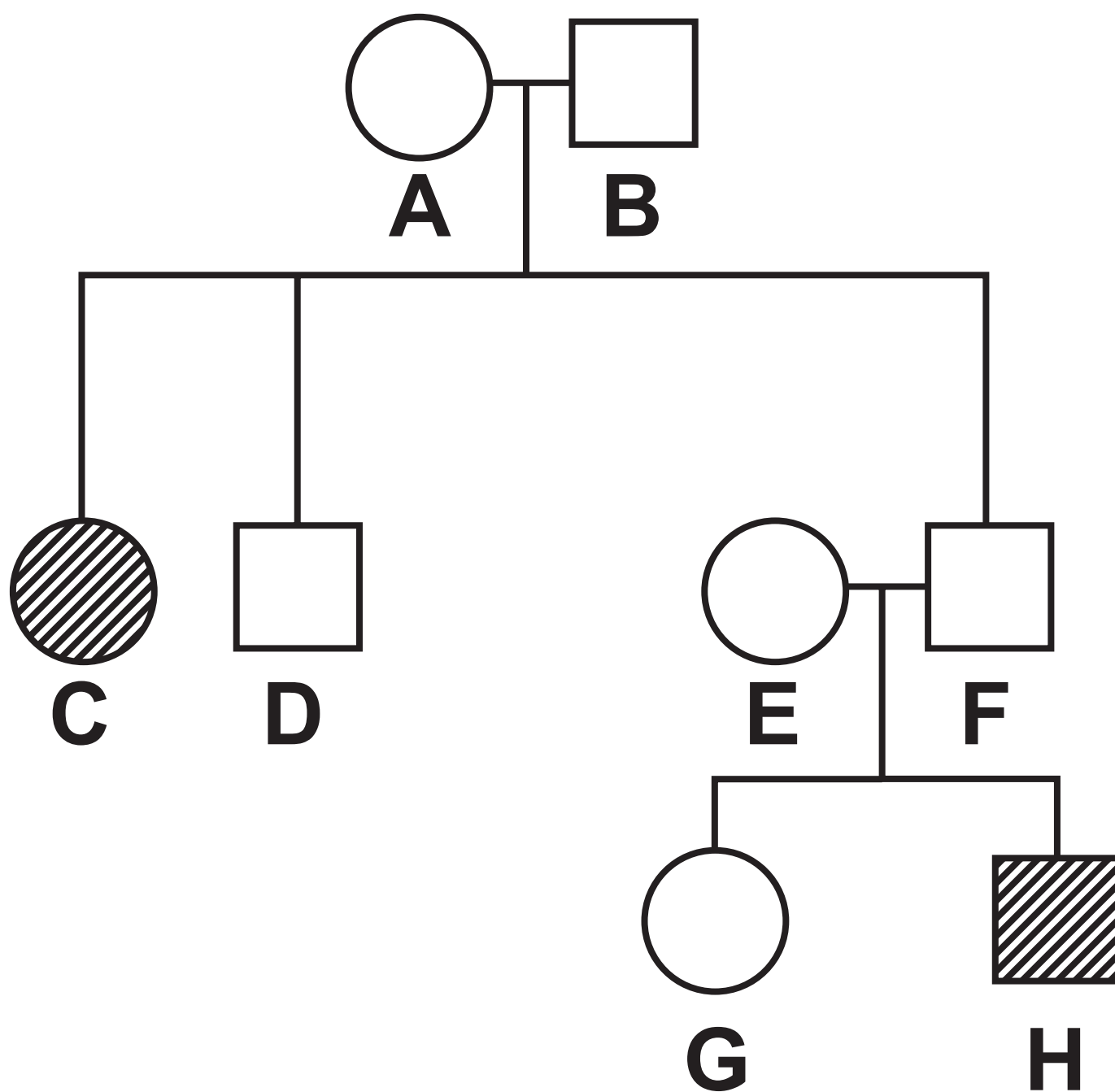
unaffected female



male with CF



unaffected male



Question 9 – Diagram 1

DIAGRAM 1

Duckweed plant with one leaf

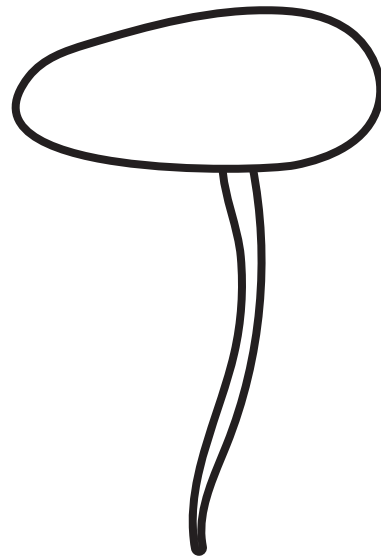
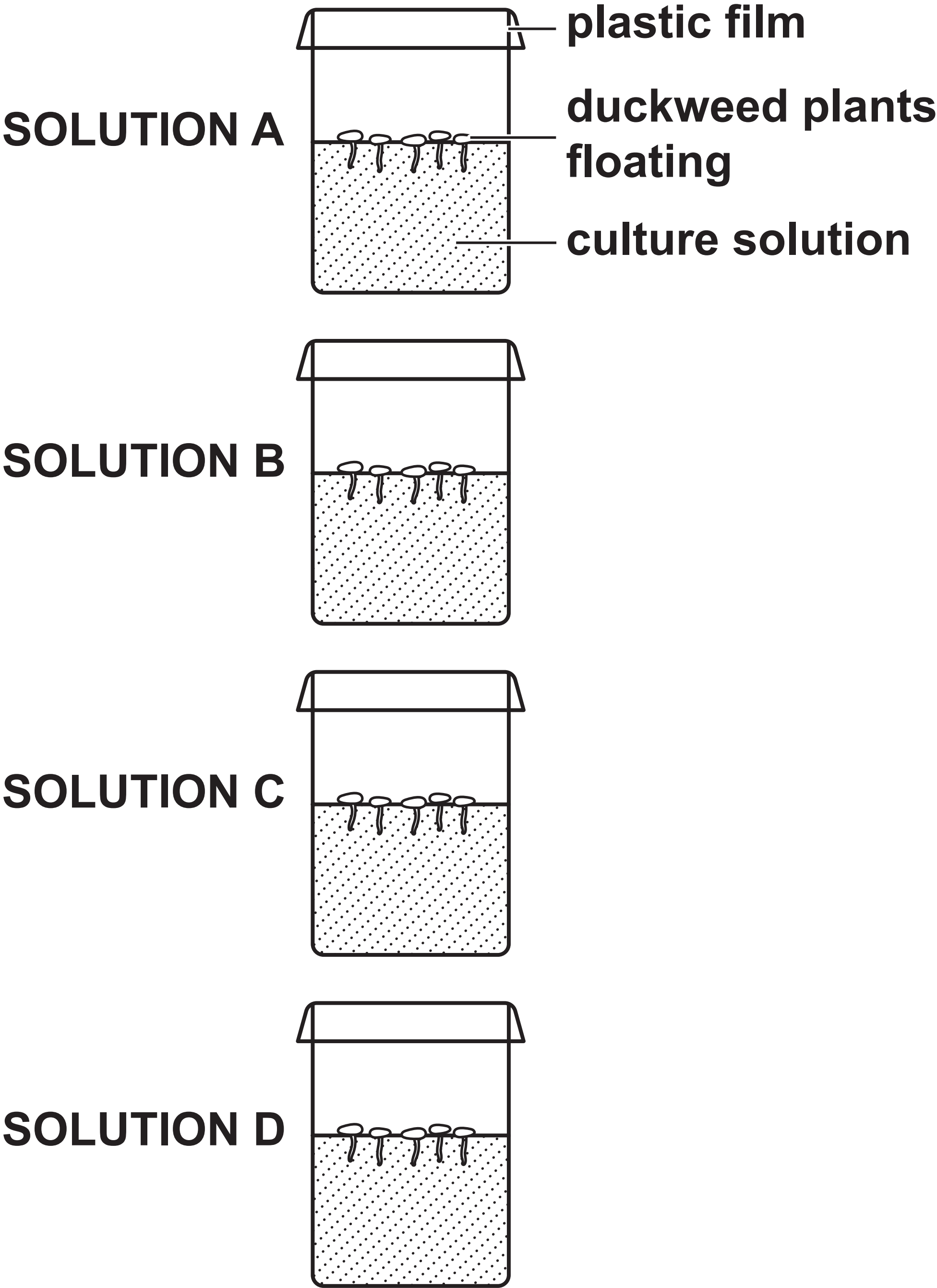


DIAGRAM 2

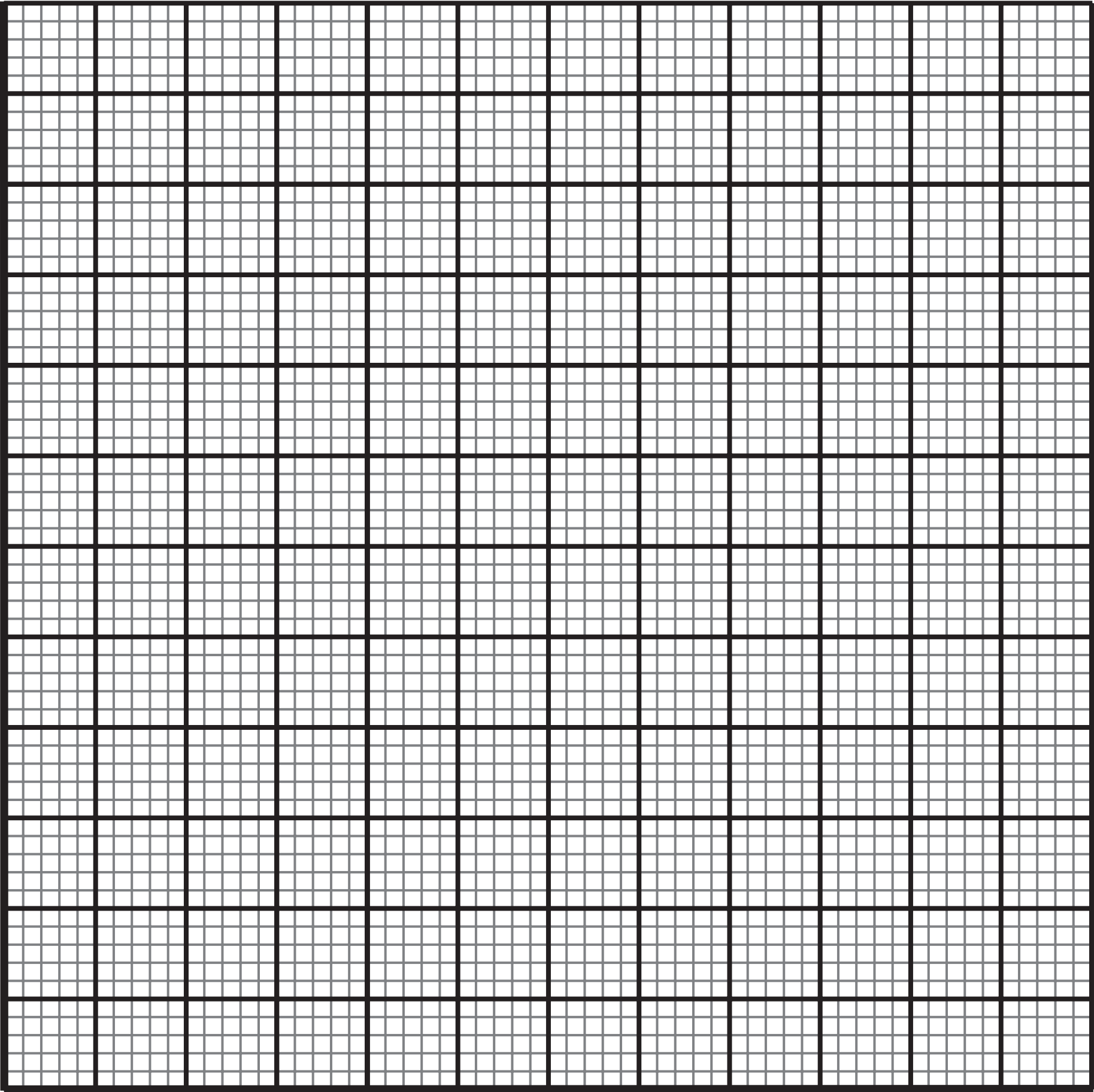


Question 9(b)

Solution	Mineral lacking	Total number of leaves	Leaf size	Leaf colour
A	none	13	large	4
B	nitrate	7	small	2
C	magnesium	8	medium	2
D	iron	9	medium	1

Question 1(a)(ii) – Blank

Question 6(b)(i)



Source information

Question 1(b)

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