

Biology A (Salters Nuffield)
Advanced

PAPER 1: The Natural Environment and Species Survival

Thursday 5 June 2025 – Afternoon

Time: 2 hours

Diagram Booklet

THIS DOCUMENT MUST BE RETURNED TO
PEARSON 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.

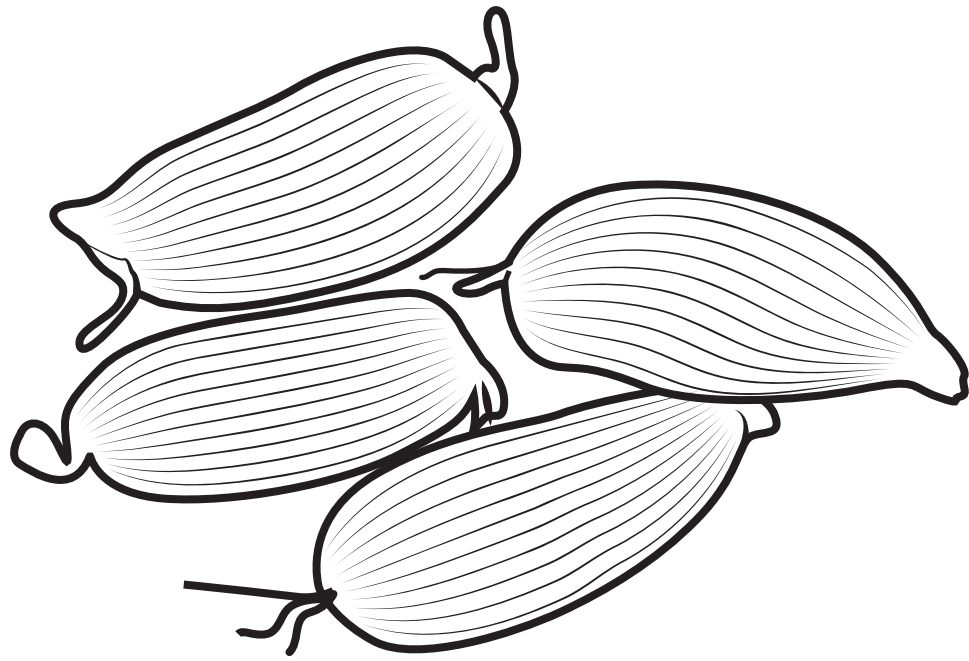
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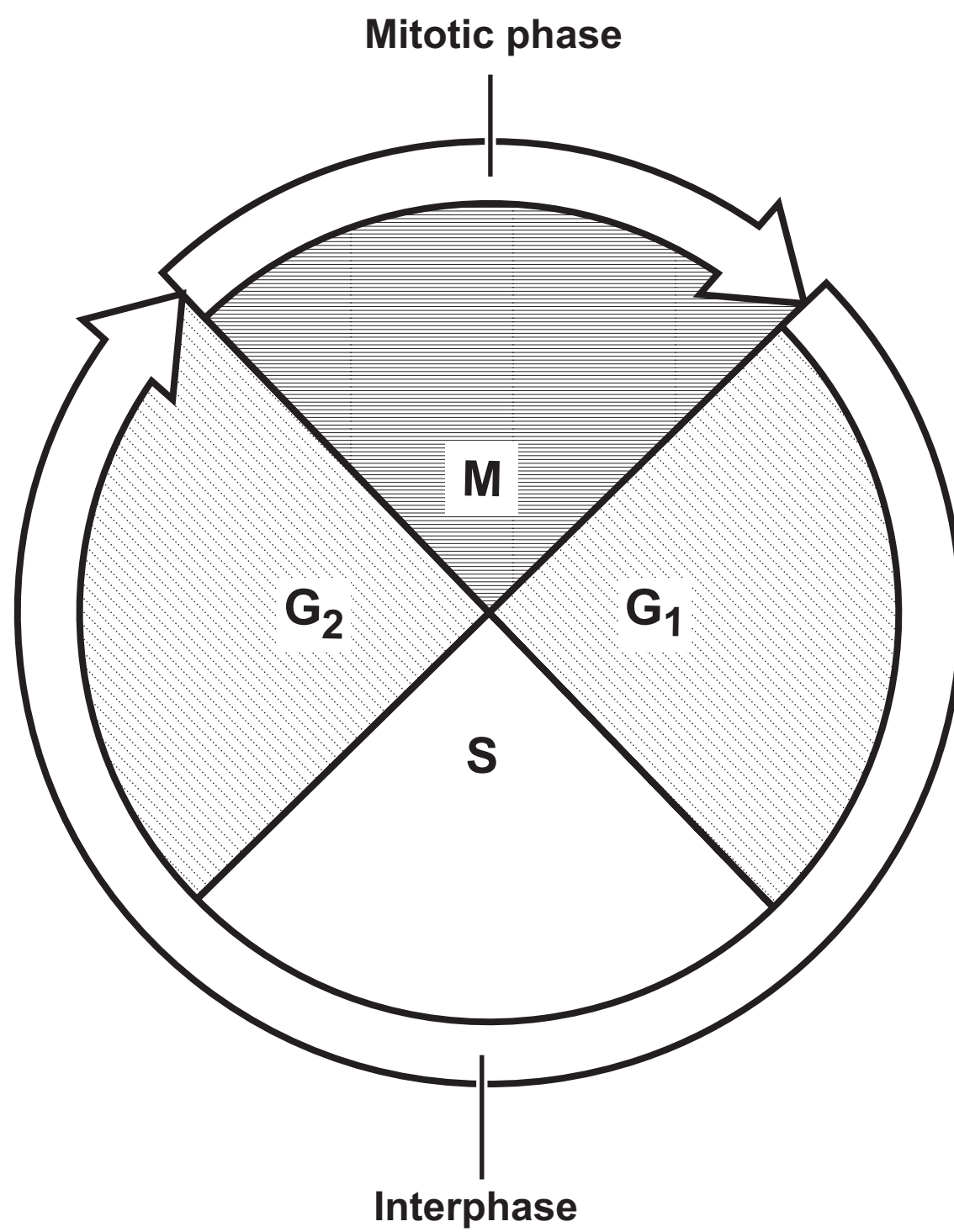
3	Question 2(b)
4	Question 3(a)
5	Question 3(a)(ii)
6	Question 3(b)
7	Question 4
8	Question 6(c)
9	Question 7
10	Question 7(b)(i)
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Spare Copies

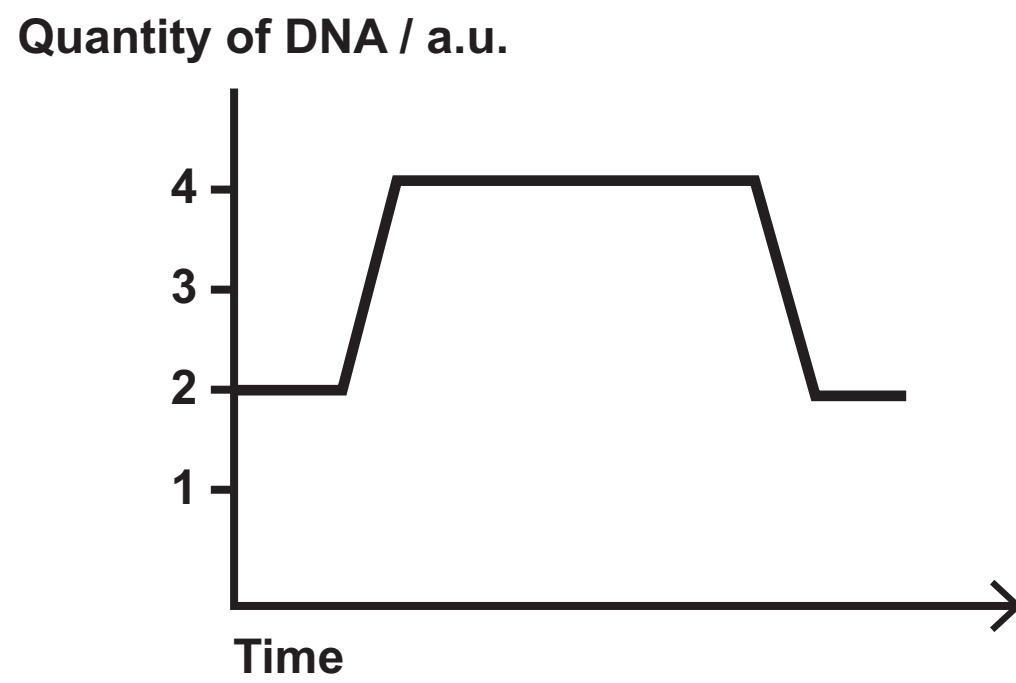
14	Question 7(b)(i) – spare copy
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Question 2(b)

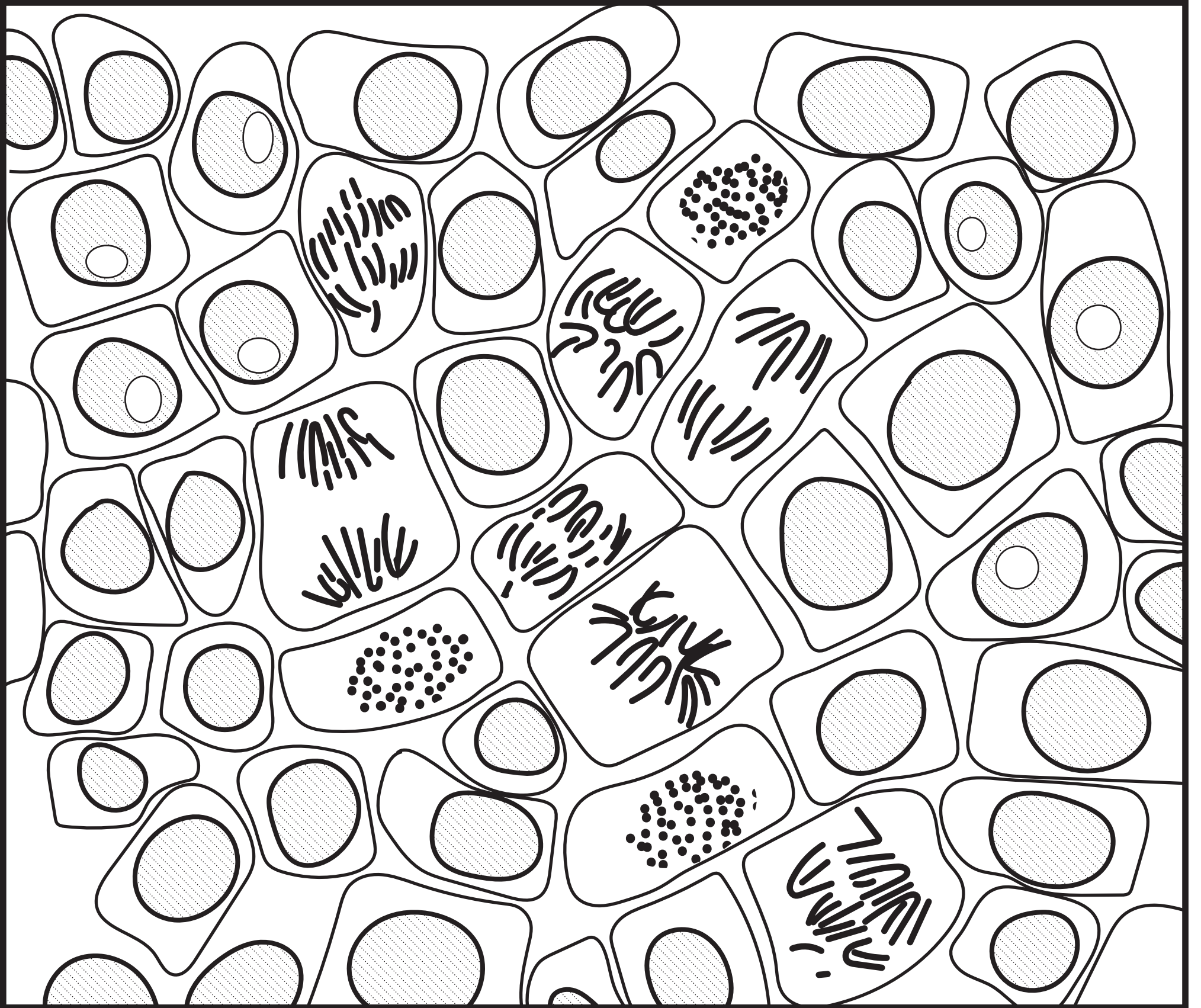
Question 3(a)



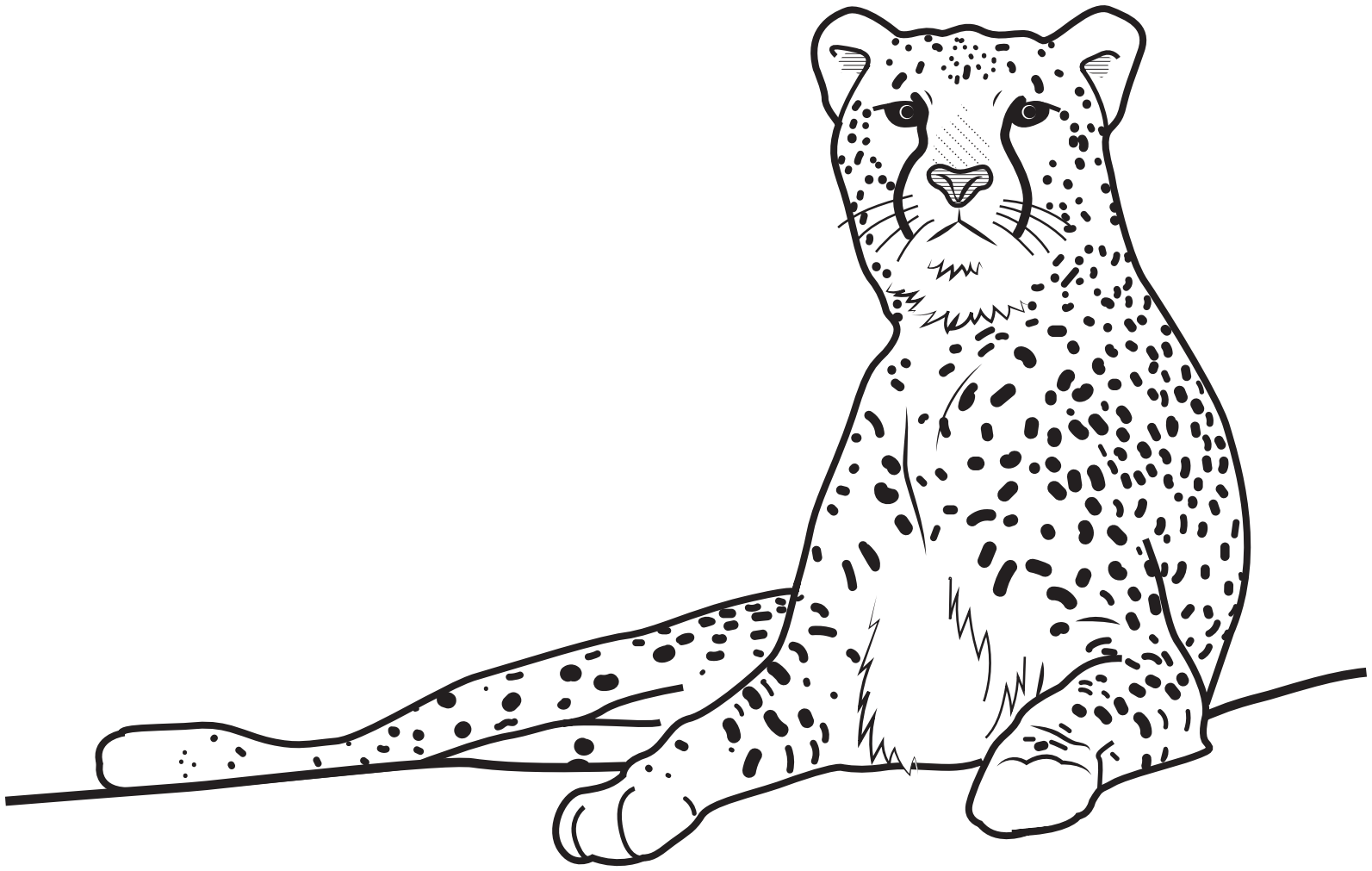
Question 3(a)(ii)



Question 3(b)

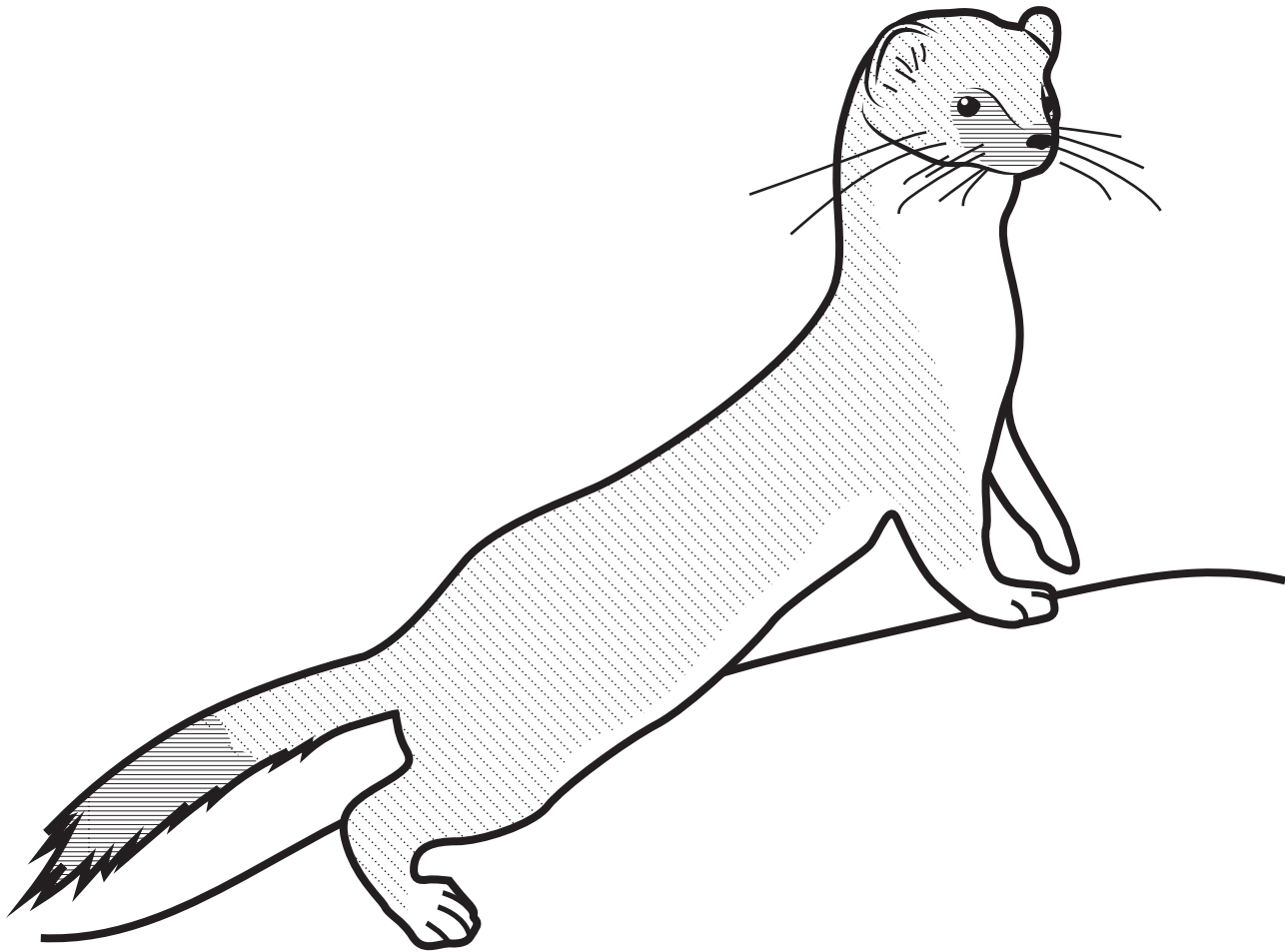


Question 4



Question 6(c)

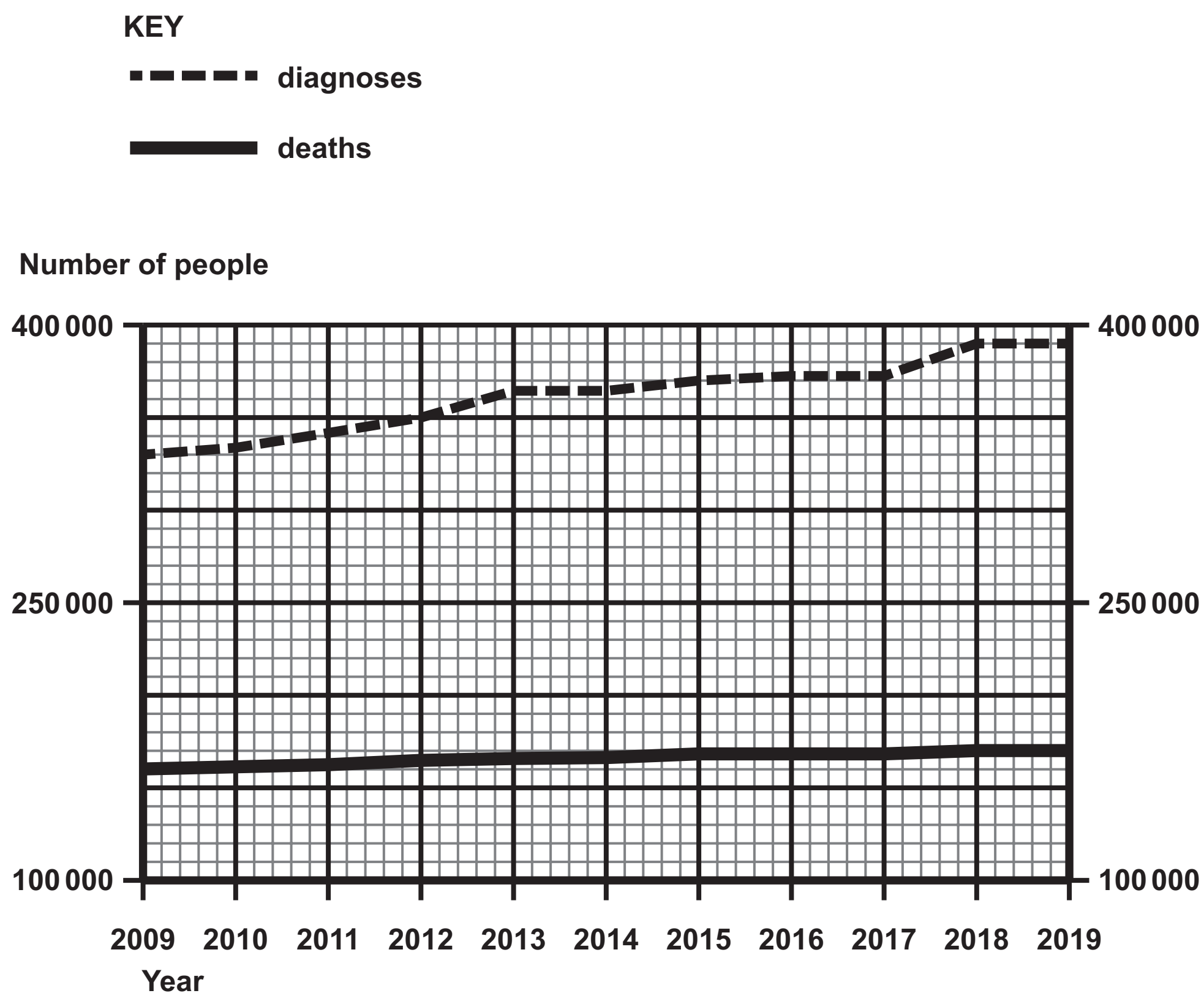
Antibiotic substance	Potential use
Seraticin	Effective against MRSA, C. difficile, E. coli
Reutericyclin	Effective against MRSA

Question 7

Question 7(b)(i)

Year	Number of breeding females	Number of female offspring	Total number of offspring
1	1	6	12
2	$1 + 6 = 7$	42	84
3	$7 + 42 = 49$	294	588
4			

Question 8



Question 8(c)

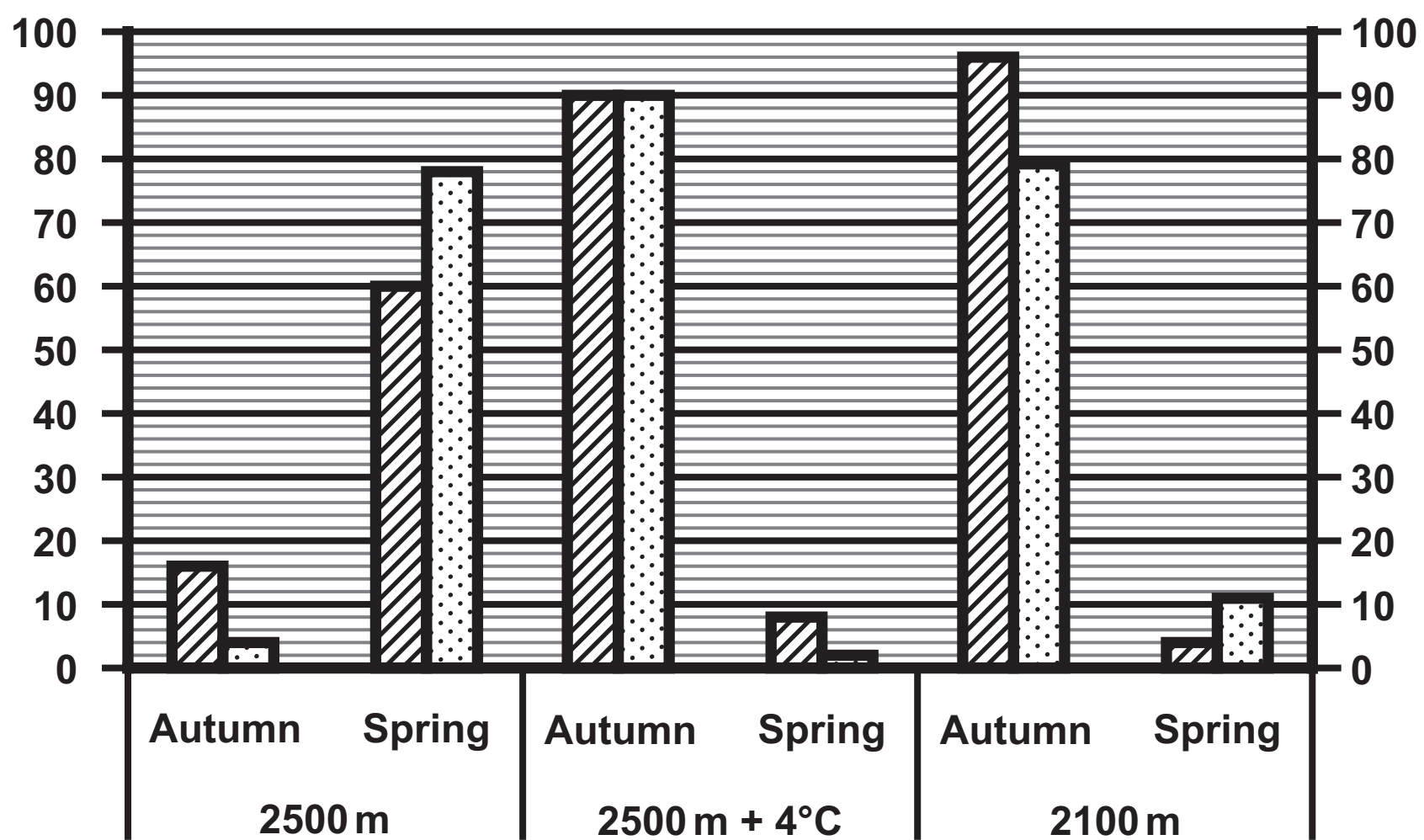
Type of immunotherapy	Method of action
Monoclonal antibodies	The antibody attaches to the specific protein antigen on cancer cells
Checkpoint blockers	Blocks T cell inhibitors produced by cancer cells
mRNA vaccine	Engulfed by macrophages and used to synthesise the specific protein antigen

Question 10(b)

KEY

 Veronica Oxyria

Percentage germination (%)



Question 7(b)(i) – spare copy

Year	Number of breeding females	Number of female offspring	Total number of offspring
1	1	6	12
2	$1 + 6 = 7$	42	84
3	$7 + 42 = 49$	294	588
4			

Source information

Question 2(b)

Source: adapted from © Silarock/Shutterstock

Question 3(b)

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Question 4

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Question 7

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