

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

**Biology**

**UNIT: 4BI1**

**Science (Double Award) 4SD0**

**PAPER: 1BR**

**Time: 2 hours**

**Diagram Booklet**

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

<b>Surname</b>					
<b>Other names</b>					
<b>Centre Number</b>					
<b>Candidate Number</b>					

## INSTRUCTIONS

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

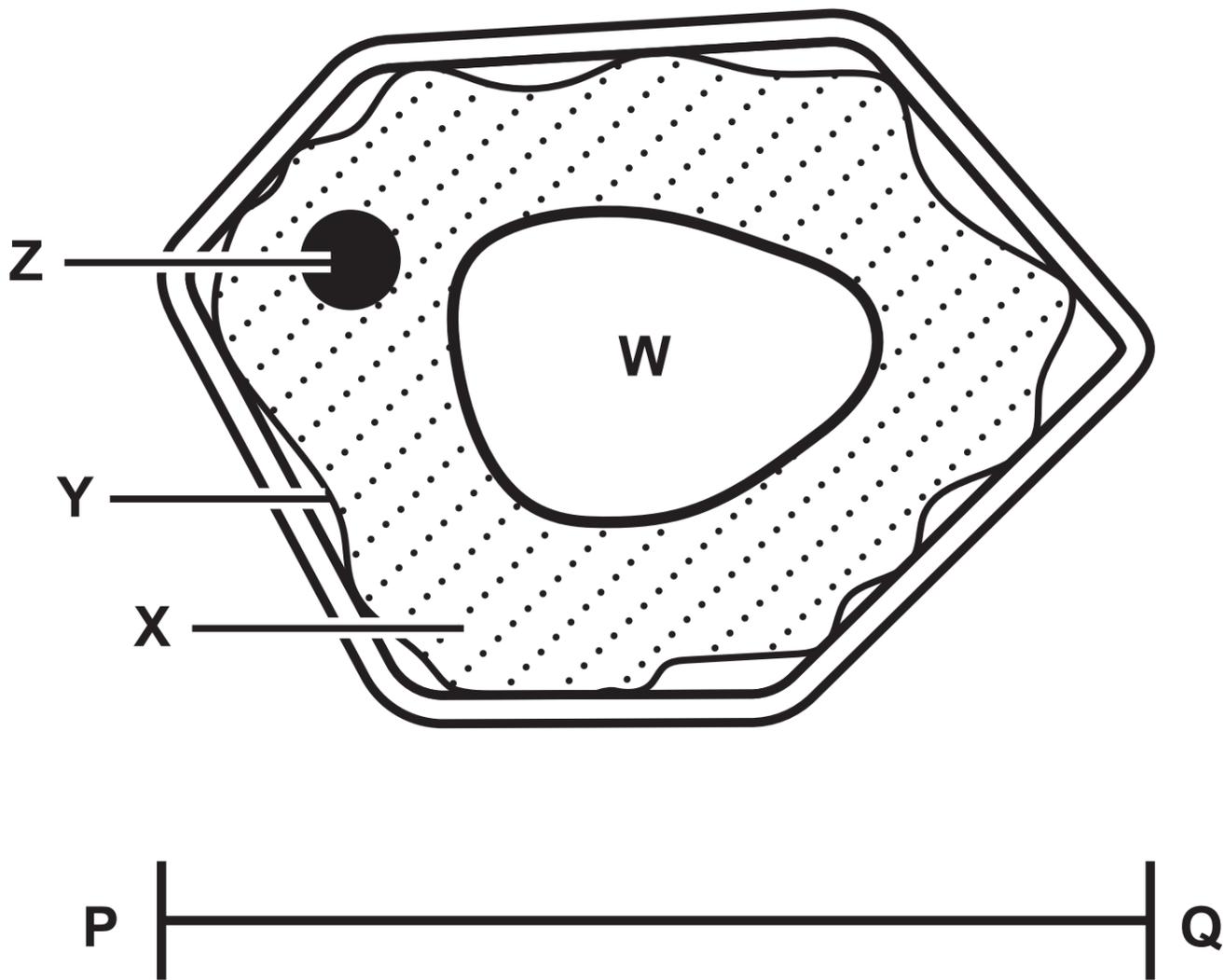
**THIS DIAGRAM BOOKLET MUST BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.**

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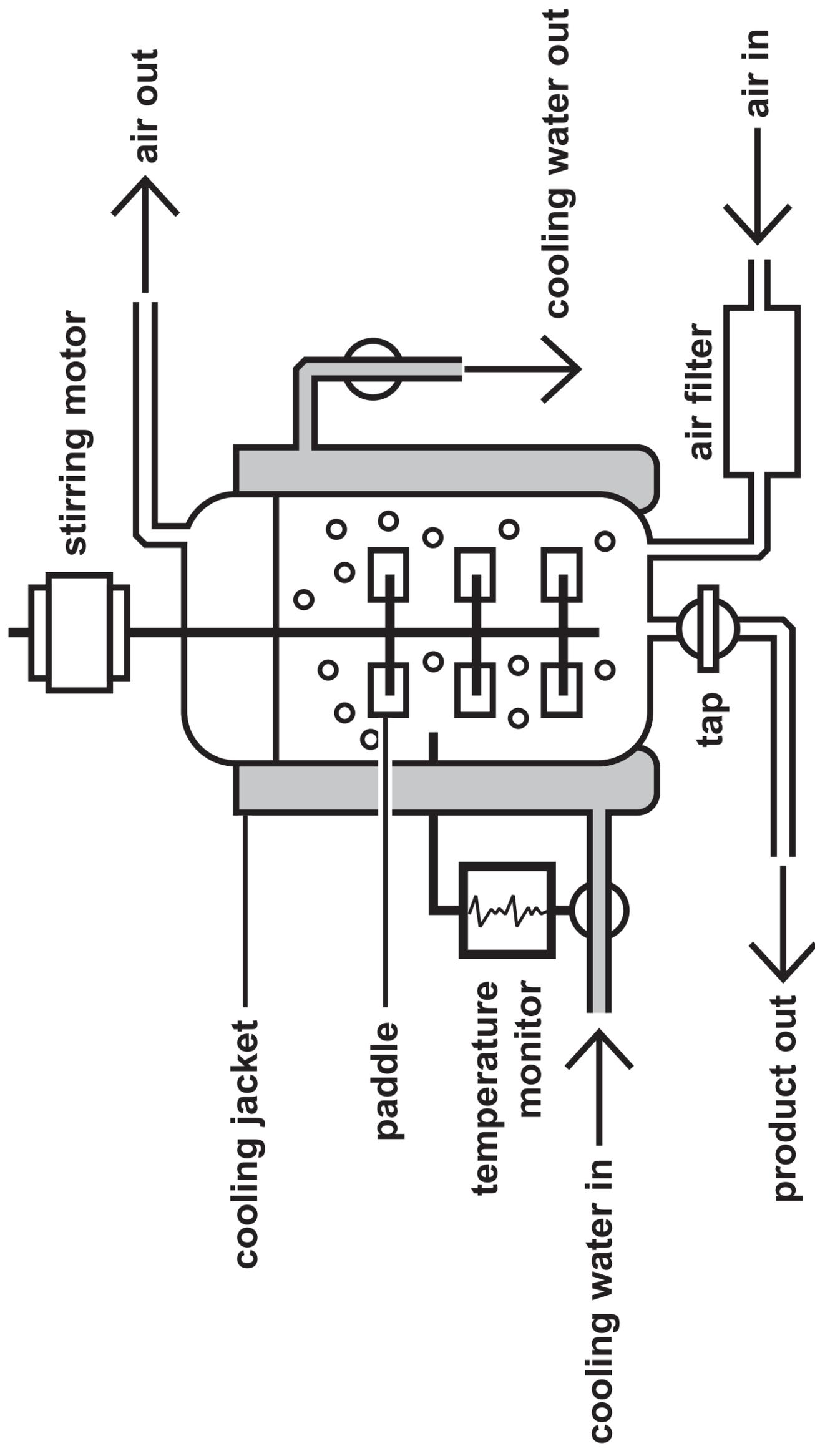
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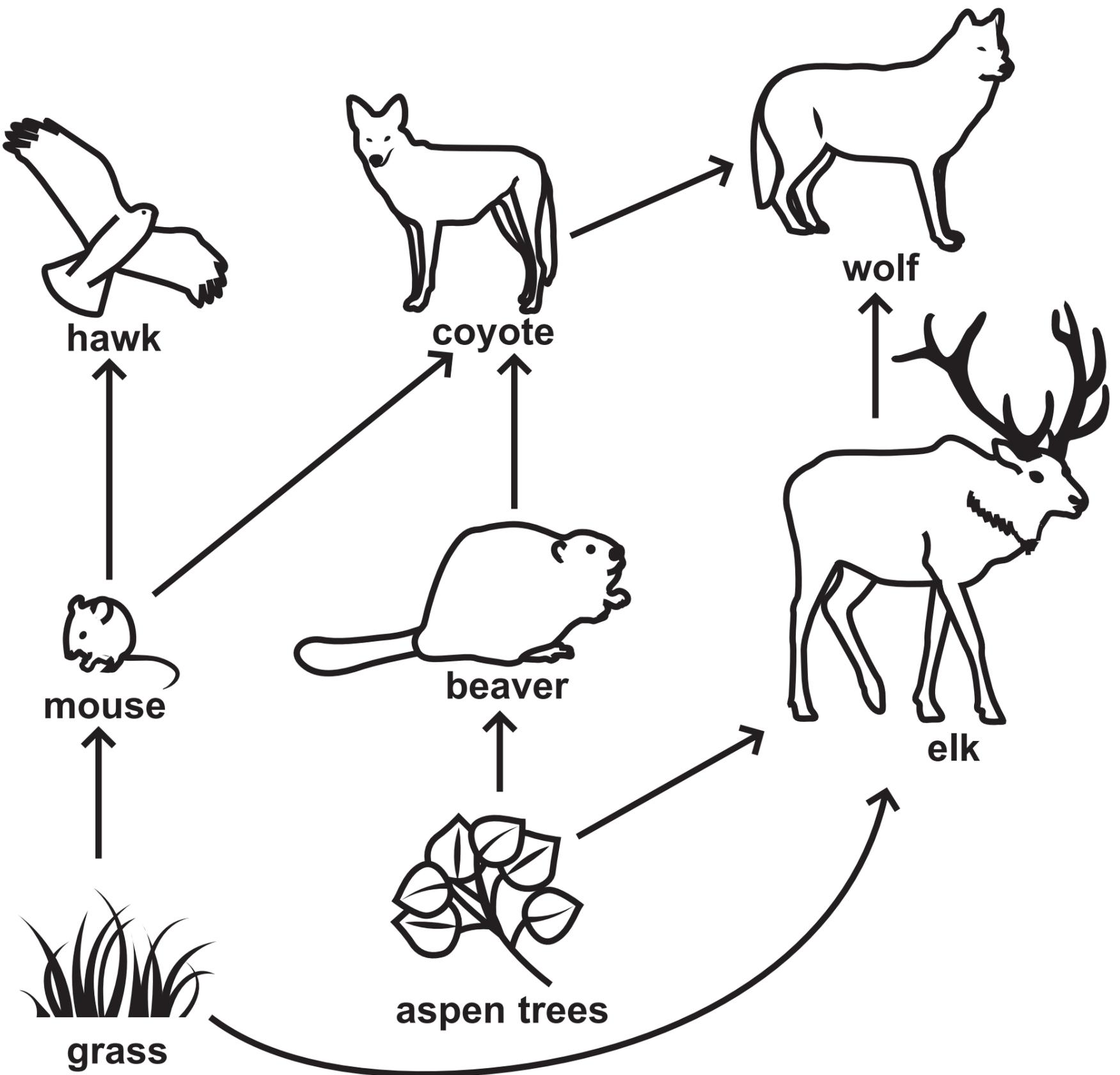
Question 1



Question 2(c)

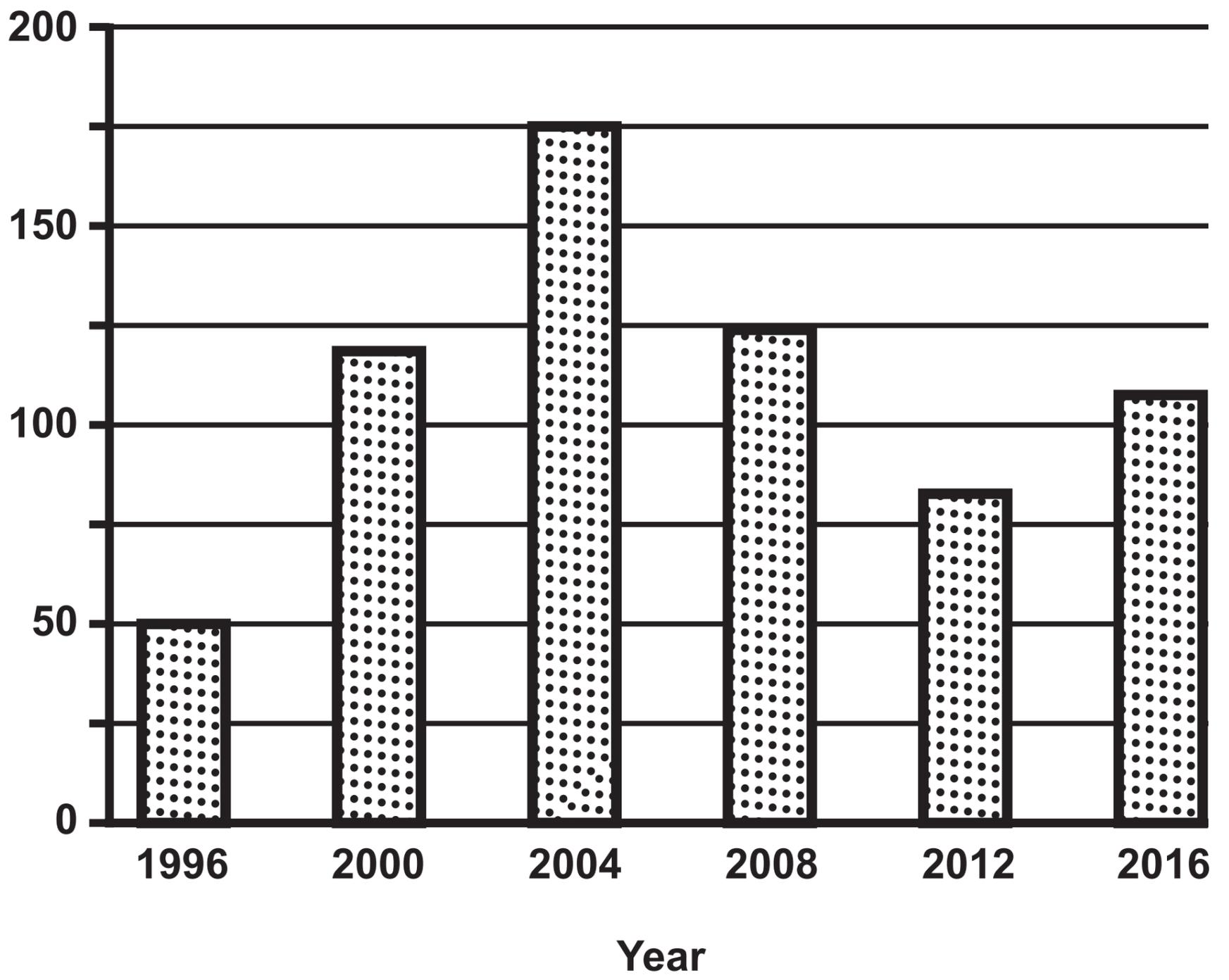


Question 3

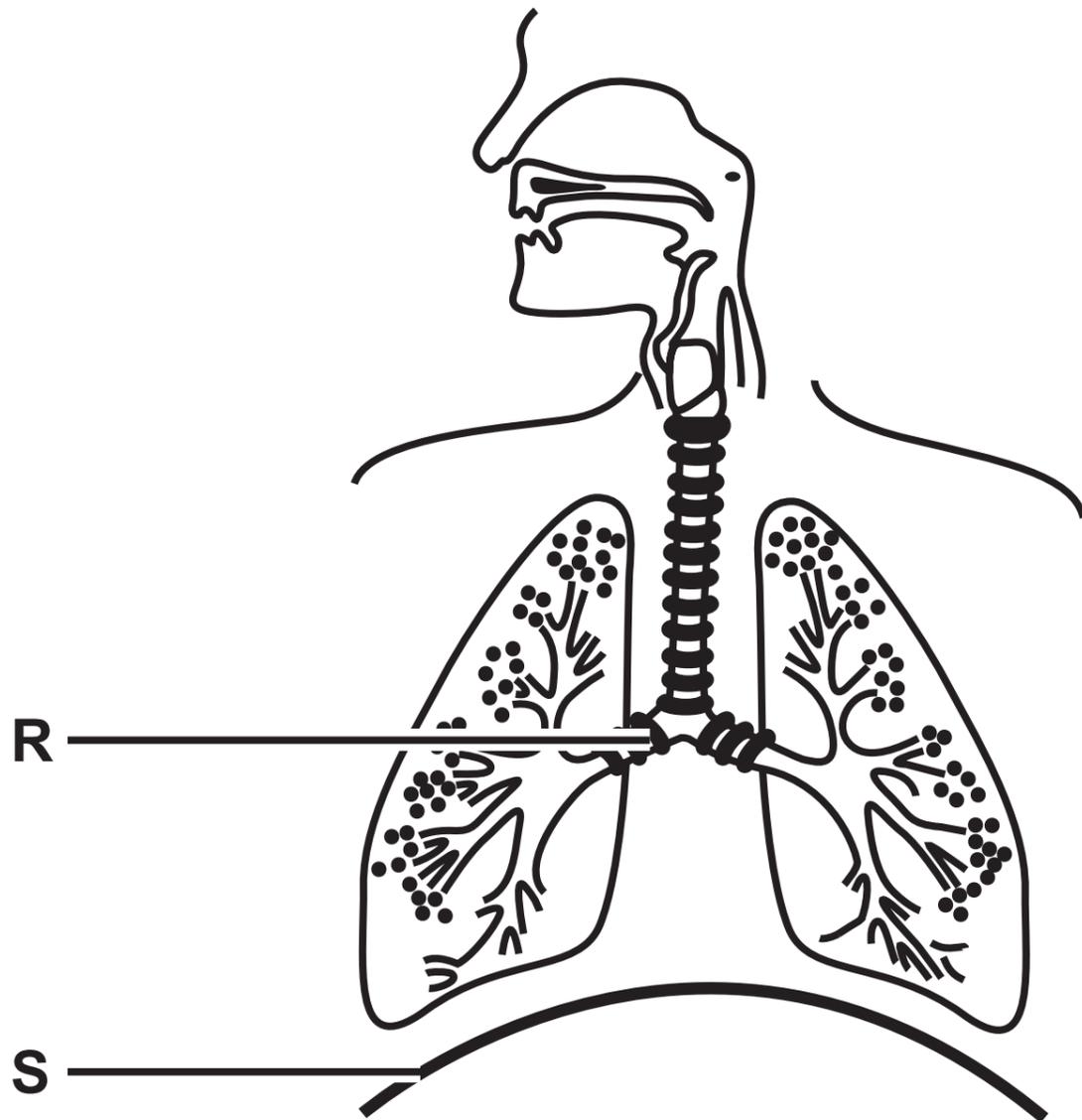


Question 3(c)

Wolf population



Question 4(a)

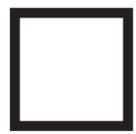


## Question 4(b)

<b>Cycling speed in km per hour</b>	<b>Volume of air in each breath in cm<sup>3</sup></b>	<b>Breathing rate in breaths per minute</b>	<b>Ventilation rate in dm<sup>3</sup> per minute</b>
<b>0</b>	<b>500</b>	<b>14</b>	<b>7</b>
<b>15</b>	<b>1500</b>	<b>14</b>	<b>21</b>
<b>20</b>	<b>2000</b>	<b>14</b>	<b>28</b>
<b>25</b>	<b>2500</b>	<b>16</b>	<b>40</b>
<b>30</b>	<b>2600</b>	<b>20</b>	<b>52</b>
<b>35</b>		<b>25</b>	<b>65</b>

## Question 5(b)

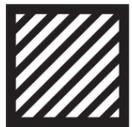
## KEY



male with normal feathers



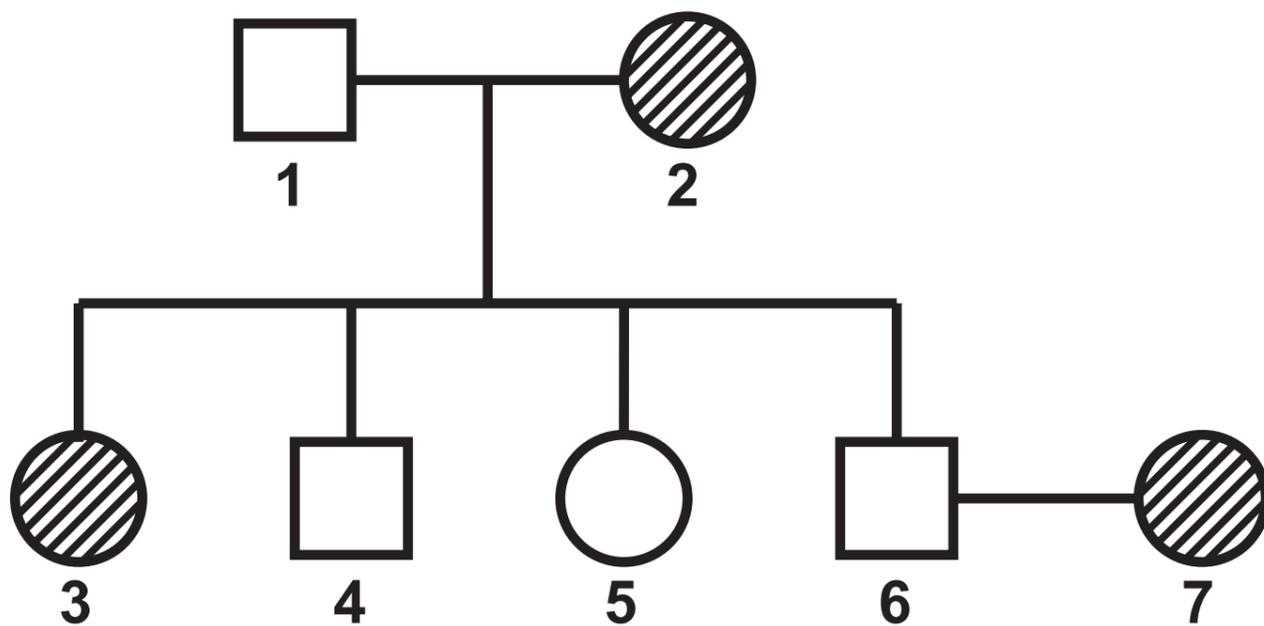
female with normal feathers



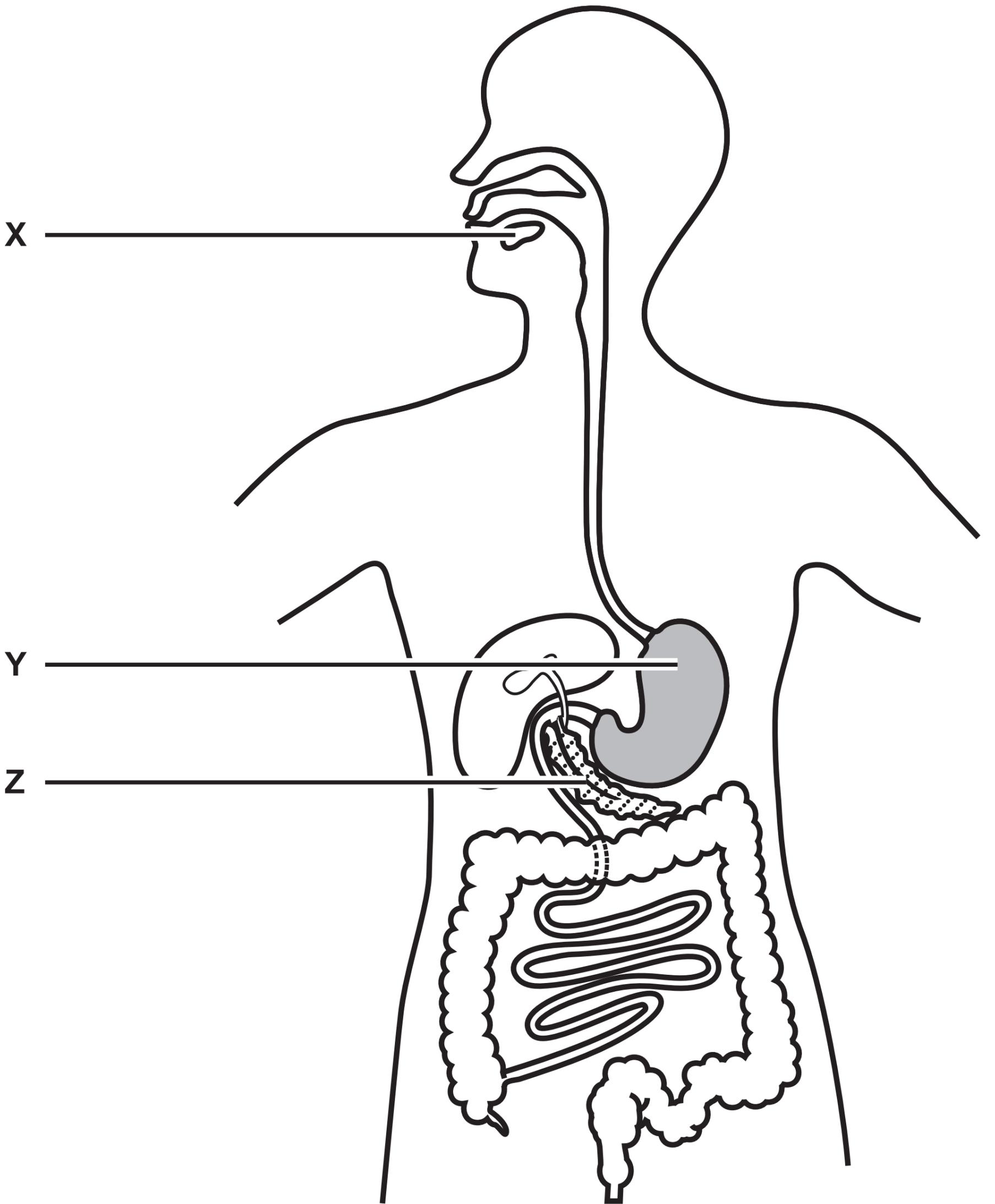
male with silkie feathers



female with silkie feathers



Question 6(a)(i)



## Question 6(a)(ii)

Table 1

<b>Enzyme</b>	<b>Molecule</b>	<b>Product</b>
		<b>maltose</b>
	<b>lipid</b>	
<b>protease</b>		

## Question 6(a)(ii)

Table 1

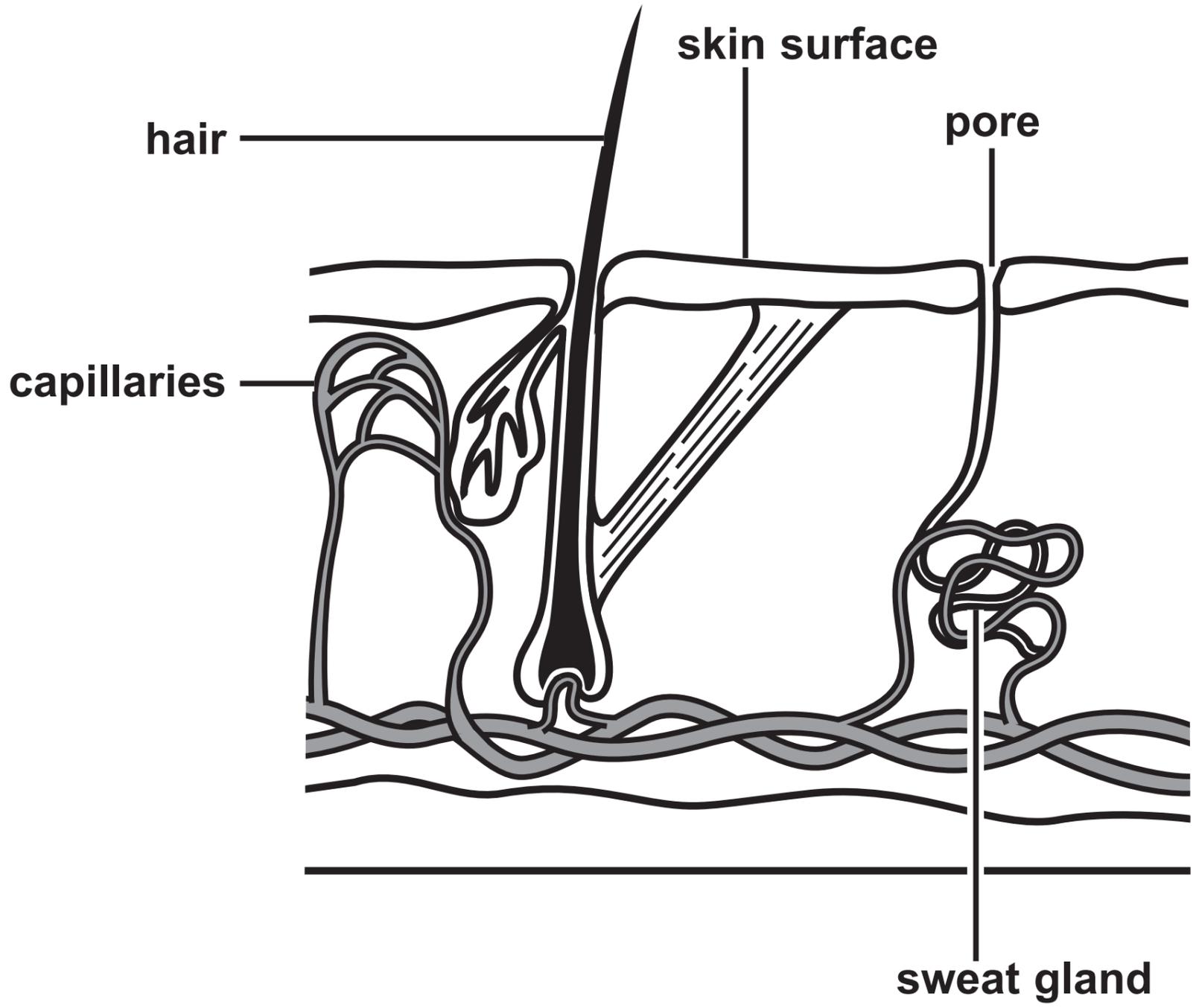
<b>Enzyme</b>	<b>Molecule</b>	<b>Product</b>
		<b>maltose</b>
	<b>lipid</b>	
<b>protease</b>		

## Question 6(b)

Table 2

Amount of dietary component							
	Energy in kJ	Protein in g	Vitamin A in mg	Vitamin C in mg	Calcium in mg	Iron in mg	Fibre in g
<b>RDA</b>	2200	46	0.70	65	1300	15	26
<b>Diet of person</b>	2700	46	0.72	32	800	16	12

Question 7(b)



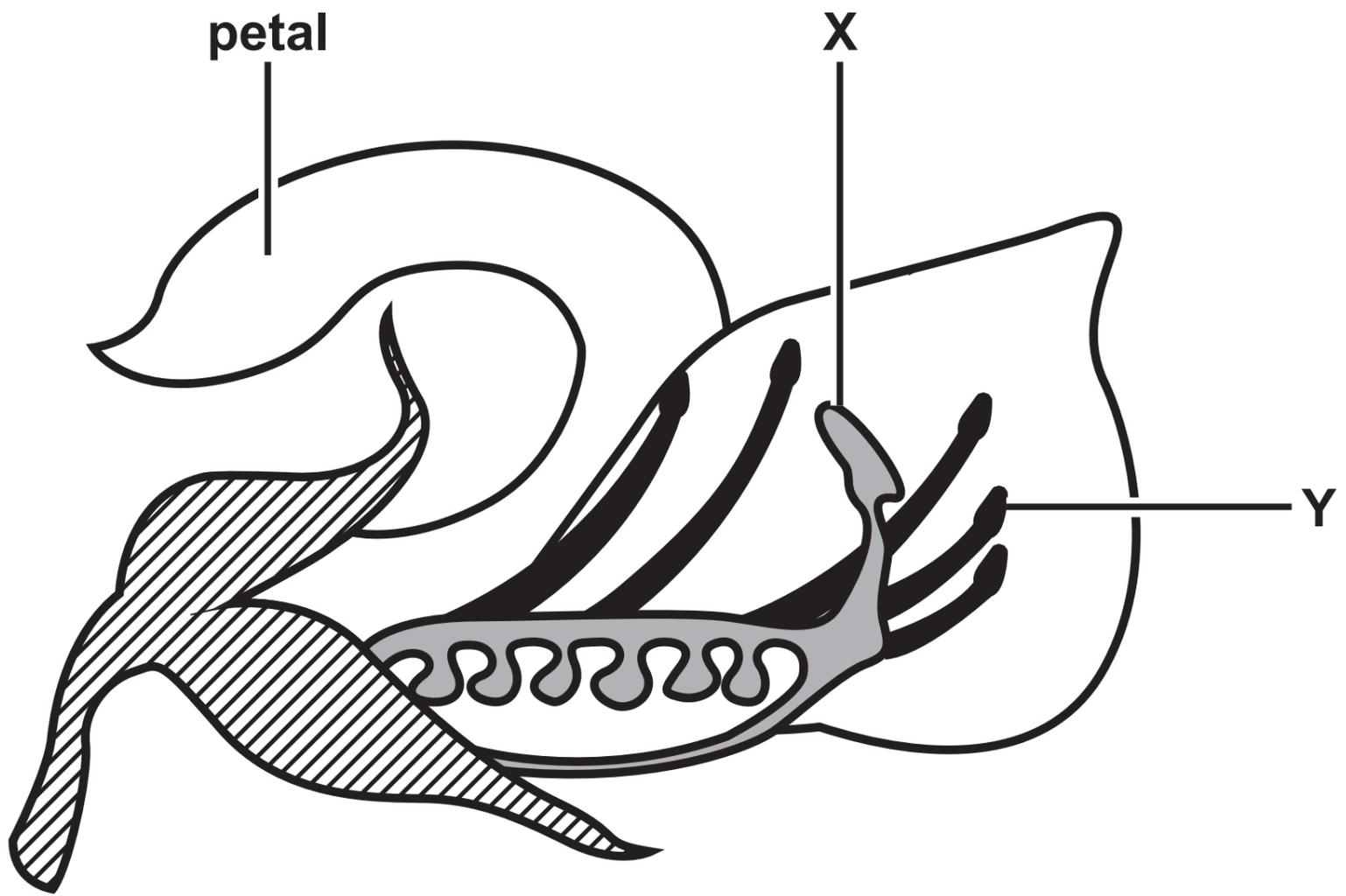
## Question 8

Day	Dry mass of seedlings in g	
	Without fertiliser	With fertiliser
4	3.5	3.8
8	4.9	5.8
12	5.8	6.7
16	6.3	7.8
20	6.8	8.5





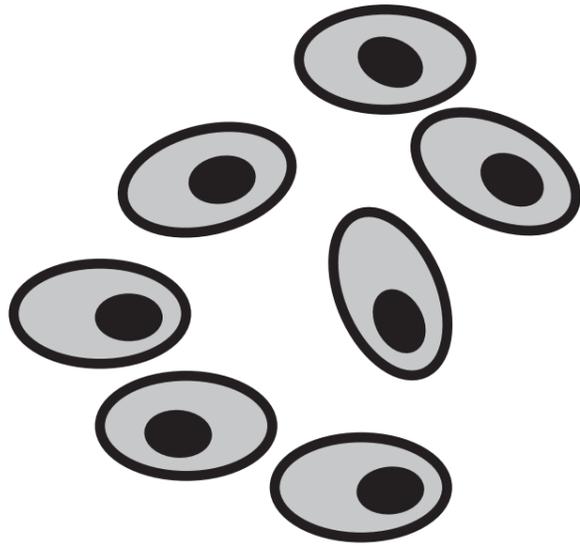
Question 9(a)



## Question 9(b)

<b>Seeds</b>	<b>Colour of iodine solution</b>	<b>Colour of Benedict's solution</b>
<b>ungerminated</b>	<b>black</b>	<b>blue</b>
<b>germinating</b>	<b>black</b>	<b>red</b>

Question 10(a)



**Question 10**

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