

Biology
PAPER 1
Higher Tier

Tuesday 16 May 2023 – Morning

Diagram Booklet

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.

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

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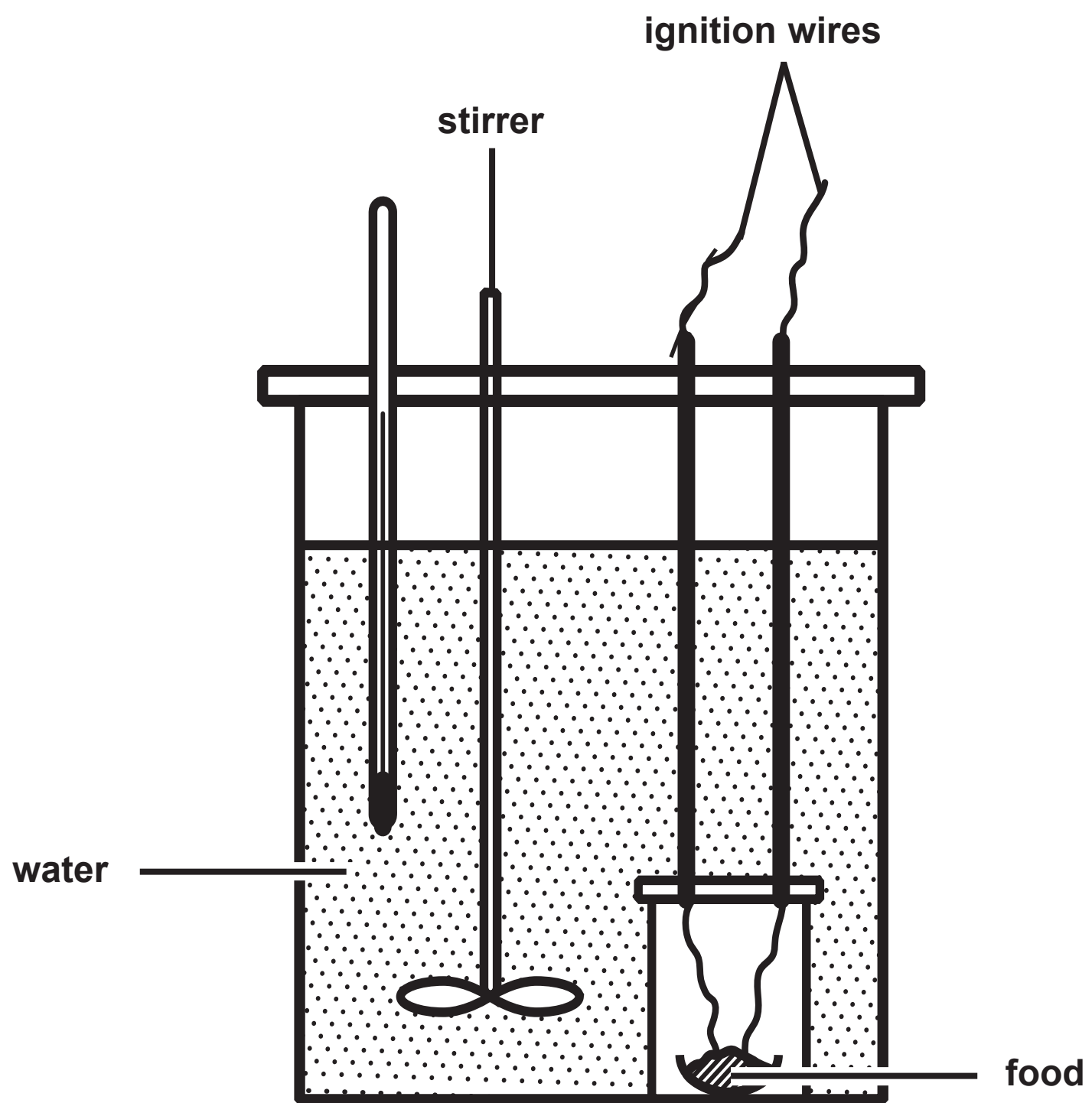
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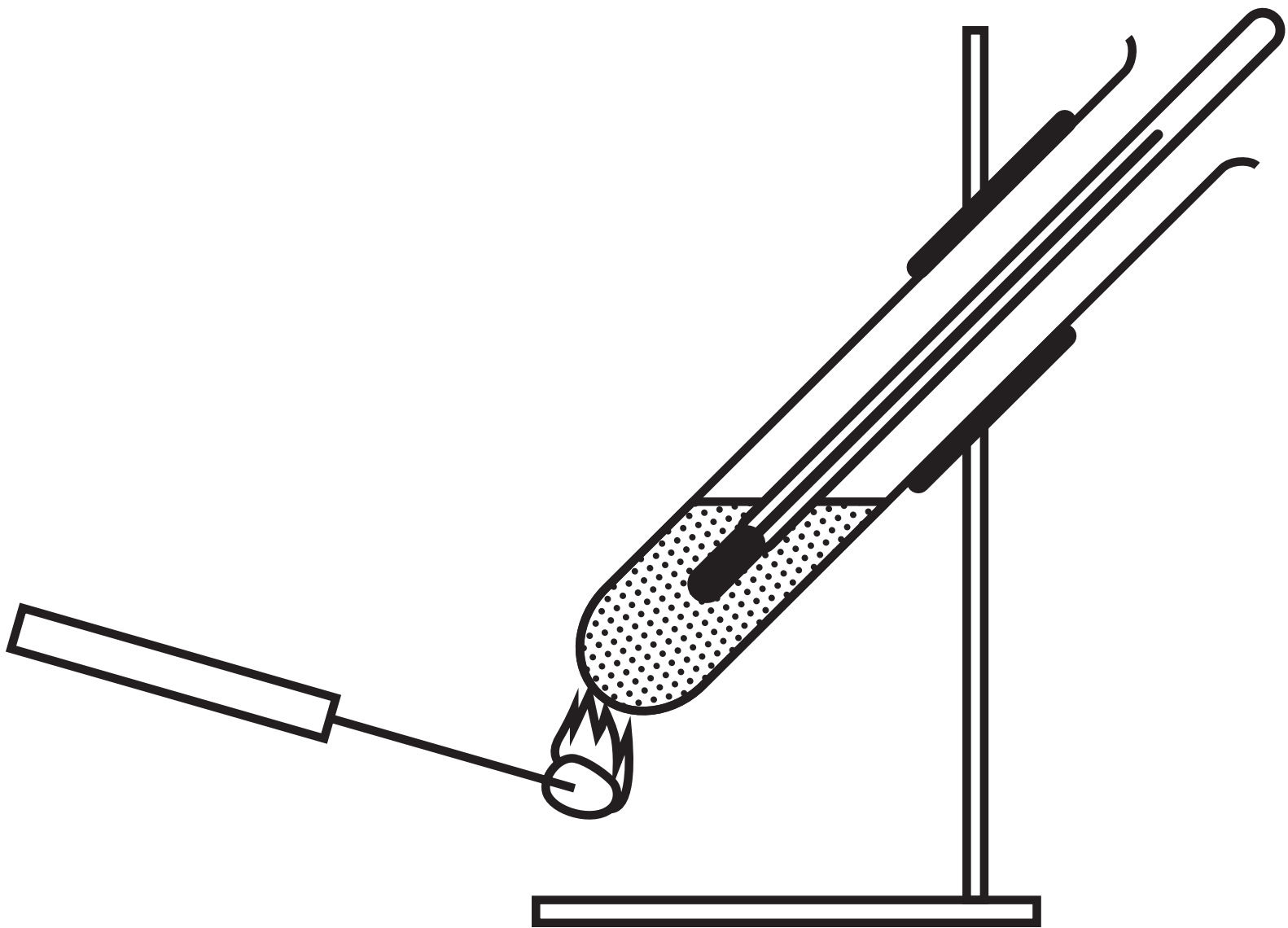
Question 1(a)

FIGURE 1



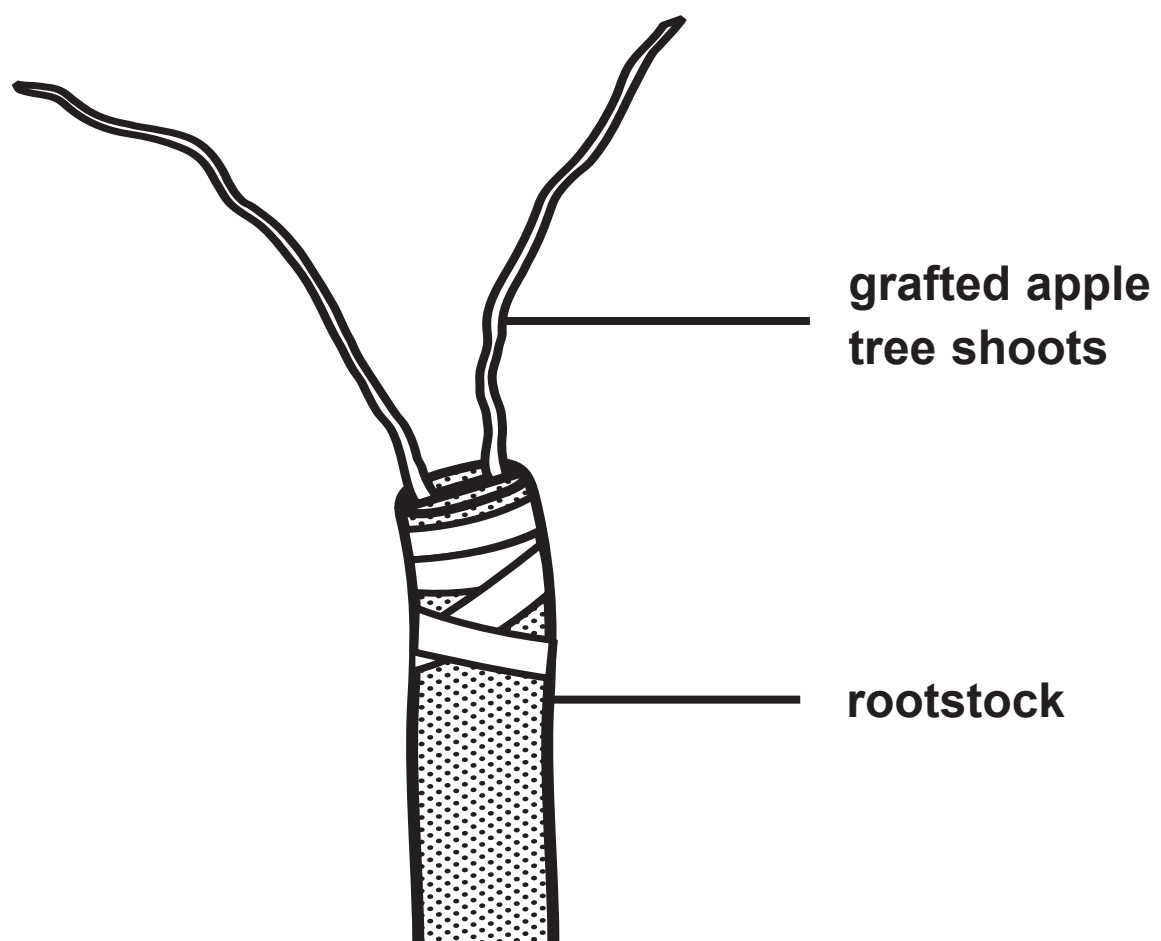
Question 1(b)

FIGURE 2



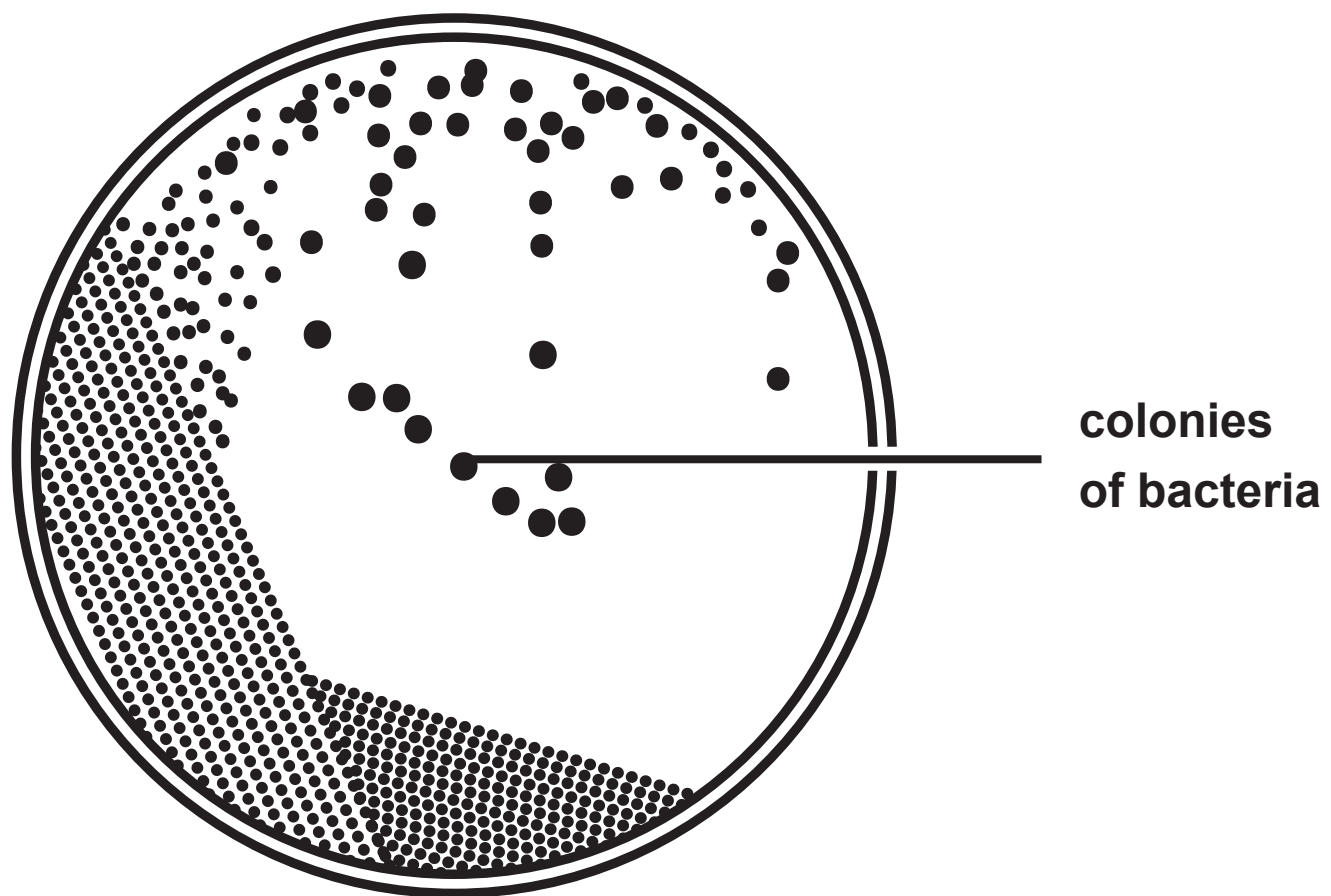
Question 2(b)

FIGURE 3



Question 3(a)

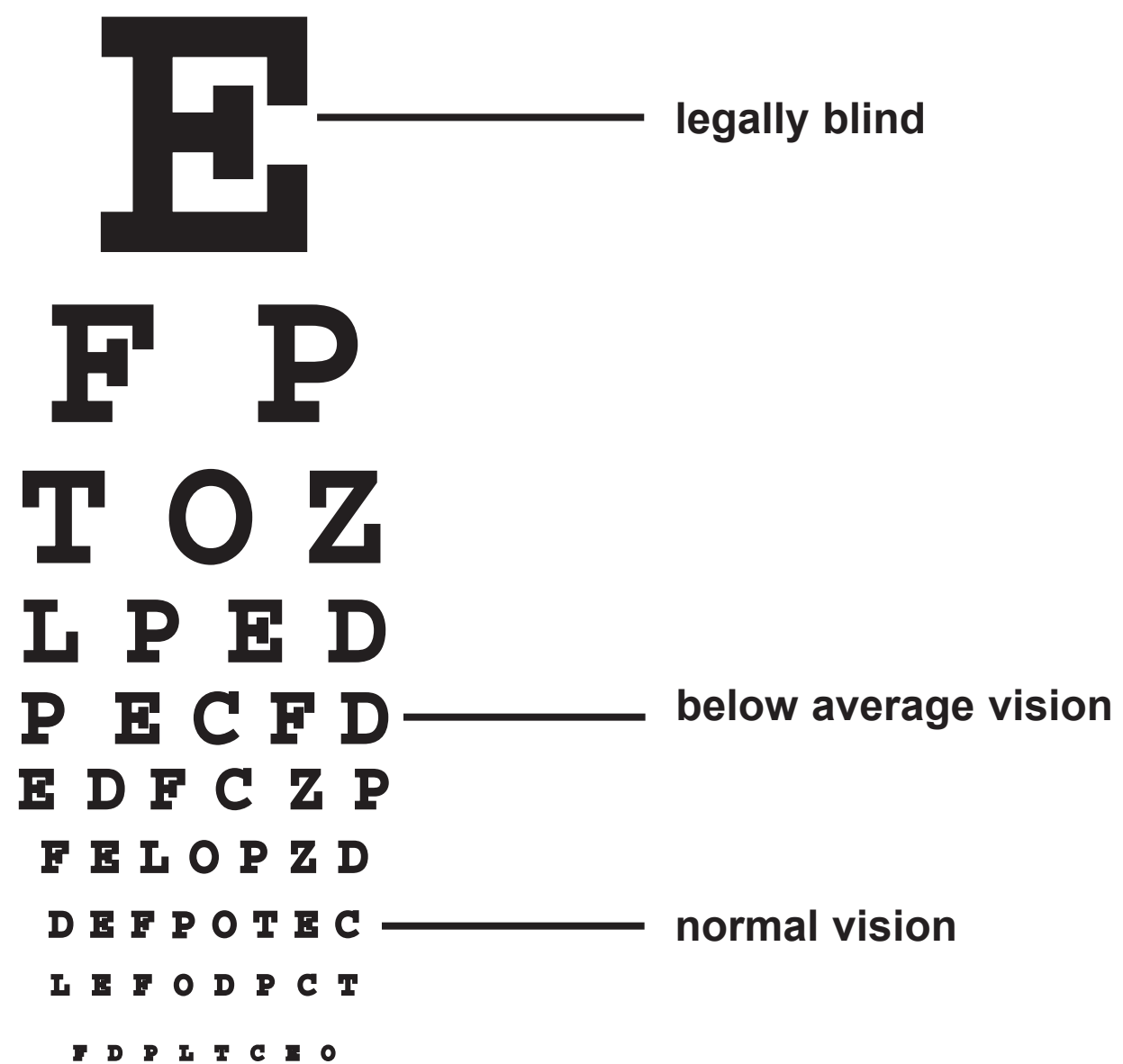
FIGURE 4



Question 4(a)

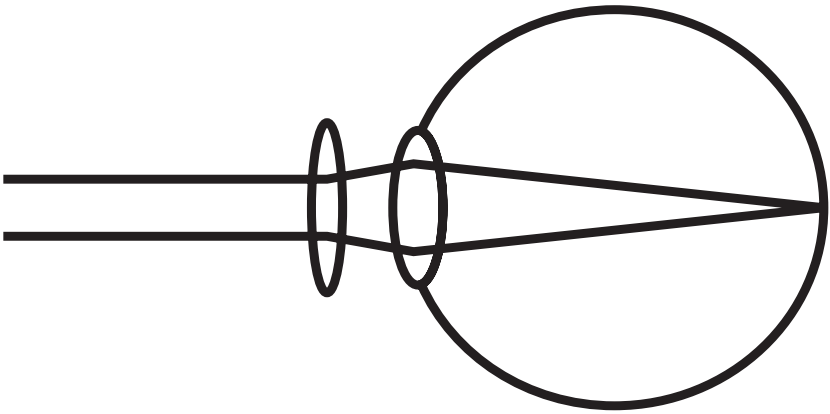
The image shows a reading chart in order of size, becoming progressively smaller. From top to bottom: very large print with a single letter to fine print with 8 letters.

FIGURE 5

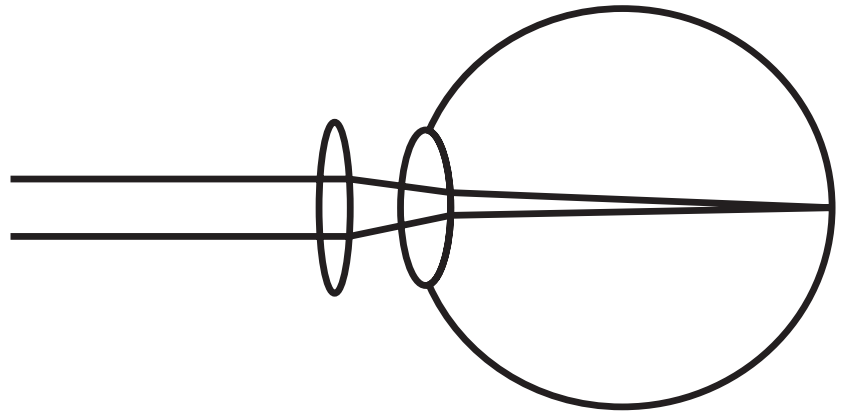


Question 4(a)(iii)

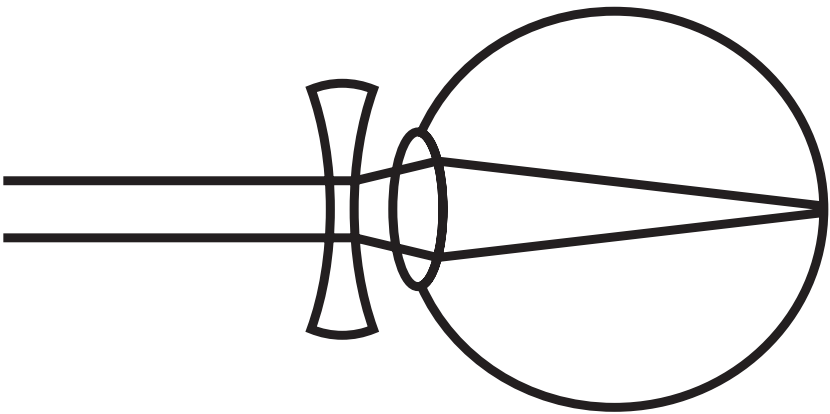
A



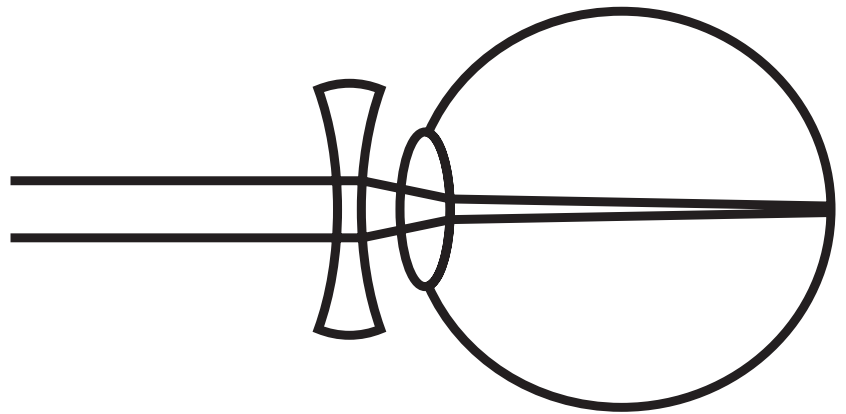
B



C



D



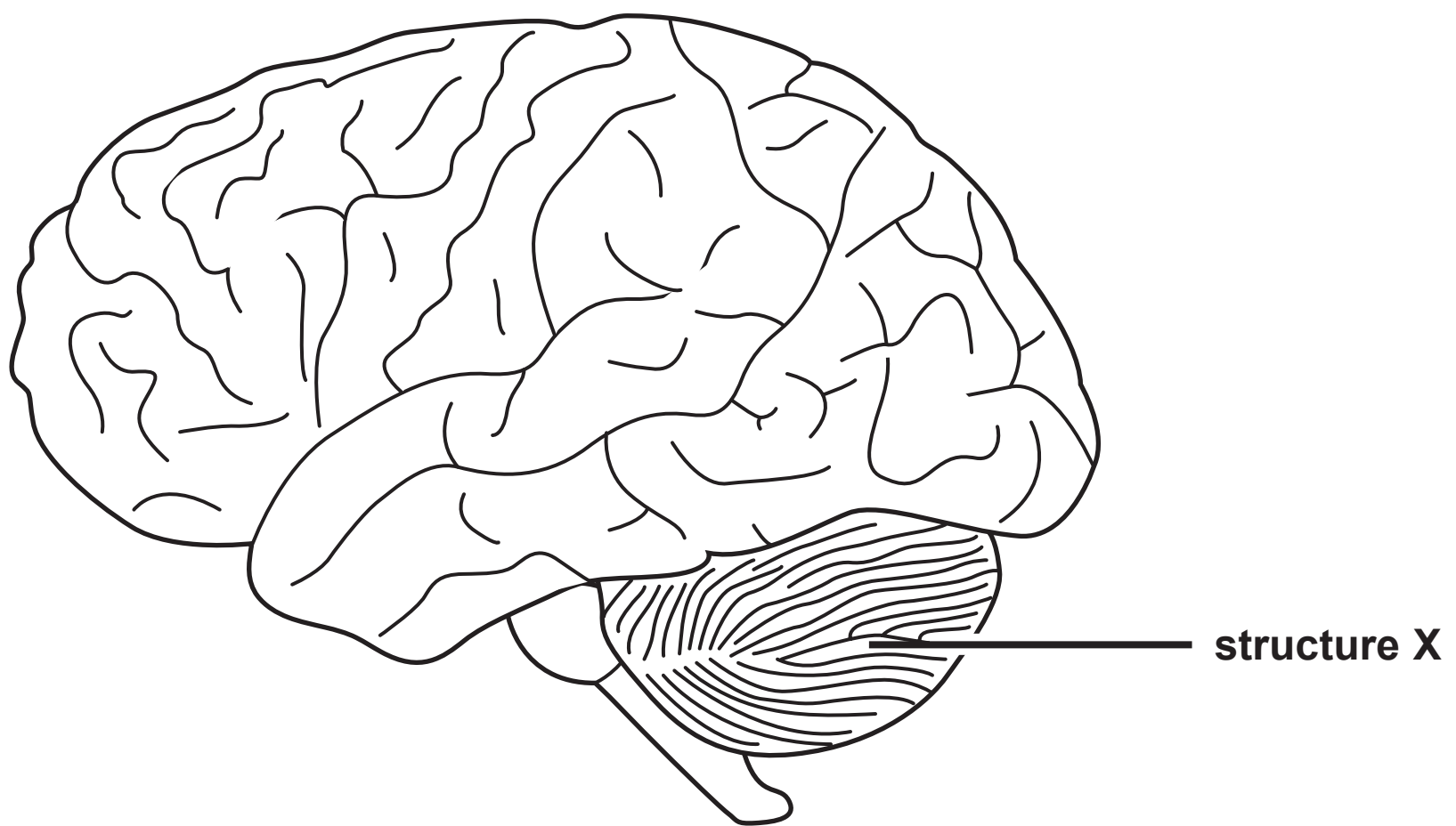
Question 4(b)

Two images of block capital letter 'E' side by side. Person with normal vision is shown as a solid, legible letter 'E' with no defects. Person with cataracts is shown as a strongly blurred image, the letter is smaller than at normal vision, with the four corners of the letter the most defined areas.

FIGURE 6**person with normal vision****person with cataracts**

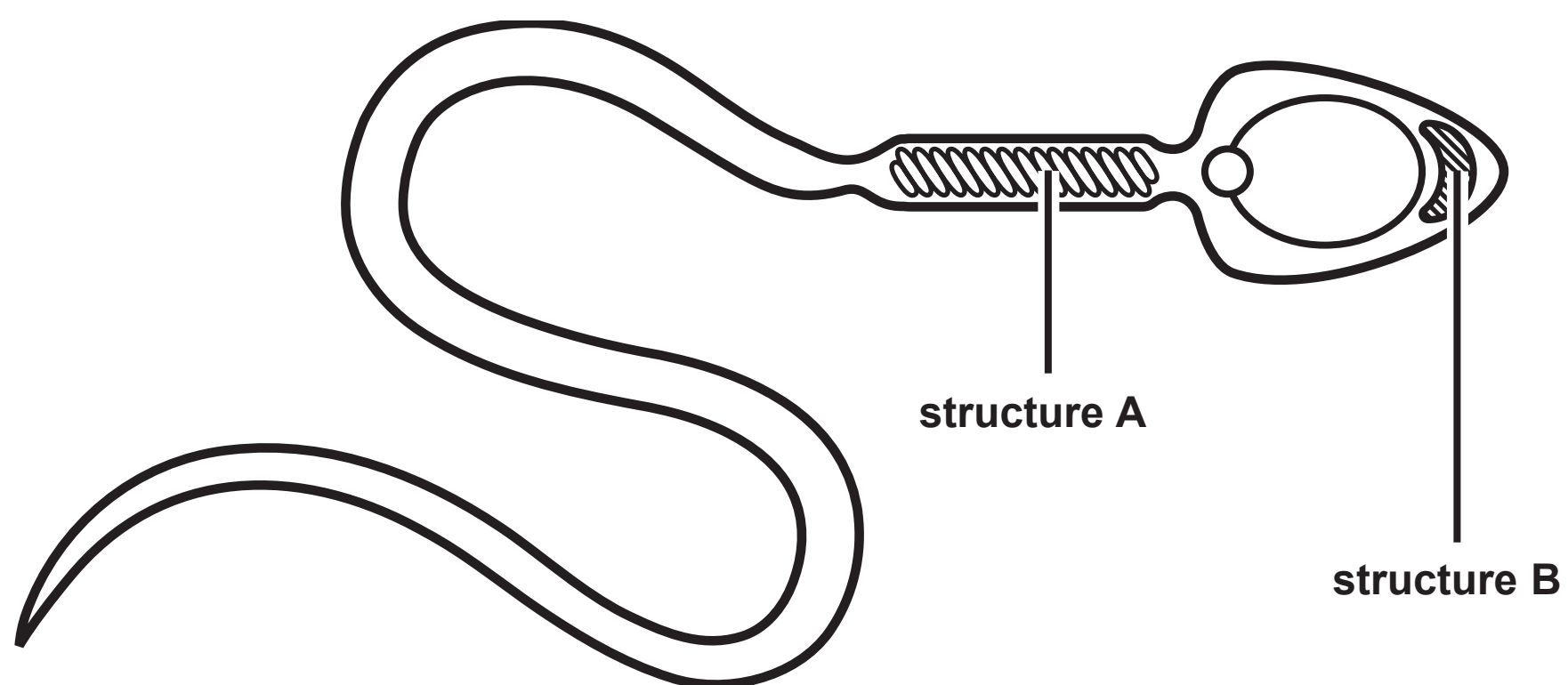
Question 4(c)(i)

FIGURE 7



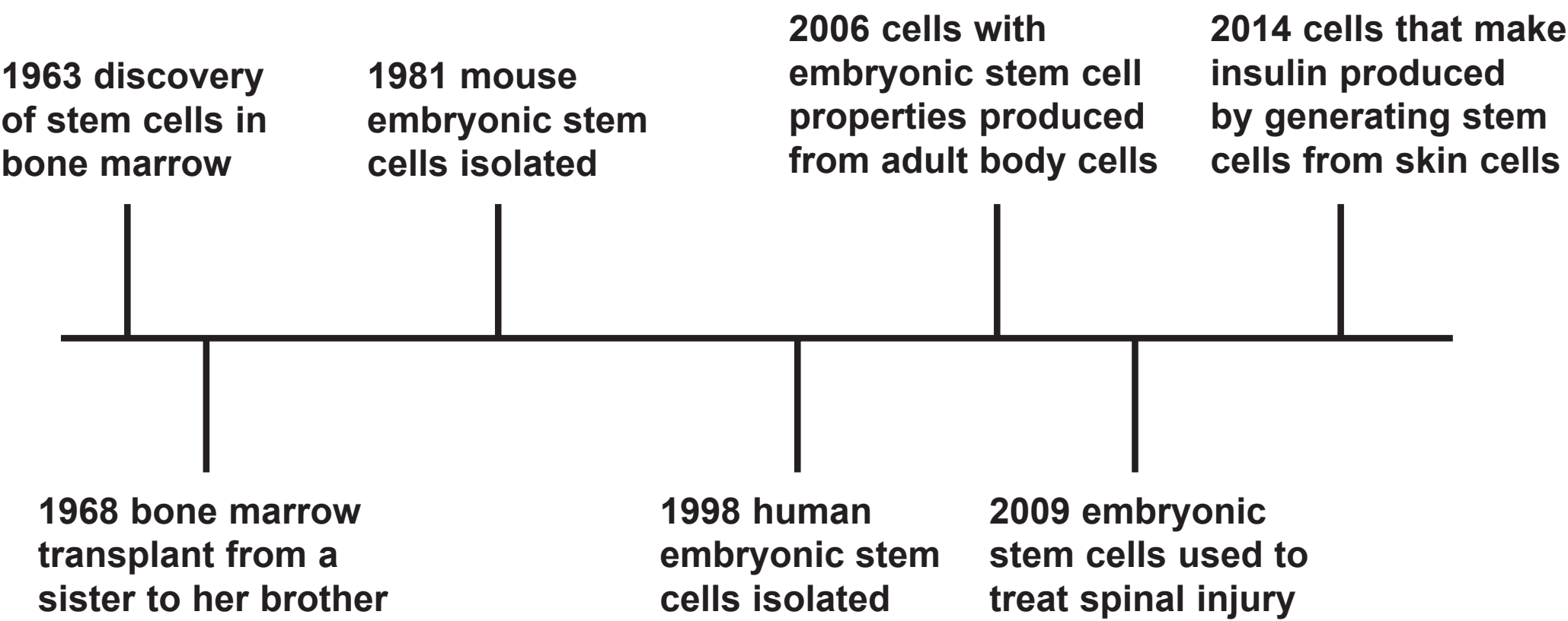
Question 5(a)

FIGURE 8



Question 5(c)

FIGURE 9



Question 6(a)

The black and white photograph shows a bird with mottled feathers and a long, pointed bill standing on a piece of driftwood on a body of water.

FIGURE 10

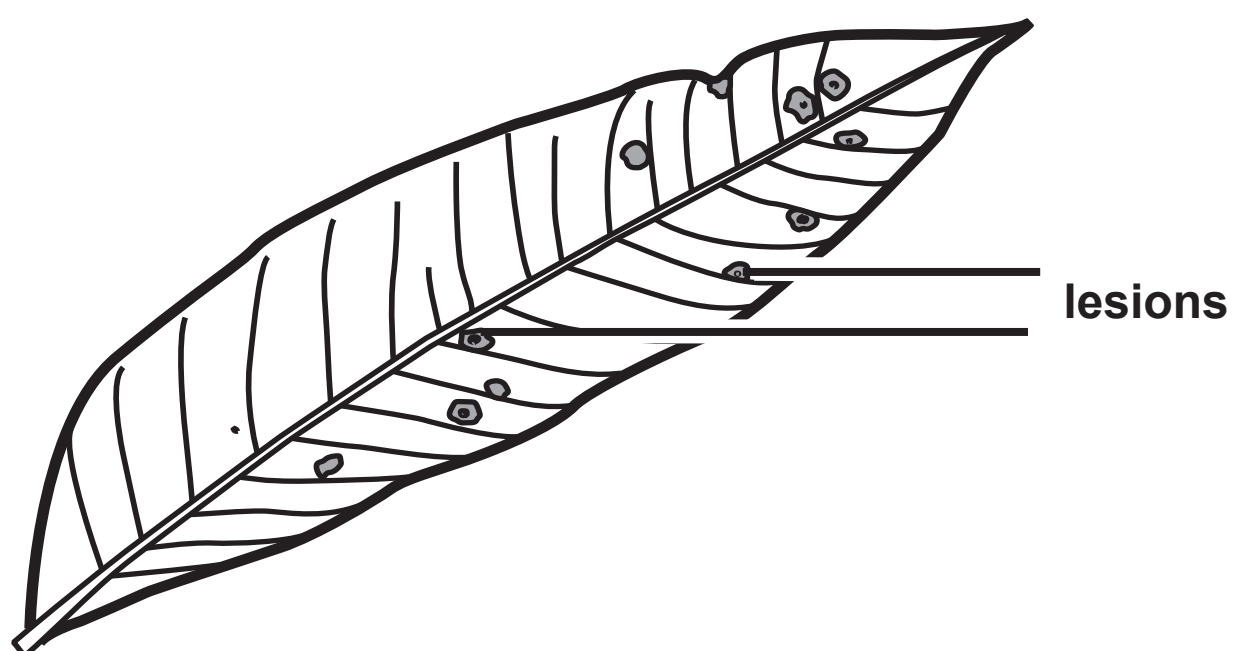


Question 6(c)

		male	
female			

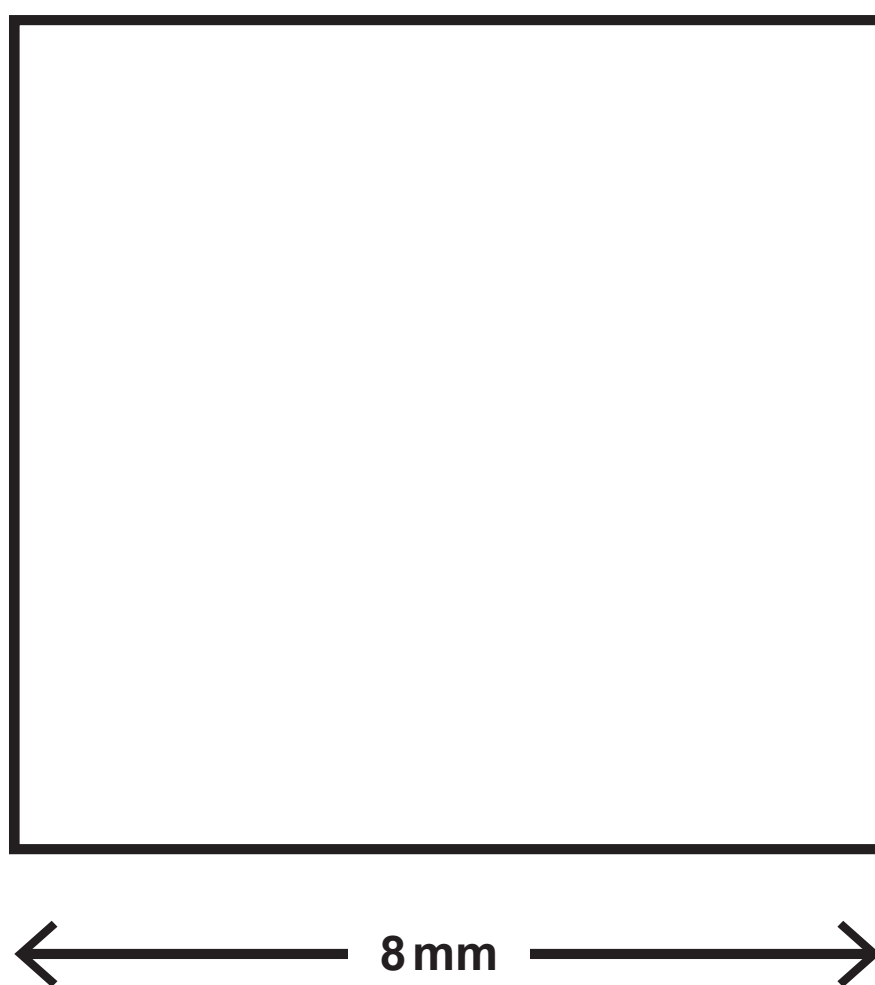
Question 7(a)

FIGURE 11



Question 8

FIGURE 12



Question 8(a)

FIGURE 13

	starting mass in grams	final mass in grams
water	0·95	1·08
dilute salt solution	0·95	0·98
concentrated salt solution	0·94	0·88

Question 9(b)

FIGURE 14

measurement	data	guidance
BMI	28	18–25 healthy 26–30 overweight 30+ obese
waist : hip ratio	0·85	<0·9 healthy >0·9 abdominal obesity
alcohol units	3–4 units per day	<14 units per week
number of cigarettes smoked	0	do not smoke or vape

Question 10(a)(ii)

		male	
female			

Question 6(c)

		male	
female			

Question 10(a)(ii)

		male	
female			

Question 2(b):

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Question 3(a):

Source adapted from: © Chatchouliya/Shutterstock)

Question 6(a):

Source: © Ildiko Laskay/Shutterstock

Question 7(a):

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