

Combined Science  
PAPER 4  
Foundation Tier

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.**

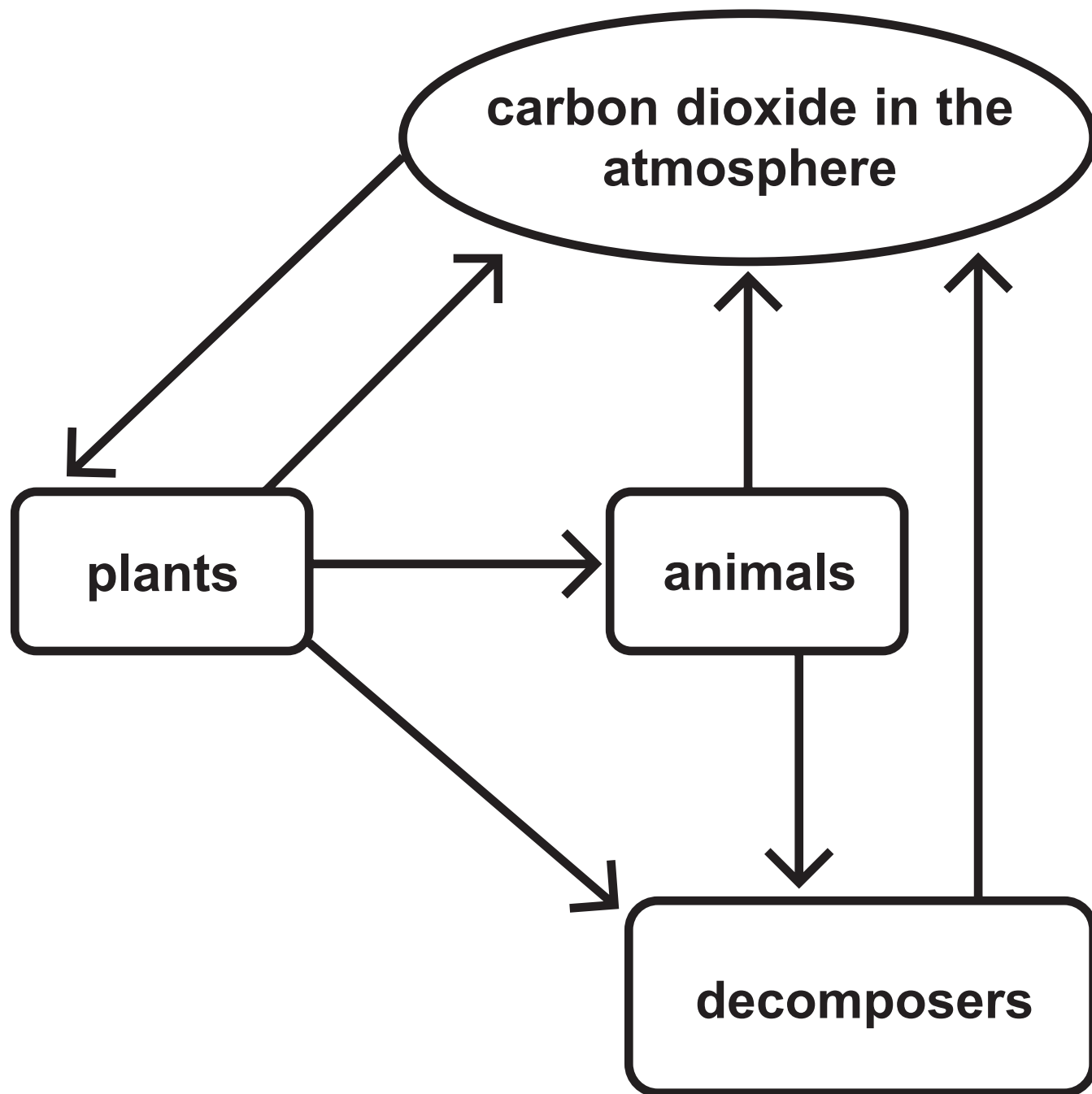
## **Contents**

### **Page**

<b>4</b>	<b>Question 1(a)</b>
<b>5</b>	<b>Question 2(a)(i)</b>
<b>6</b>	<b>Question 2(a)(i) (Spare copy)</b>
<b>7</b>	<b>Question 2(a)(ii)</b>
<b>8</b>	<b>Question 3(a)</b>
<b>9</b>	<b>Question 3(b)</b>
<b>10</b>	<b>Question 3(c)</b>
<b>11</b>	<b>Question 4(a)</b>
<b>12</b>	<b>Question 4(a)(ii)</b>
<b>13</b>	<b>Question 5(a)</b>
<b>14</b>	<b>Question 5(b)</b>
<b>15</b>	<b>Question 5(c)</b>
<b>16</b>	<b>Question 6(a)</b>
<b>17</b>	<b>Question 6(c)</b>

## Question 1(a)

Figure 1



## Question 2(a)(i)

part of the blood

plasma

red blood  
cell

function

produces oestrogen

transports dissolved urea

contains haemoglobin

produces antibodies

surrounds and digests  
foreign cells

## Question 2(a)(i)

part of the blood

plasma

red blood  
cell

function

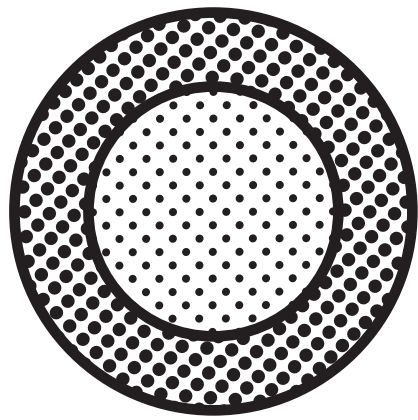
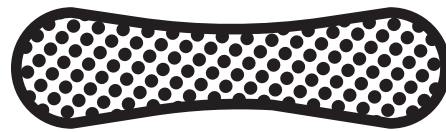
● produces oestrogen

● transports dissolved urea

● contains haemoglobin

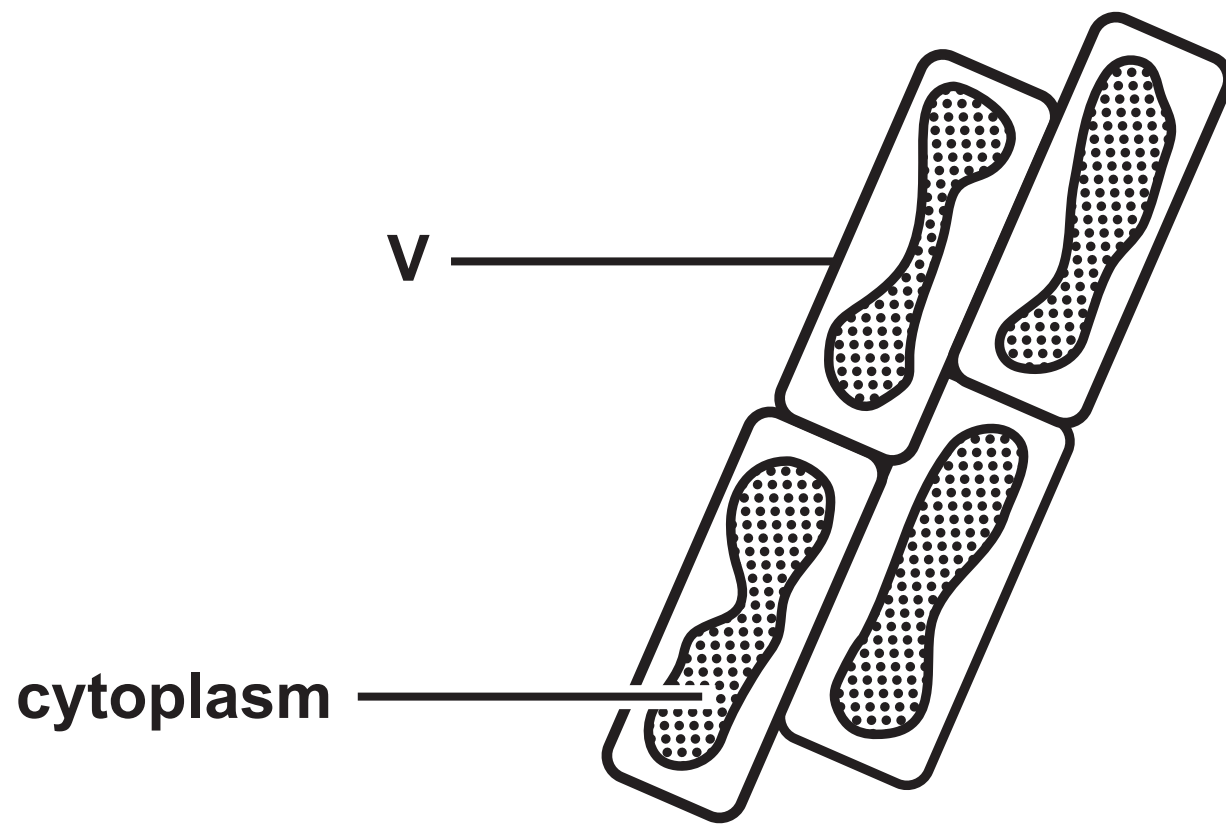
● produces antibodies

● surrounds and digests  
foreign cells

**Question 2(a)(ii)****Figure 2****plan view****side view**

## Question 3(a)

Figure 3

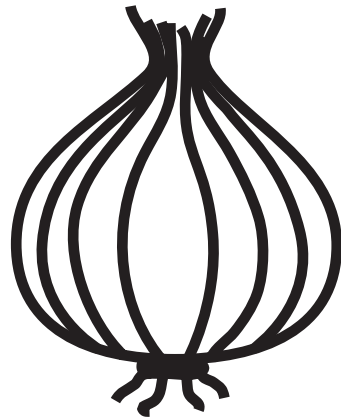




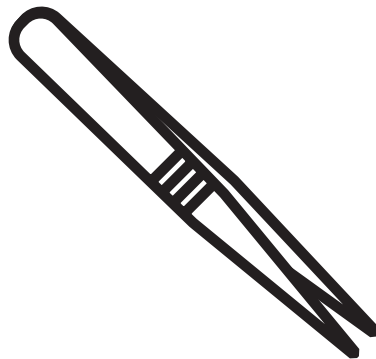
## Question 3(b)

Figure 4

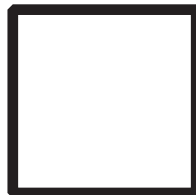
onion



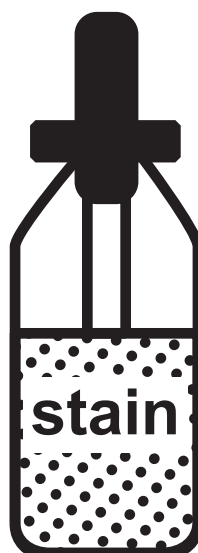
tweezers



cover slip



bottle of stain



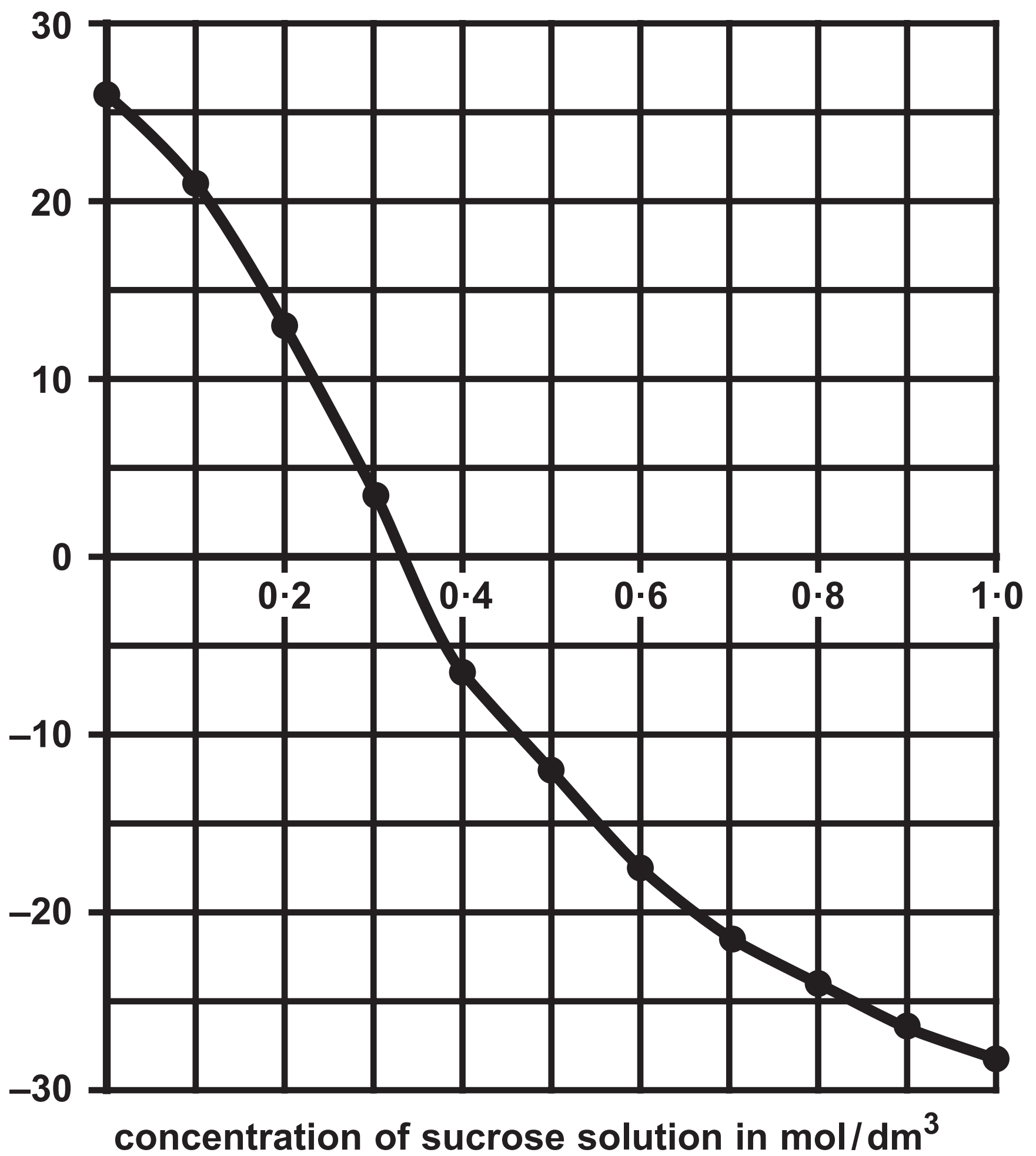
microscope slide



## Question 3(c)

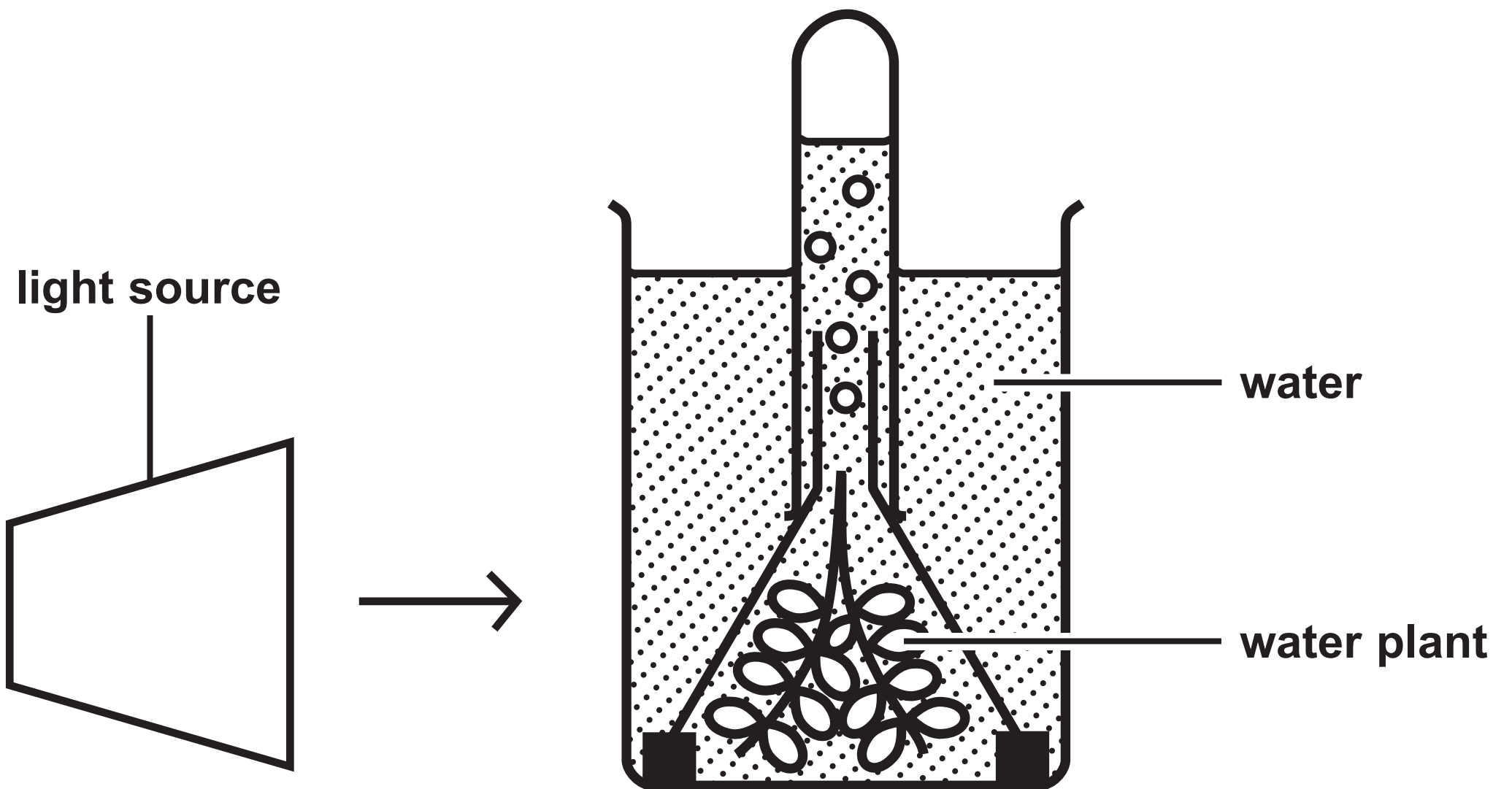
Figure 5

percentage  
change  
in mass



## Question 4(a)

Figure 6



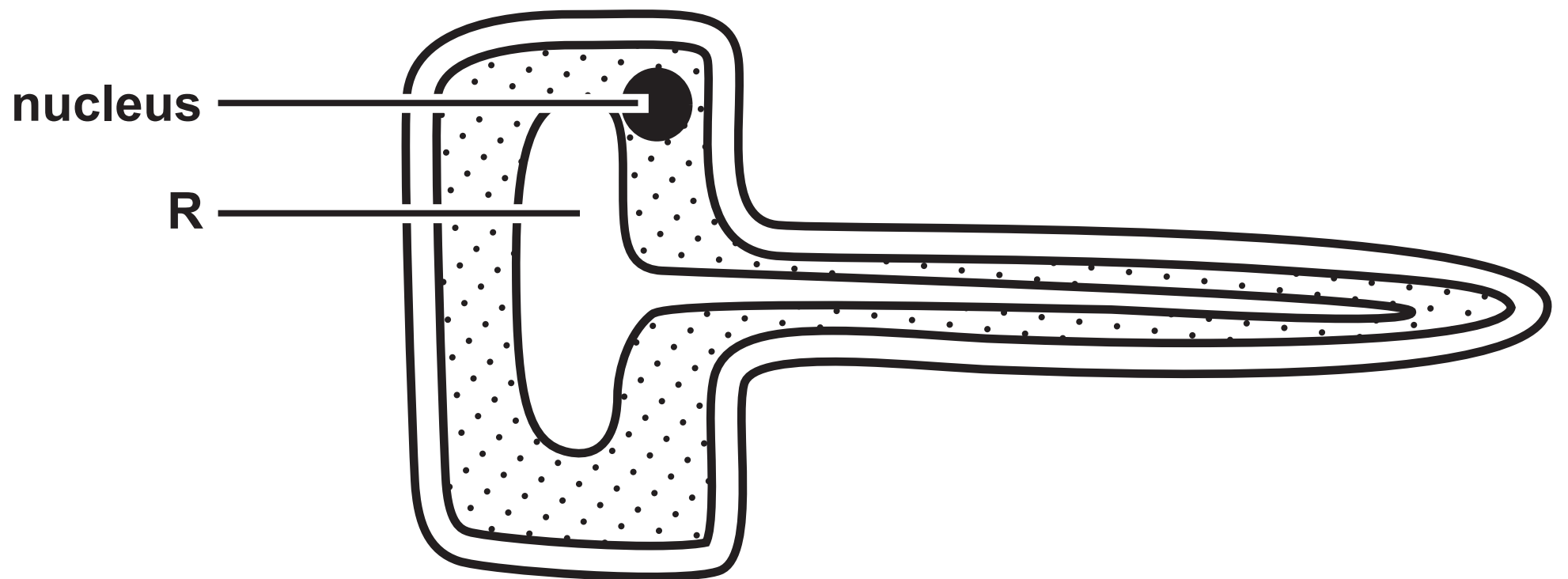
Question 4(a)(ii)

Figure 7

light intensity in arbitrary units	rate of photosynthesis in bubbles per minute
25	19
31	43
39	46
50	95
69	125
100	222

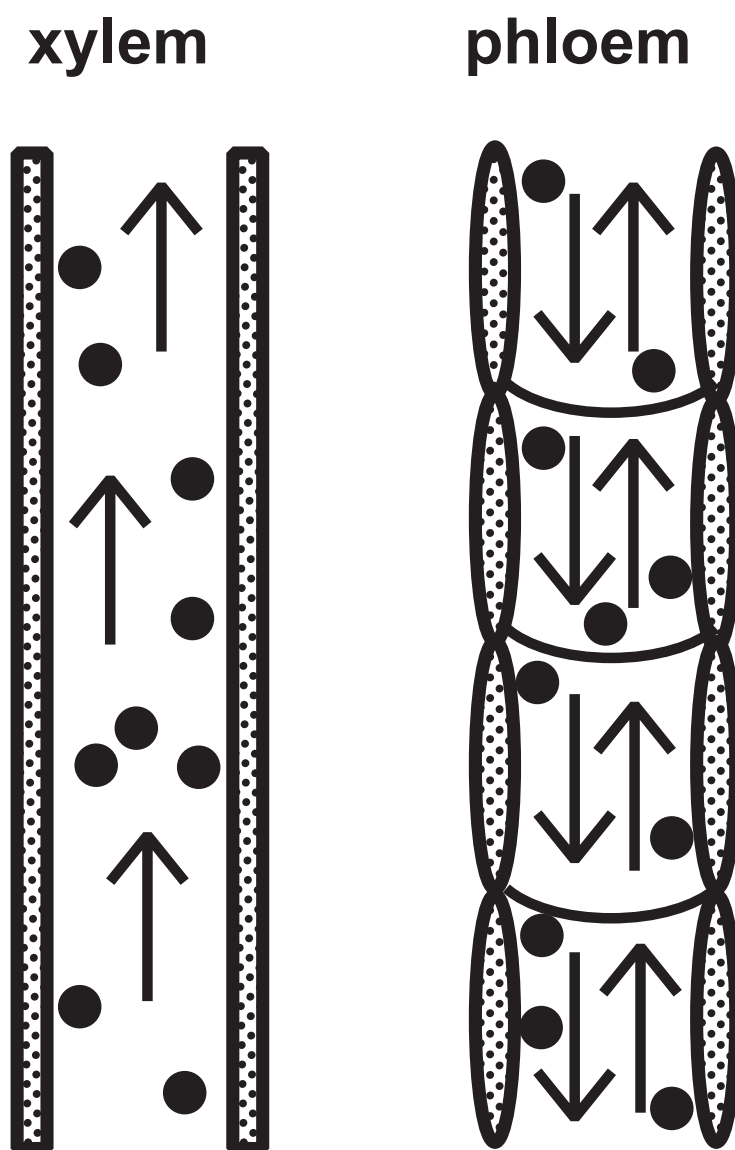
## Question 5(a)

Figure 8



## Question 5(b)

Figure 9



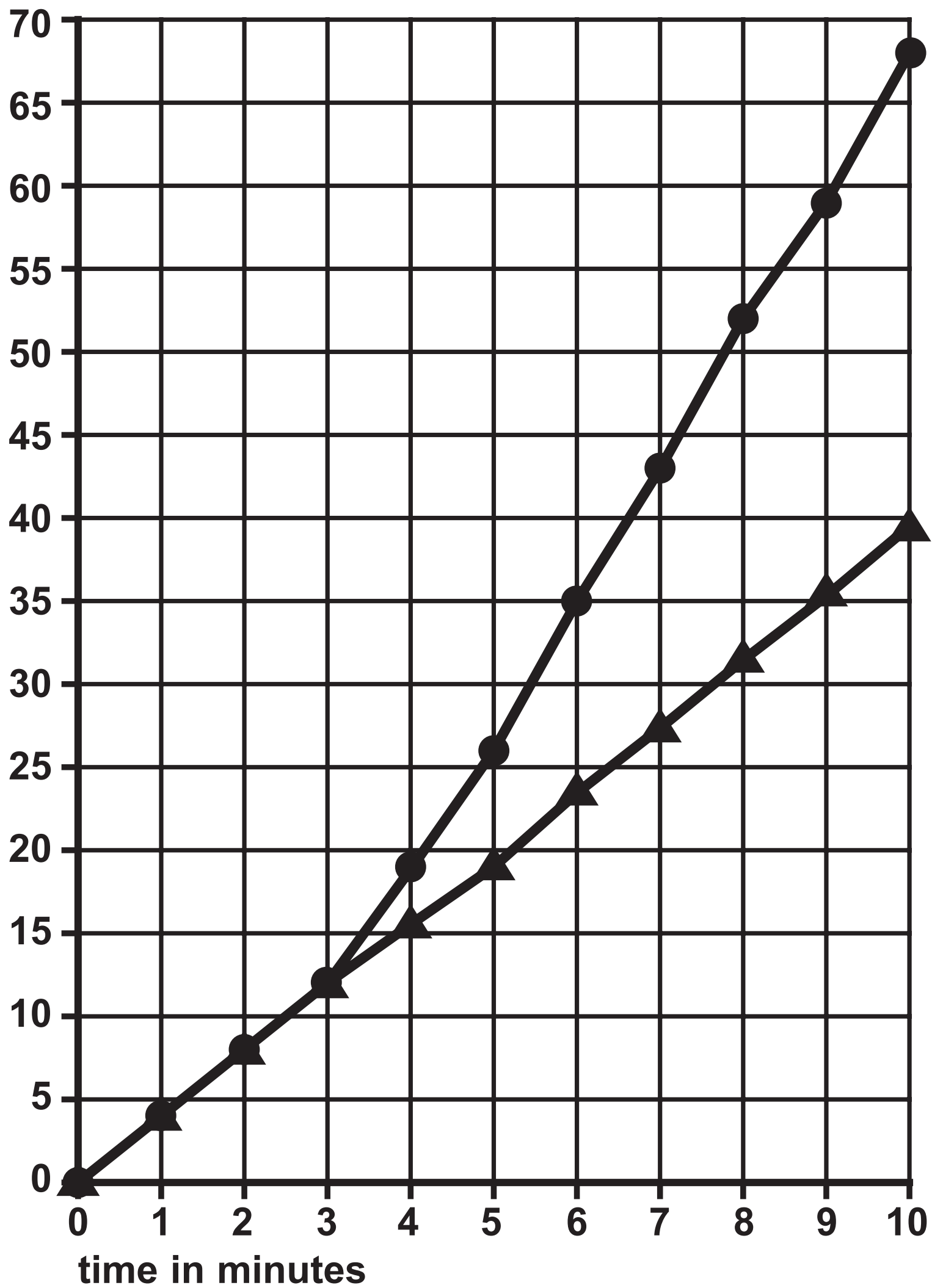
## Question 5(c)

Figure 10

—●— fan switched on after three minutes

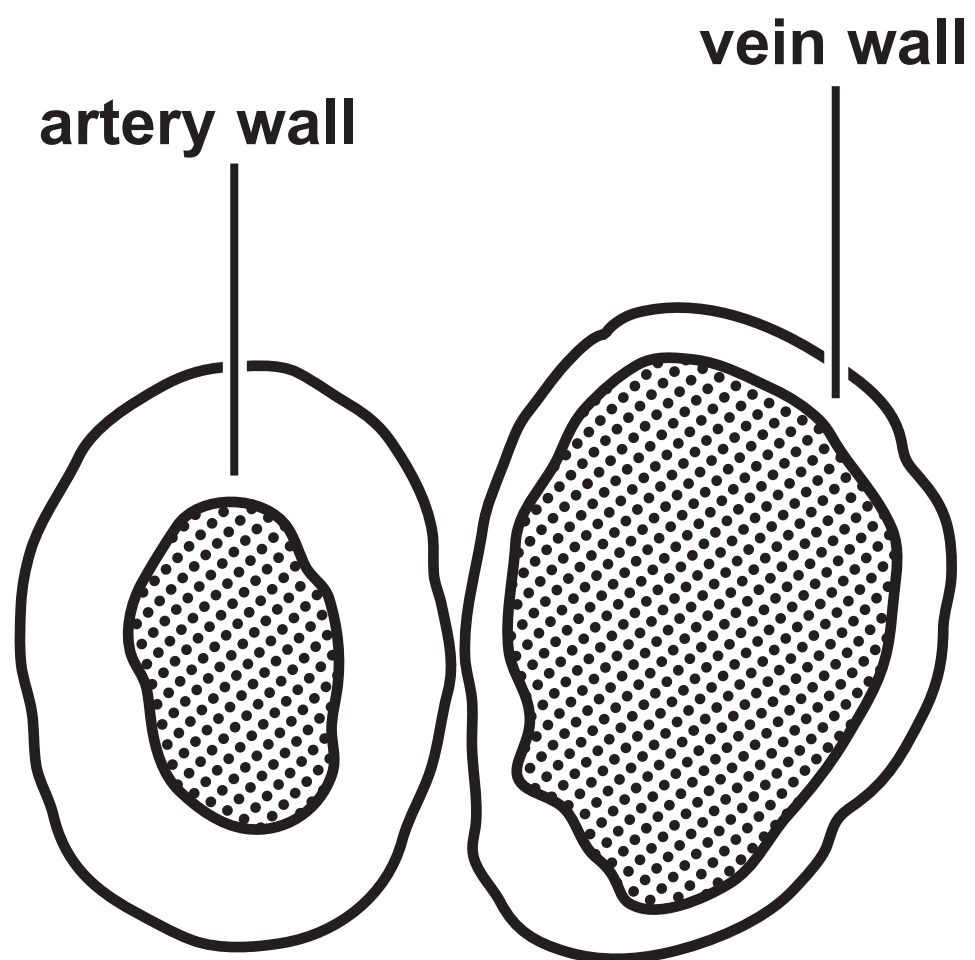
—▲— fan not switched on

volume of water taken  
up by the plant in  $\text{mm}^3$



## Question 6(a)

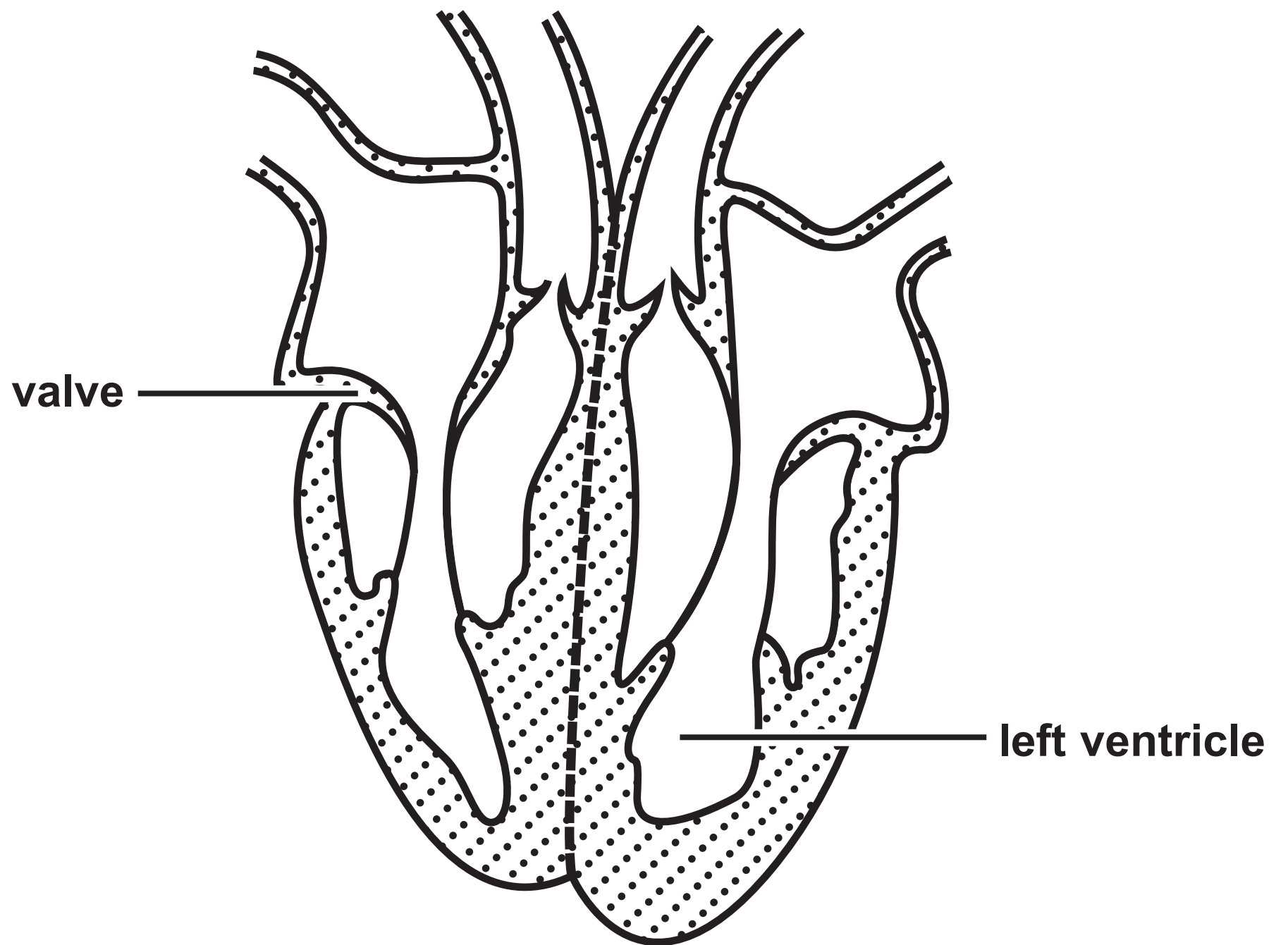
Figure 11





## Question 6(c)

Figure 12



**Question 2(a)(ii)**

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**Question 3(a)**

**(Source adapted from: © Rattiya Thongdumhyu/Shutterstock)**

**Question 4(a)**

**(Source adapted from: © ghrzuzudu/Shutterstock)**

**Question 6(a)**

**(Source adapted from: © The University of Kansas Medical Center)**