

Anglo-Chinese School (Junior)



BITE-SIZED ASSESSMENT 1 (2022)

PRIMARY 5

SCIENCE

Friday

4 March 2022

40 min

Name: _____ () Class: 5.() Parent's Signature: _____

INSTRUCTIONS TO PUPILS

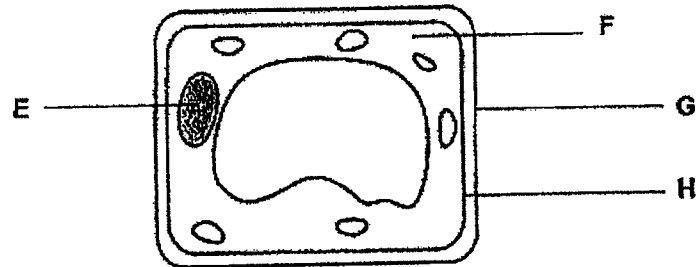
- 1 Do not turn over the pages until you are told to do so.
- 2 Follow all instructions carefully.
- 3 There are 9 questions in this booklet.
- 4 Answer ALL questions.
- 5 The marks are given in the brackets [] at the end of each question or part question.

Question Paper	Possible Marks	Marks Obtained
Total	20	

This question paper consists of 6 printed pages (inclusive of cover page).

Answer questions 1 to 9. The number of marks available is shown in the brackets [] at the end of each question.

1. The diagram shows a plant cell.



- (a) Name parts G and H. [1]

G: _____

H: _____

- (b) State the function of parts E and F. [2]

E: _____

F: _____

- (c) Which parts, E, F, G and H, are found in an animal cell? [½]

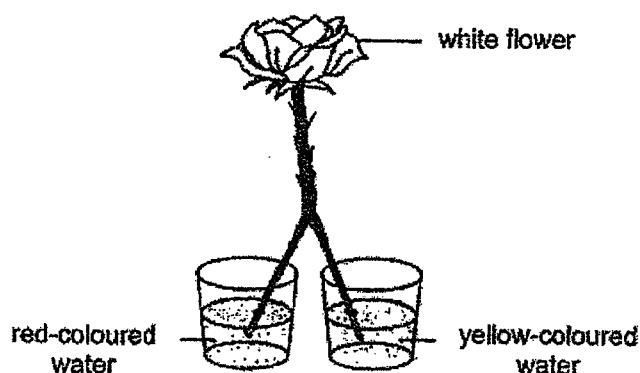
- (d) Name the cell part that uses sunlight to make food. [½]

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SCORE	
	4

3

2. Sam split the lower part of a stalk with a white flower into two equal halves. He placed them into containers with different coloured water as shown.



After a short time, he observed that some parts of the flower turned red, and other parts turned yellow.

- (a) Explain Sam's observation.

[1]

- (b) Sam observed that some parts of the flower remained white. Place a tick (✓) next to the statement that explains Sam's observation.

[1]

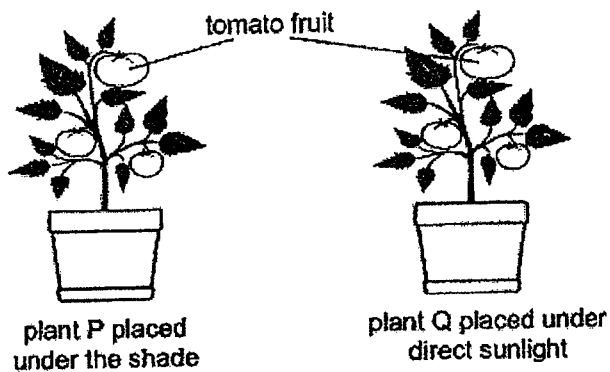
Statement	True
There were no food-carrying tubes in the parts of the flower that remained white.	
Coloured water was not transported to the flower parts that remained white.	
The red and yellow coloured water mixed at the flower parts that remained white.	

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SCORE	
	2

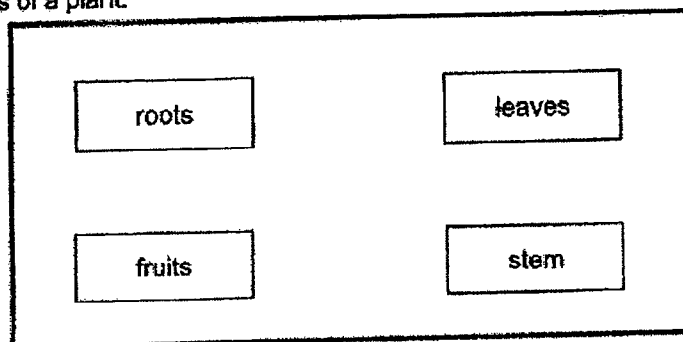
4

3. Peter used two identical tomato plants and placed them at different locations in his garden. He watered them daily with the same amount of water.



After a few weeks, Peter noticed that plant Q had bigger tomato fruits than plant P. Explain his observation. [2]

4. (a) Draw three arrows (→) in the diagram to show how food is transported in the four parts of a plant. [1]



- (b) Tick (✓) the substance(s) that is/are transported in the plant transport system. [1]

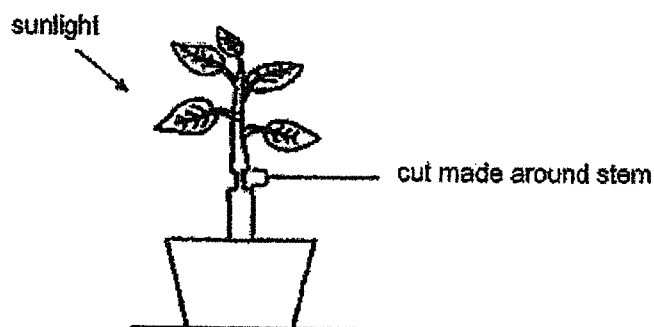
Substance	Transported in the plant transport system
Sugar	
Starch	
Oxygen	
Mineral Salts	

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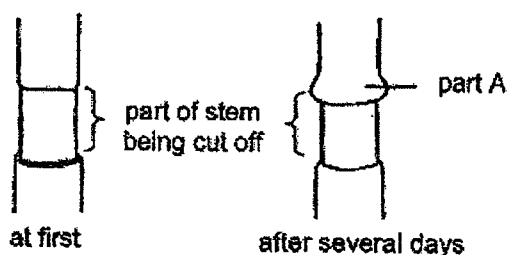
SCORE	4
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5

5. Gabriel removed the food-carrying tubes of a plant by making a cut around the stem as shown.



He left the plant under the Sun and watered it regularly. After several days, he observed that part A of the stem was swollen as shown below.



Explain Gabriel's observation.

[2]

6. For most plants, there are more tiny openings on the underside of their leaves than on the upper surface of their leaves. Explain clearly how this is an advantage to these plants on a hot day.

[1]

(Go on to the next page)

SCORE	
	3

7. The table shows two gases that are in the inhaled and exhaled air by the human respiratory system.

- (a) Fill in the words "More" or "Less" in the boxes to compare the amount of each gas between inhaled and exhaled air. [1]

	Amount of Gas	Inhaled Air	Exhaled Air
1	Carbon Dioxide		
2	Water Vapour		

- (b) Does inhaled air or exhaled air contain less dust? Explain why. [1]

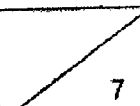
8. (a) State the three main parts of the human respiratory system. [1]

- (b) State the function of the human respiratory system. Include the gases involved. [1]

- (c) Describe how oxygen in the surrounding air enters the lungs. [1]

9. What would happen to our breathing rate when we exercise? Explain your answer. [2]

End of Paper

SCORE	
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SCHOOL : ACS (J)
 LEVEL : PRIMARY 5
 SUBJECT : SCIENCE
 TERM : 2022 WA1

Q1)	<p>a) G: Cell wall H: Cell membrane</p> <p>b) E: Controls all activities of the cell. F: The function of part F is it let the parts of the cell to float around.</p> <p>c) E , F , H</p> <p>d) chloroplast</p>
Q2)	<p>a) The water-carrying tubes carry red and yellow-coloured water separately to the flower.</p> <p>b)</p> <div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; position: relative;"> <div style="position: absolute; top: 5px; left: 5px; width: 90%; height: 90%; border: 1px solid black;"></div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 24px;">√</div> </div>
Q3)	<p>E: Plant Q received more sunlight.</p> <p>R: The leaves of Plant Q made more food and could store more food.</p>
Q4)	<p>a)</p> <div style="text-align: center; margin: 10px 0;"> <div style="display: inline-block; border: 1px solid black; padding: 5px; margin: 5px;">roots</div> <div style="display: inline-block; border: 1px solid black; padding: 5px; margin: 5px; margin-left: 100px;">leaves</div> </div> <div style="text-align: center; margin: 10px 0;"> <div style="display: inline-block; border: 1px solid black; padding: 5px; margin: 5px;">fruits</div> <div style="display: inline-block; border: 1px solid black; padding: 5px; margin: 5px; margin-left: 10px;">stem</div> </div> <p style="margin-left: 100px;">↓</p> <p style="margin-left: 100px;">↙</p> <p>b)</p> <div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; position: relative;"> <div style="position: absolute; top: 5px; left: 5px; width: 90%; height: 90%; border: 1px solid black;"></div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 24px;">√</div> </div> <div style="border: 1px solid black; width: 60px; height: 60px; margin: 0 auto; position: relative;"> <div style="position: absolute; top: 5px; left: 5px; width: 90%; height: 90%; border: 1px solid black;"></div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); font-size: 24px;">√</div> </div>

Q5)	Food made by the leaves was unable to travel downwards to below part A as the food-carrying tubes were removed and thus, staled at A.				
Q6)	E: Tiny openings on the underside of leaves will not be directly expose to sunlight. R: So it reduce loss of water.				
Q7)	a) <table border="1"> <tr> <td>Less</td><td>More</td></tr> <tr> <td>Less</td><td>More</td></tr> </table> b) Exhaled air. Hairs in the hose traps dust from inhaled air.	Less	More	Less	More
Less	More				
Less	More				
Q8)	a) Nose , windpipe , lungs b)To take in / absorb oxygen into the body and give out carbon dioxide from the body. c) Air enters the hose, down the windpipe to the lungs.				
Q9)	Our breathing rate would rise higher, this is because we need energy to exercise so we need to breathe in faster. Our body needs more oxygen and needs to quickly remove carbon dioxide.				