PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)
PRIMARY 6 SCIENCE THEMATIC PRACTICE
SYSTEMS A (LIFE SCIENCE)

Name: _____ ( )

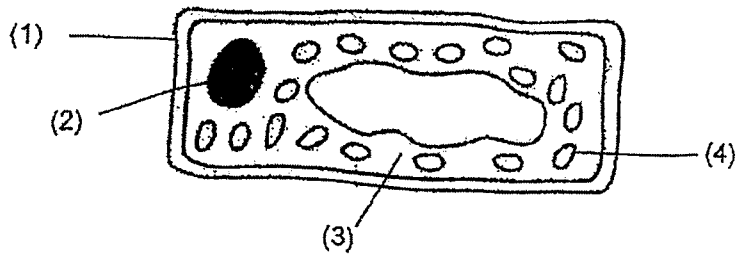
Section A	/32

Class: Primary 6 _____

Date: _____ Parent's Signature: _____

Section A (16 x 2 = 32 marks)
For each question from 1 to 16, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4).

1. The diagram shows a leaf cell with parts labelled 1 to 4.
Which part uses sunlight to make food?



( )

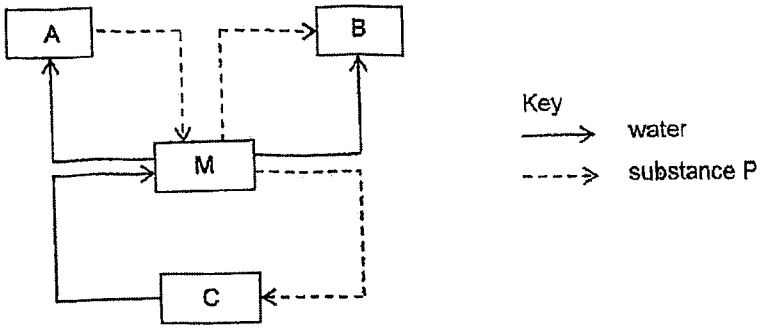
2. Which of the following shows the correct direction of food that is taken through the mouth?

(1) stomach, small intestine, large intestine, gullet
(2) stomach, gullet, small intestine, large intestine
(3) gullet, stomach, large intestine, small intestine
(4) gullet, stomach, small intestine, large intestine

( )

Downloaded from SingaKids.com

3. The diagram shows how water and substance P flow through different parts, A, B, C and M of a plant.



What do A, B and C represent?

	A	B	C
(1)	flower	stem	root
(2)	leaf	root	flower
(3)	leaf	flower	root
(4)	root	leaf	flower

( )

4. Fizah wrote some statements about humans, fish and plants.

The lungs and gills are part of the circulatory system.

B Oxygen and carbon dioxide are carried by the blood in humans and fish.

C Gaseous exchange takes place at the lungs, gills and stomata (tiny openings in leaves).

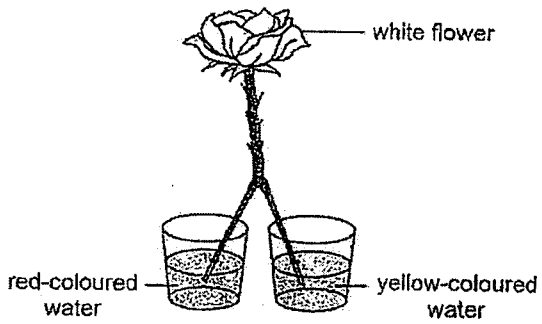
Which of her statement(s) is/are correct?

(1) C only
(2) A and B only
(3) B and C only
(4) A, B and C

( )

Downloaded from SingaKids.com

5. Lisa cut the lower stem of a white flower into two equal parts. She placed them into containers with different coloured water as shown.



After a short time, she observed that some parts of the flower turned red, some turned yellow, while the rest remained white.

Lisa made four statements.

A The food made by the plant was red and yellow in colour.

B The stem transported the different coloured water to the flower.

C No coloured water was transported to the flower parts that remained white.

D There were no water tubes in the flower parts that remained white.

Which statements can be concluded from her observations?

(1) A and D only

(2) B and C only

(3) B and D only

(4) B, C and D only

6. Which statement about the human digestive system is correct?

(1) Some food has been digested when it leaves the stomach.

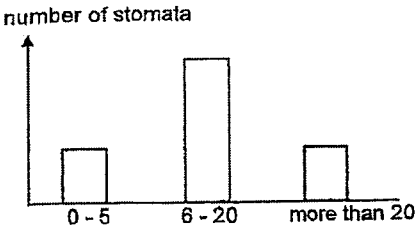
(2) The large intestine does not absorb any substance.

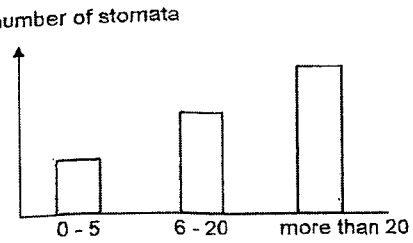
(3) The large intestine digests and absorbs food.

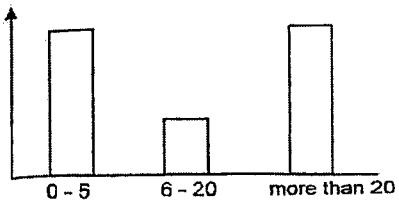
(4) The mouth does not digest food.

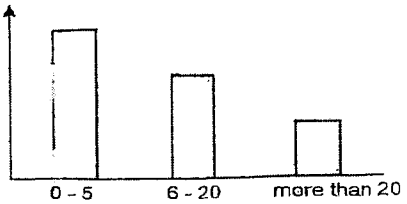
Downloaded from SingaKids.com

7. Aidan predicted the greater the amount of carbon dioxide in a tower, the fewer the number of tiny openings called stomata found in a plant. Which of the following supports his prediction?

(1)


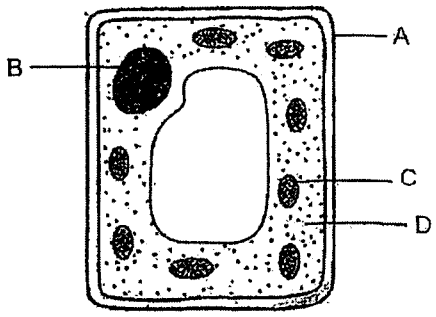
(2)


(3)


(4)


(

8. The diagram shows a plant cell.



Which parts are also found in an animal cell?

(1) A and B
(2) A and C
(3) B and D
(4) C and D

(

Downloaded from SingaKids.com

9. The table shows the types of gases in air that are taken in and given out by a human.

Gas	Air taken in (%)	Air given out (%)
nitrogen	78	78
oxygen	21	16
carbon dioxide	less than 1	4
water vapour	less than 1	2

Based on the information given, which statement is **not** correct?

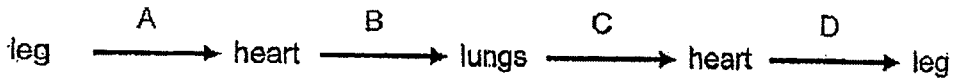
(1) Carbon dioxide produced by the body is released into the air.

(2) All the oxygen that enters the lungs goes into the blood.

(3) At least four types of gases enter the respiratory system.

(4) Water is lost through breathing.

10. Blood flows through blood vessels A to D as shown.



Which blood vessels transport blood richer in oxygen?

(1) A and B only

(2) A and D only

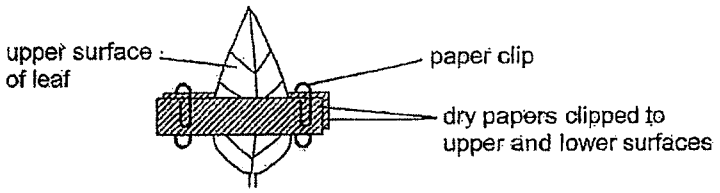
(3) B and C only

(4) C and D only

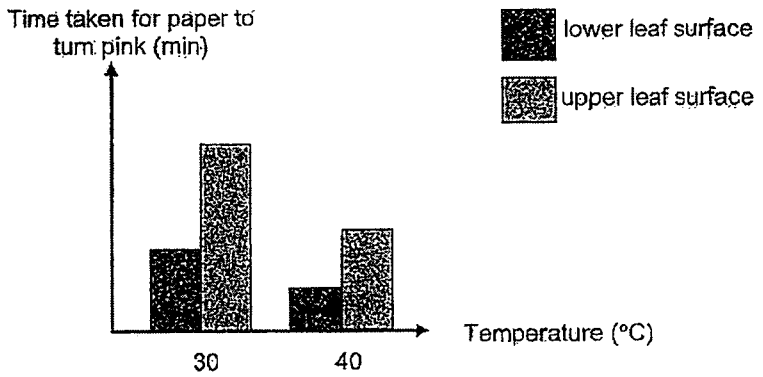
)

Downloaded from SingaKids.com

11. Ken has two identical pots of plan P. He placed one plant in a room at 30 °C and the other at 40 °C. On each plant, he clipped dry pieces of a type of paper to the upper and lower surfaces of a leaf as shown. The paper turns pink when wet.



The graph shows the time taken for the paper to turn pink.



Based on the graph, which statement is a correct conclusion?

(1) Plant P at 30 °C lost more water.

(2) Plant P at 40 °C has fewer openings on its leaves.

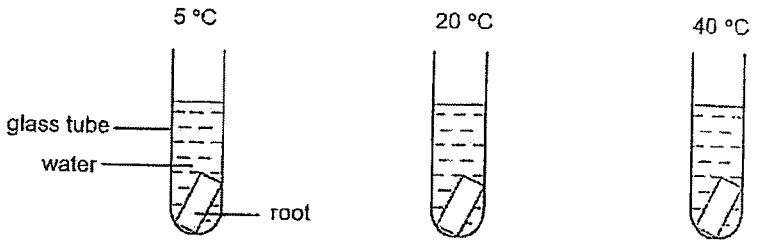
(3) Plant P has more openings on the upper surface of its leaves.

(4) Plant P lost water more quickly through the lower surface of its leaves.

(

Downloaded from SingaKids.com

12. Kim cut a root into pieces of the same size. She placed each piece into a glass tube. Each tube was kept at a different temperature.



The root cells contained a red substance.

After some time, Kim observed the colour of the water in the tubes. The table shows her results.

Temperature of water (°C)	Colour of water
5	light pink
20	pink
40	dark pink

Which of the following explains her observation?

	Temperature change	Effect on root cells
(1)	decreased	cell wall prevented more red substance from moving out
(2)	increased	cell wall prevented more red substance from moving out
(3)	decreased	cell membrane allowed more red substance to move out
(4)	increased	cell membrane allowed more red substance to move out

( )

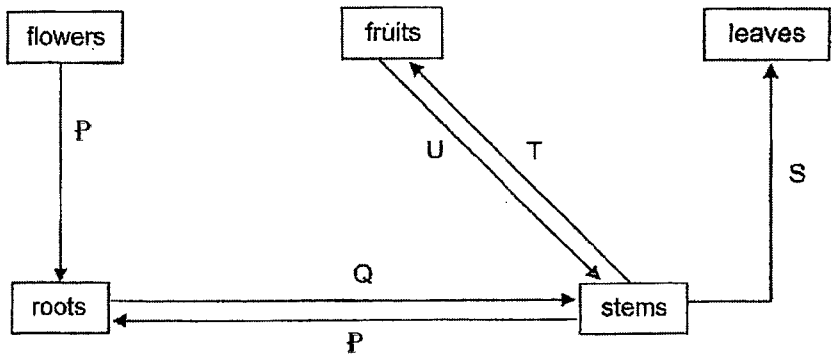
Downloaded from SingaKids.com

13. Which gases are found in air?

A oxygen
B nitrogen
C carbon dioxide
D water vapour

(1) A and C only
(2) B and D only
(3) A, B and C only
(4) A, B, C and D

14. Study the diagram.



Which arrows show the correct direction in which water moves in a plant?

(1) P, Q and T only
(2) Q R and S only
(3) Q, S and T only
(4) P, S and U only

Downloaded from SingaKids.com

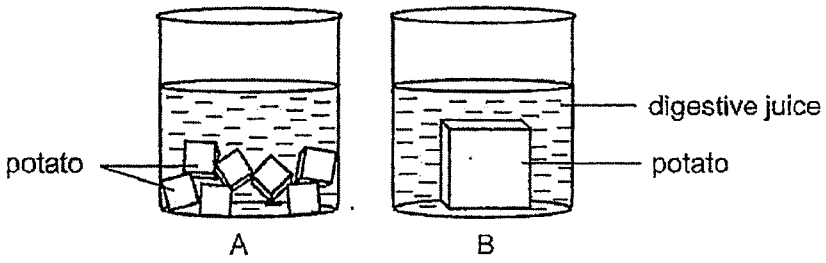
15. Substances are obtained from the water-carrying tubes and food-carrying tubes of a plant on a sunny day.

Which of the following is correct?

	Main substances present in	
	water-carrying tubes	**food-carrying tubes**
(1)	water and mineral salts	sugar and mineral salts
(2)	water, sugar and mineral salts	sugar
(3)	water and mineral salts	sugar
(4)	water, sugar and mineral salts	water and mineral salts

( )

16. A and B are similar beakers containing the same volume of digestive juices. Equal amounts of potato are placed in the beakers.



The potato in beaker B took a longer time to digest because it has a _____.

(1) larger volume
(2) smaller volume
(3) larger exposed surface area
(4) smaller exposed surface area

Downloaded from SingaKids.com

Downloaded from SingaKids.com

PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)
PRIMARY 6 SCIENCE THEMATIC PRACTICE
SYSTEMS B (LIFE SCIENCE)

Name: _____ ( )

Section B	/20

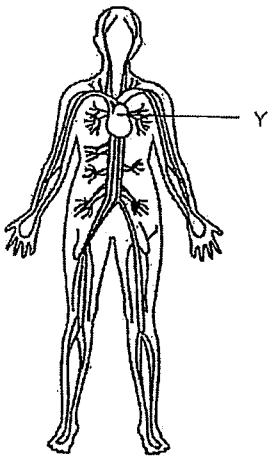
Class: Primary 6 _____

Date: _____ Parent's Signature: _____

Section B: 20 Marks

For questions 17 to 22, write your answers in the spaces provided.
The number of marks available is shown in brackets [ ] at the end of each question or part question.

17. The diagram shows a human body system.



(a) Identify the system and state the function of this system. [2]

_____

_____

(b) Name Y. [1]

_____

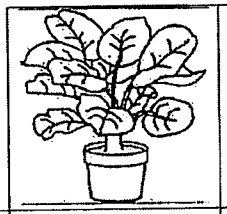
(c) Other than Y, name another two parts of this system. [1]

_____

_____

Downloaded from SingaKids.com

18. Ravi wanted to investigate the conditions needed for leaf growth using three types of soil. Four pots of identical plants were placed in the same area within a garden. The diagram shows the four pots of plants after two weeks.

				
Pot	P	Q	R	S
Type of soil	garden soil	garden soil	sandy soil	clayey soil
Availability of water	Yes	No	Yes	Yes

(a) State which pots must be compared to conclude about the effect of each variable on leaf growth. [2]

Variable	**Pots to compare**
Type of soil	
Availability of water	

Ravi conducted a second experiment to find how the amount of fertiliser affects leaf growth. He conducted a fair test, planting the same number of plants in five big pots, V, W, X, Y and Z. The pots are filled with garden soil.

The results of his experiment are as shown.

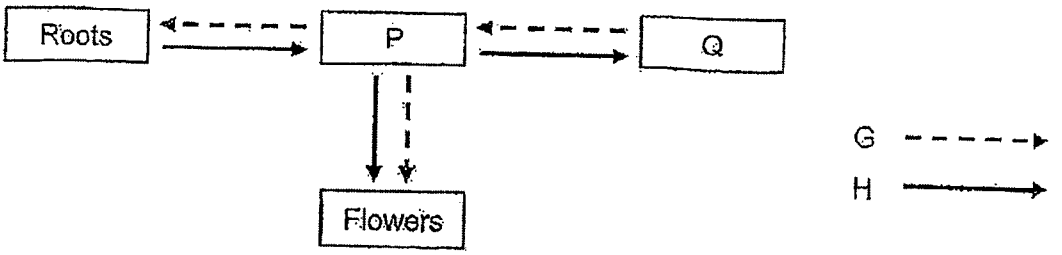
Pot	**V**	**W**	**X**	**Y**	**Z**
Amount of fertiliser (g)	0	5	10	15	20
Average surface area of a leaf after two weeks (cm^2)	20	30	36	20	14

(b) What can Ravi conclude about the effect of fertiliser on leaf growth? [2]

(c) Explain why the results of Ravi's second experiment cannot be used to improve the leaf growth in pot S from his first experiment. [1]

Downloaded from SingaKids.com

19. The diagram shows how substances are transported in a plant. P and Q represent different parts of the plant. The arrows represent the movement of substances G and H.



(a) Identify parts P and Q. [1]

P _____

Q _____

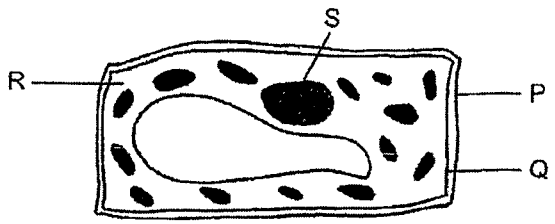
(b) Identify substances represented by H and describe how these substances move in the plant. [2]

_____

_____

_____

20. The diagram shows a plant cell.



(a) Name parts R and S. [1]

R _____

S _____

(b) State the functions of parts P and Q. [2]

P _____

Q _____

Downloaded from SingaKids.com

21.

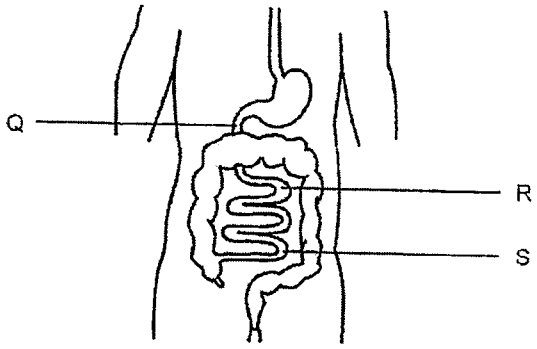
(a) State the function of the human respiratory system. Include in your answer the gases involved. [1]

(b) Name three parts found in the human respiratory system. [1]

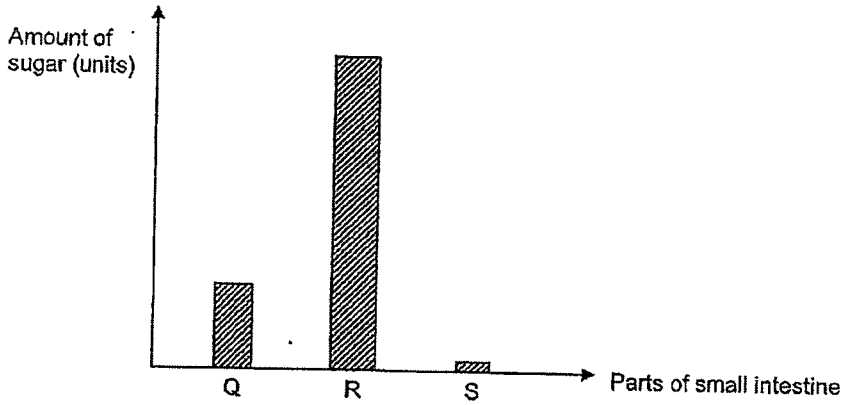
(c) Describe how the respiratory system works together with the circulatory system in our body. [2]

Downloaded from SingaKids.com

22. Ali ate a bowl of rice. Rice is digested into sugar.
After three hours, the doctor measured the amount of sugar in different parts of the small intestine.



The chart shows the amount of sugar at various parts of the small intestine.



(a) The amount of sugar increased from Q and R. Explain why. [1]

(b) The amount of sugar decreased from R and S. Explain why. [1]

(c) Undigested food enters an organ after leaving the small intestine.
Name this organ and state its main function. [1]

Downloaded from SingaKids.com

Downloaded from SingaKids.com

SCHOOL : PAYA LEBAR MGS PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : SCIENCE
TERM : THEMATIC PRACTICE 2025

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	4	3	3	2	1	4	3	2	4
Q11	Q12	Q13	Q14	Q15	Q16				
4	4	4	3	3	4				

Q17)	a) Circulatory system. It transports blood rich in oxygen and digested food to all parts of the body. b) Heart c) Blood, blood vessels.
Q18)	a) type of soil---- P,R,S Availability of water --- P and Q b) From V to X, as the amount of fertiliser increases the average surface area of a leaf after two weeks increases. From V to Z, as the amount of fertiliser increases the average surface area of a leaf after two weeks decreases. c) The pots are filled with garden soil than clayey soil.
Q19)	a)P—stem Q—Leaves b)Water and mineral salts. The water carrying tubes transport them from the roots to all parts of the body.
Q20)	a)R--- cytoplasm S--- nucleus b)P—It supports and gives the cell a regular shape. Q--- It controls the movement of substances going in and out of the cell.
Q21)	a) The respiratory system enables humans to take in oxygen and give out carbon dioxide for survival.

Downloaded from SingaKids.com

	b) Nose, windpipe, lungs c) The respiratory takes in oxygen through the nose. The oxygen then travels to the lungs and into the bloodstream where the blood rich in oxygen is transported to all parts of the body, carbon dioxide is transported by the blood to the lungs out of the body.
Q22)	a) More food was digested. b) Some of the sugar entered the bloodstream in between R and S. c) Large intestine. Absorbs water from undigested food.

Downloaded from SingaKids.com