



**CATHOLIC HIGH SCHOOL  
CONTINUAL ASSESSMENT TWO (2017)  
PRIMARY FIVE**

**SCIENCE**

**BOOKLET A**

Name: \_\_\_\_\_ ( )

Class: Primary 5 - \_\_\_\_\_

Date: 24 August 2017

10 questions

20 marks

Total Time for Booklets A and B: 40 minutes

**INSTRUCTIONS TO CANDIDATES**

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

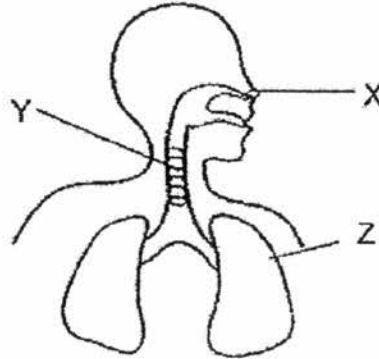
Shade your answers in the Optical Answer Sheet (OAS) provided.

This booklet consists of 6 printed pages, excluding the cover page.

**Booklet A (10 × 2 marks)**

For each question from 1 to 10, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (20 marks)

- 1 The diagram below shows the human respiratory system.



Which of the following statements is/are correct?

- A Y transports air from X to Z.
- B Only oxygen is taken in at X.
- C Gaseous exchange **does not take place** at Z.

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

- 2 Which of the following statements are correct ?

- A The air we breathe **out** is cooler than **the air we breathe in**.
- B The air we breathe in contains more oxygen than the air we breathe out.
- C The air we breathe in contains more water vapour than the air we breathe out.
- D The air we breathe out contains more carbon dioxide **than** the air we breathe in.

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

- 3 The table below shows the properties of cells, X, Y and Z.

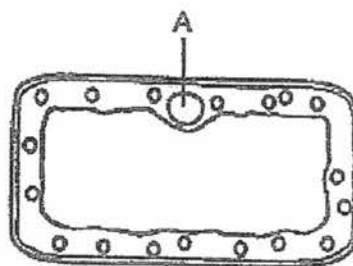
Cell part \ Cell	X	Y	Z
cytoplasm	✓	✓	✓
cell membrane	✓	✓	✓
nucleus	✓	✓	✓
cell wall	✓	✓	
chloroplasts	✓		

Some pupils made the following statements.

- A Cell X is a plant cell.
- B Cell Y is a plant cell.
- C Cell Z is an animal cell.
- D Cells X and Y can make its own food.

Which of the above statements are correct?

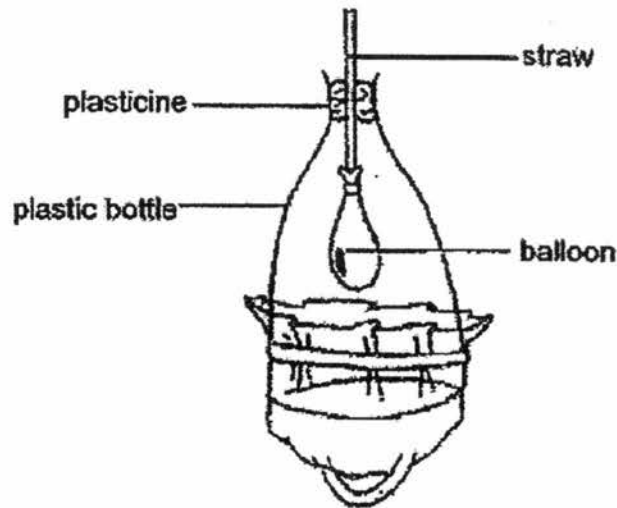
- (1) A and D only
  - (2) B and C only
  - (3) A, B and C only
  - (4) A, B, C and D
- 4 The cell below is taken from a plant found in pond water.



What is the function of part A?

- (1) Allows some materials to pass through.
- (2) Traps sunlight for the plant to make food.
- (3) Allows all materials and water to pass through.
- (4) Contains information that is passed from one generation to another.

- 5 Joe made a model of the human respiratory system as shown below.



Which of the following is represented by each part of the model?

	straw	balloon	plastic bottle
(1)	nose	lung	ribcage
(2)	nose	ribcage	lung
(3)	windpipe	lung	ribcage
(4)	windpipe	ribcage	lung

- 6 A group of people was trapped in a lift for 30 minutes. There was no fresh supply of air while they were trapped inside the lift.

Which of the following about the changes in the amount of carbon dioxide, water vapour and oxygen in the lift after 30 minutes is correct?

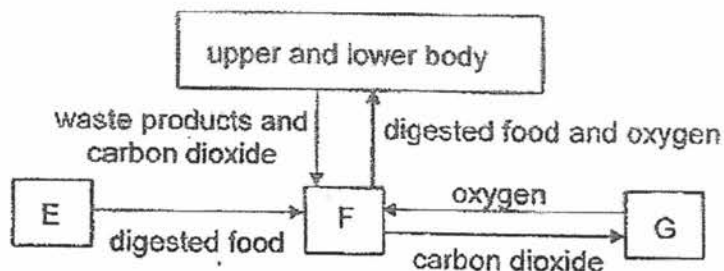
	carbon dioxide	water vapour	oxygen
(1)	increase	increase	decrease
(2)	increase	decrease	increase
(3)	increase	increase	increase
(4)	decrease	decrease	decrease

- 7 The table below shows the comparison between how a man and a fish breathe.

	Man	Fish
A	Air containing oxygen enters through the nose or mouth and gets into the lungs.	Water containing dissolved oxygen enters through the mouth and passes over the gills.
B	Oxygen from the air gets into the blood vessels in the lungs.	Oxygen in the air gets into the blood vessels in the gills.
C	The lungs have many air sacs to allow greater gaseous exchange.	The gills have many feather-like structures with a rich supply of blood vessels.

Which of the above comparisons are correct?

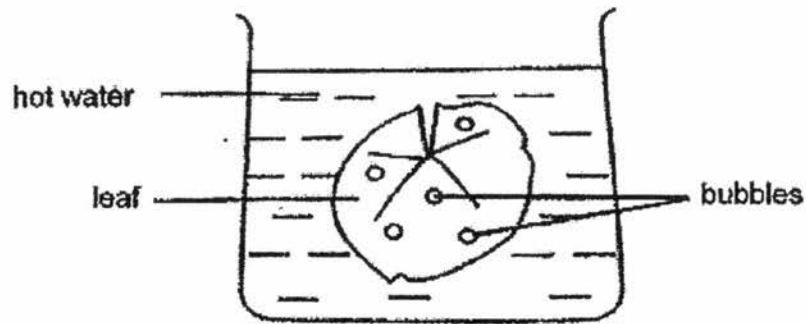
- (1) A and B only  
 (2) A and C only  
 (3) B and C only  
 (4) A, B and C
- 8 The diagram below shows the different body systems in the human body.



Which of the following correctly represents E, F and G?

	E	F	G
(1)	respiratory	circulatory	digestive
(2)	digestive	respiratory	circulatory
(3)	circulatory	digestive	respiratory
(4)	digestive	circulatory	respiratory

- 9 Kai Lung plucked a leaf from a plant and placed it in a beaker of hot water.



He observed that bubbles formed only on the upper surface of the leaf.

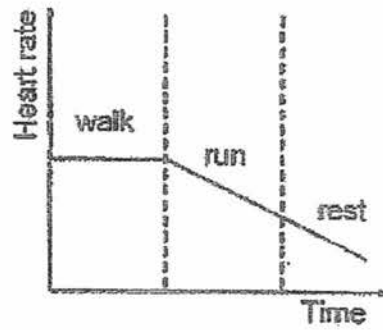
Which one of the following statements is correct?

- (1) Bubbles form in the water and land on the upper surface of the leaf.
- (2) Air escapes through tiny openings found on both surfaces of the leaf.
- (3) The leaf has tiny openings on the upper surface but not on the lower surface.
- (4) Air enters the lower surface of the leaf and escapes through the upper surface.

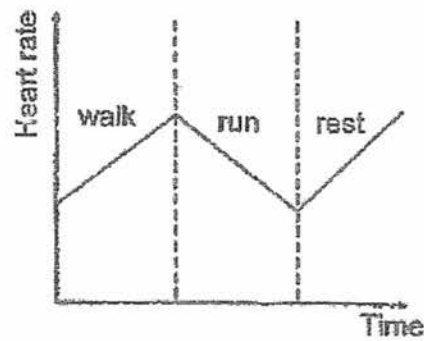
10 Sue plotted a graph to show her heart rate as she walked, ran and rested

Which graph shows her correct heart rate as she walked, ran and rested?

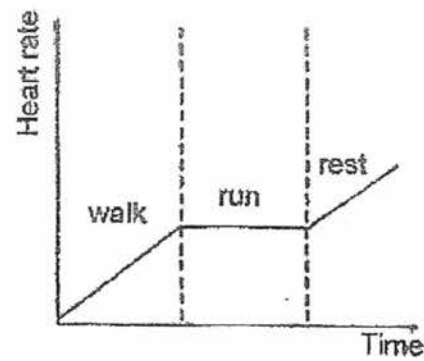
(1)



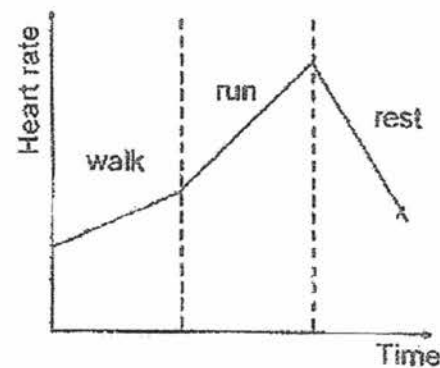
(2)



(3)



(4)



End of Booklet A



**CATHOLIC HIGH SCHOOL  
CONTINUAL ASSESSMENT TWO (2017)  
PRIMARY FIVE**

**SCIENCE**

**BOOKLET B**

Name: \_\_\_\_\_ ( )

Class: Primary 5 - \_\_\_\_\_

Date: 24 August 2017

Parent's Signature: \_\_\_\_\_

Booklet A	20
Booklet B	15
Total	35

5 questions

15 marks

Total Time for Booklets A and B: 40 minutes

**INSTRUCTIONS TO CANDIDATES**

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

This booklet consists of 5 printed pages, excluding the cover page.

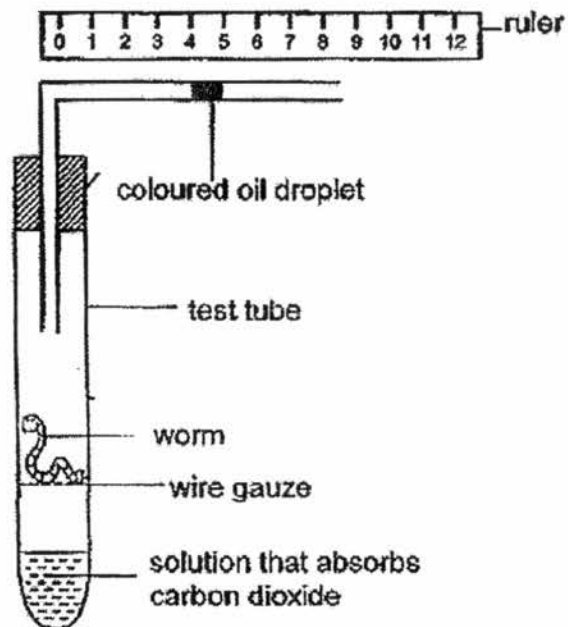


**Booklet B (15 marks)**

For questions 11 to 15, write your answers in this booklet.

The number of marks available is shown in brackets [ ] at the end of each question or part question. (15 marks)

- 11 Ben inserted a tube with a coloured oil droplet into a test-tube that prevented air from going in and out of the tube.



- (a) Will the coloured droplet move towards or away from the test-tube after a few hours? Explain your answer. [2]

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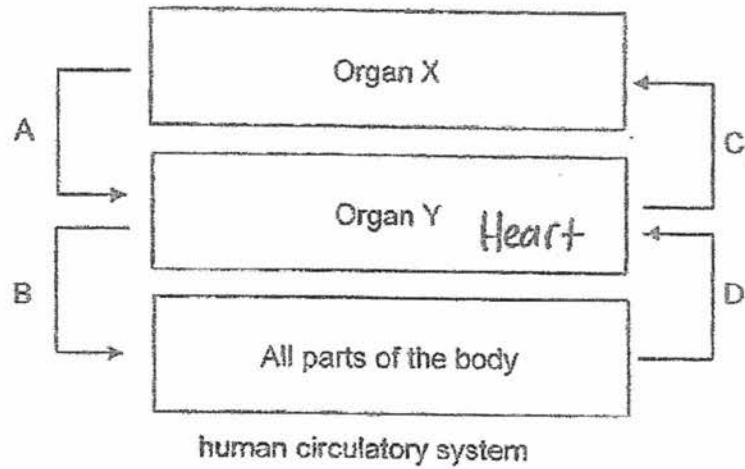
- (b) Name a gas inside the test-tube that remained the same in amount throughout the experiment. [1]

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SCORE	3
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- 12 The diagram below shows the direction of blood flow in some parts of the human body.



- (a) Name the organs X and Y. [1]

Organ X: \_\_\_\_\_

Organ Y: \_\_\_\_\_

- (b) Other than the direction of flow, state one difference between blood in A and blood in C. [1]

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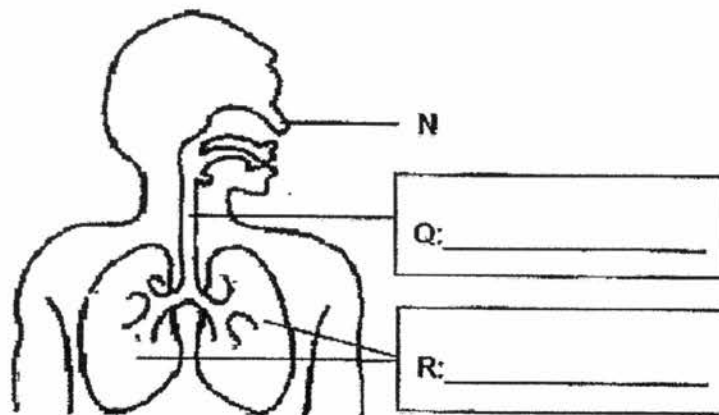
- (c) Name one substance in the blood where its amount is higher in D than B. [1]

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SCORE	3
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13 Look at the diagram of the respiratory system shown below.



(a) Identify the parts Q and R. Write their names in the boxes above. [1]

(b) What is the function of the hair found in part N? [1]

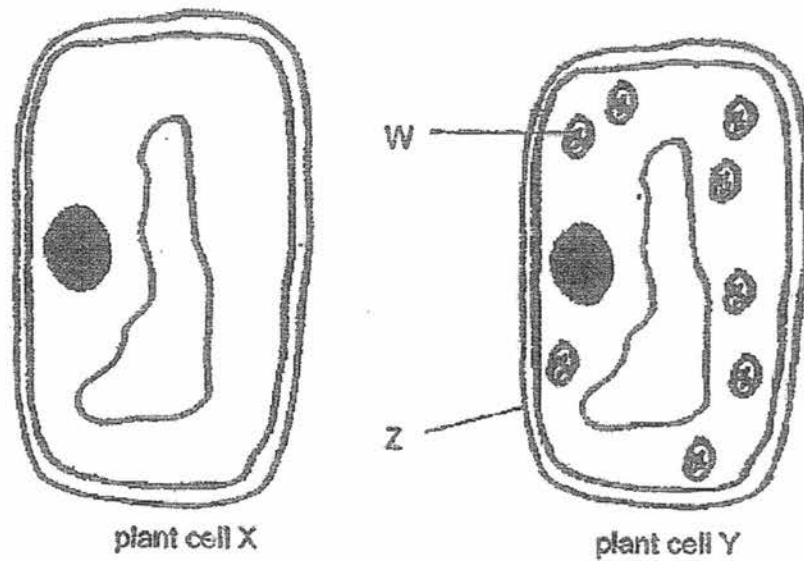
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SCORE	/
	2

14 The diagrams below show two cells from different plants.



(a) Which cell part is found in both plant cells X and Y but not in animal cells? [1]

\_\_\_\_\_

(b) What would happen if part Z is absent in plant cell Y? [1]

\_\_\_\_\_  
\_\_\_\_\_

(c) What is the function of the part labelled W? [1]

\_\_\_\_\_  
\_\_\_\_\_

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SCORE	3
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15 The table below shows Ali's breathing and pulse rate according to age.

Age (years)	Breathing rate (average number of times per minute)	Pulse Rate (average number of beats per minute)
10	22	110
20	18	85
30	16	75
40	14	70
50	12	65

(a) What is the relationship between the age and breathing rate per minute? [1]

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(b) Why does Ali's breathing rate increase when he is running? [1]

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(c) Explain why Ali's heart beats faster after running for 10 minutes. [2]

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SCORE	4
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End of Booklet B

YEAR : 2017  
LEVEL : P5  
SCHOOL : CATHOLIC HIGH SCHOOL  
SUBJECT : SCIENCE  
TERM : CA2

Booklet A

Q1	1	Q2	2	Q3	3	Q4	4	Q5	3
Q6	1	Q7	2	Q8	4	Q9	3	Q10	4

Booklet B

Q11 (a) Towards the test tube. The worm takes in oxygen in the test tube and produces carbon dioxide. The released carbon dioxide is absorbed by the solution so the oil droplet moves inner to occupy the space.

(b) Nitrogen.

Q12 (a) Organ X: Lung      Organ Y: Heart

(b) Blood in A is richer in oxygen than the blood in C.

(c) Carbon dioxide.

Q13 (a) Q: Windpipe  
R: Lung

(b) the hair in part N is to trap tinny dust particles from the air that we breathe in.

**Q14 (a) Cell wall.**

**(b) Plant cell Y would not have support and shape.**

**(c) It contains chlorophyll to trap sunlight for the plant to make food.**

**Q15 (a) The greater the age of the person, the lower the breathing rate per minute.**

**(b) He needs to breathe harder to take in more oxygen and remove more carbon dioxide from his body.**

**(c) After running for 10 minutes, his body need more energy to compensate for the lost energy. Thus, his heart beats faster as it needs to pump more oxygen and digested food to the rest of his body.**