

**St. Hilda's Primary School**  
**Primary 5**  
**Science**  
**Term 2 Weighted Assessment, 2025**

|             |    |
|-------------|----|
| Section A   | 24 |
| Section B   | 11 |
| Total Score | 35 |

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

Class: P5 / \_\_\_\_\_

Duration: 45 minutes

Total no. of pages: 12

Date: \_\_\_\_\_

**Section A: 24 Marks**

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

For questions 1 to 12, write your answer (1, 2, 3 or 4) in the bracket provided.

[2 marks each]

**1** Which of the following statements about the human reproductive system is correct?

- (1) The sperms are produced in the penis.
- (2) A fertilised egg is produced in the ovary.
- (3) All the eggs released from the ovaries develop into babies.
- (4) A healthy egg will successfully fuse with a sperm during fertilisation.

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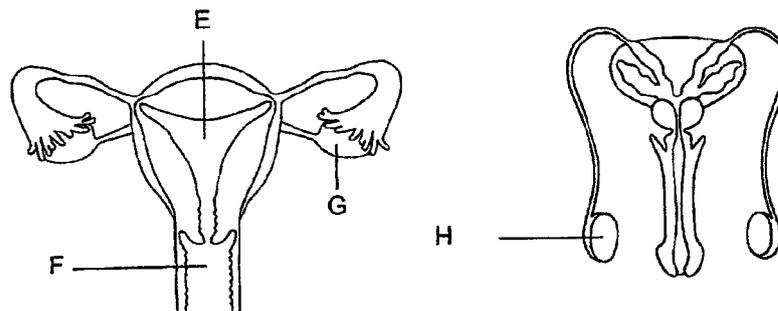
**2** Which one of the following characteristics is not passed on from the parents to their offspring?

- (1) Length of hair
- (2) Type of eyelids
- (3) Hair line shape
- (4) Type of earlobe

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- 3 The diagram below shows the female and male reproductive systems in humans.



Which of the following shows the correct function of the above parts, E, F, G and H?

|     | Part | Function                     |
|-----|------|------------------------------|
| (1) | E    | fertilisation takes place    |
| (2) | F    | fertilised egg develops here |
| (3) | G    | eggs are produced            |
| (4) | H    | fertilisation takes place    |

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- 4 Which of the following statements about fertilisation in humans is false?

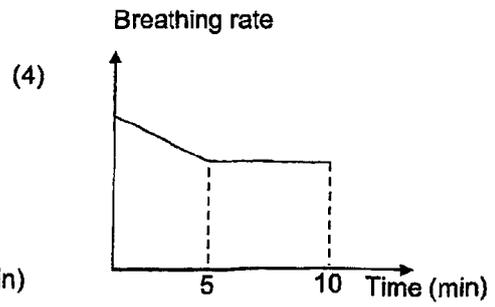
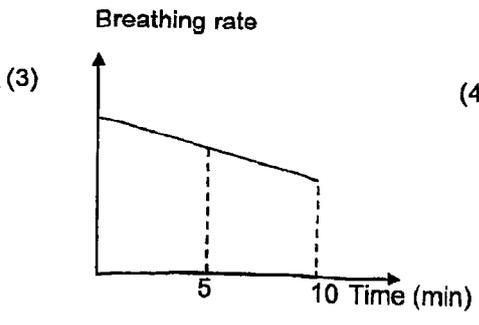
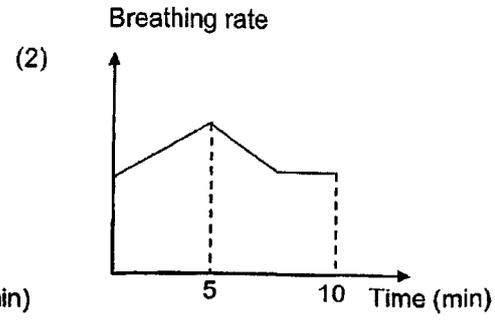
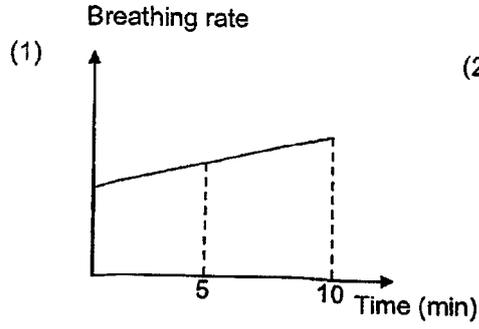
- (1) Fertilisation occurs when one sperm fuse with an egg.
- (2) Fertilisation occurs when many sperms fuse with an egg.
- (3) The fertilised egg goes through cell division and develops into a baby.
- (4) Fertilisation takes place in the female's body and the foetus will take about nine months to fully develop.

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5 Malory was at the top of a hill. She ran down the hill for five minutes and then continued to walk slowly for another five minutes.

Which of the following graphs shows Malory's breathing rate when she carried out these activities?



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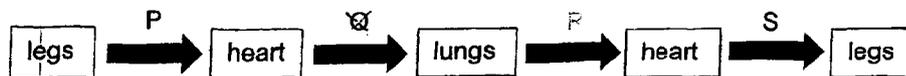
- 6 During an emergency exercise in a school, the windows and door of a classroom had to be closed and sealed with plastic sheets. All the fans had to be turned off. 40 students and one teacher stayed in the classroom for 30 minutes.

Which of the following shows the likely changes to the amount of gases in the classroom after 30 minutes?

|     | Oxygen   | Carbon dioxide | Nitrogen  | Water Vapour |
|-----|----------|----------------|-----------|--------------|
| (1) | decrease | increase       | increase  | no change    |
| (2) | decrease | increase       | no change | increase     |
| (3) | increase | decrease       | decrease  | decrease     |
| (4) | increase | decrease       | no change | increase     |

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- 7 The diagram below shows how blood flows through blood vessels P to S.



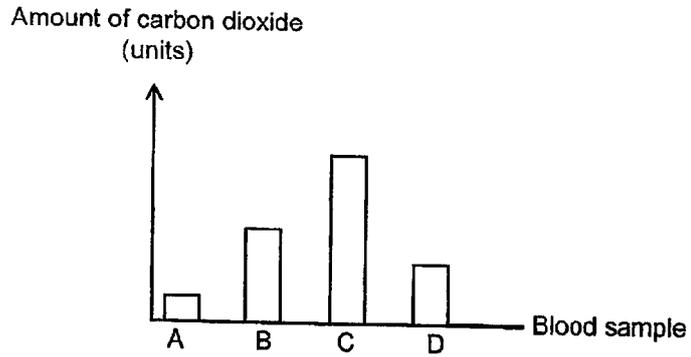
Which pair of blood vessels transport blood rich in oxygen?

- (1) R and S  
 (2) Q and R  
 (3) P and Q  
 (4) Q and S

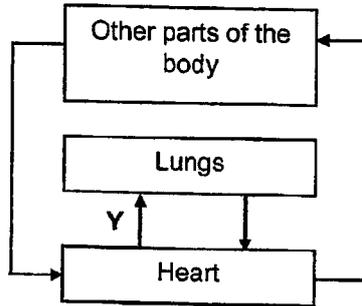
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- 8 The graph below shows the amount of carbon dioxide in four blood samples, A, B, C and D, taken from different blood vessels in the circulatory system.



The diagram below shows how blood flow in some parts of the human body.



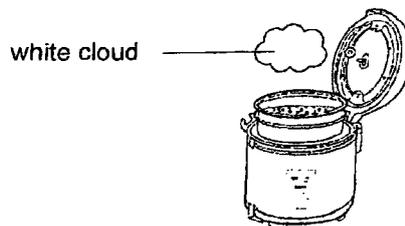
Which blood sample, A, B, C or D is most likely to be taken from blood vessel Y?

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

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- 9 The diagram below shows a rice cooker with rice that had just been cooked. When the lid was opened, a white cloud was formed above the rice cooker.



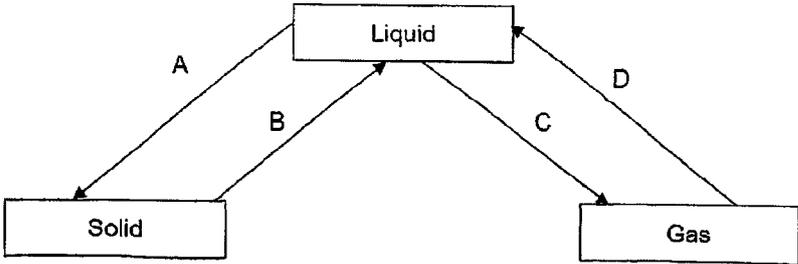
Which of the following correctly identifies the state of the white cloud and how it is formed?

|     | State of white cloud | How is the white cloud formed?   |
|-----|----------------------|--|
| (1) | Gas                  | Water vapour gained heat from the cooked rice and evaporated into mist.  |
| (2) | Gas                  | Water from the cooked rice gained heat and evaporated into water vapour.   |
| (3) | Liquid               | Hot water vapour from the rice cooker touched the cooler surrounding air above the rice cooker, lost heat and condensed into water droplets. |
| (4) | Liquid               | Hot water vapour from the rice cooker, gain heat from the surrounding air above the rice cooker and condensed into water droplets.           |

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10 The diagram below shows how water changes its state through processes A, B, C and D.



Which two processes show a change in state of water due to heat loss?

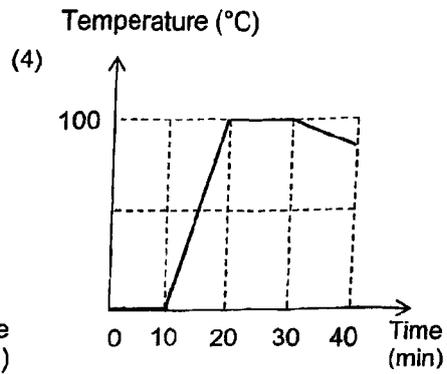
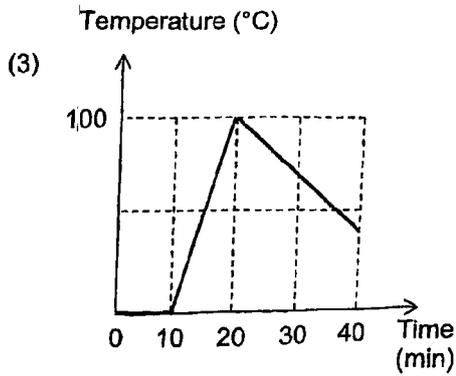
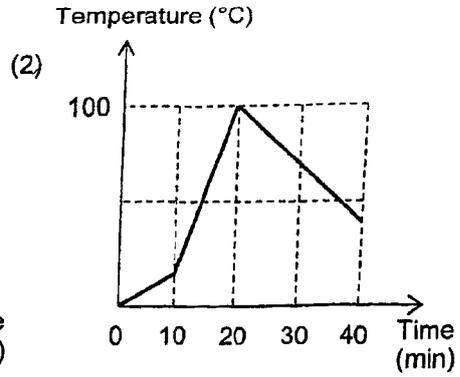
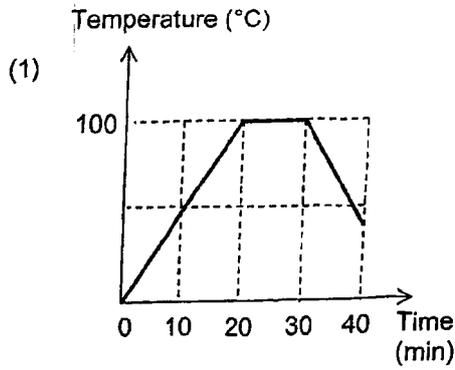
- (1) A and C
- (2) A and D
- (3) B and C
- (4) B and D

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- 11 Jenny heated some ice cubes in a beaker using a burner. After 10 minutes, all the ice melted. After another 10 minutes, the water started to boil. She then turned off the burner 10 minutes after the water started to boil.

Which of the following graphs correctly shows the results of Jenny's experiment?



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- 12 Putera conducted an experiment to find out how the amount of exposed surface area affects the rate of evaporation. He prepared four set-ups, P, Q, R and S using beakers filled with water and placed them at a basketball court. The conditions of each set-up are as shown below.

| Set-up | Initial volume of water (ml) | Exposed surface area of beaker with water (cm <sup>2</sup> ) |
|--------|------------------------------|--|
| P      | 200                          | 20   |
| Q      | 150                          | 30   |
| R      | 200                          | 30   |
| S      | 250                          | 20   |

Which two set-ups should Putera use to ensure a fair test?

- (1) P and S
- (2) Q and R
- (3) R and P
- (4) S and Q

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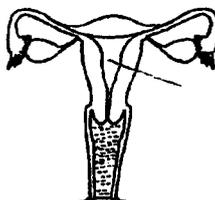
**Section B: 11 marks**

For questions 13 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.

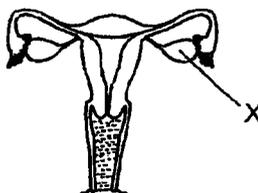
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- 13 The diagram below shows the human female reproductive system.



- (a) In the diagram above, label and name the part(s) in which a baby develops. [1]
- (b) Name the parts of the human reproductive system that produce the sperm. [1]
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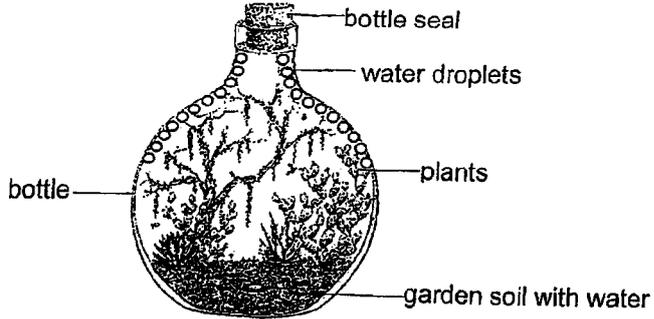
The diagram below shows part X of the female reproductive system which was damaged.



- (c) Can fertilisation still take place? Explain your answer. [1]
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14 A terrarium was created by adding garden soil, plant and water in a sealed bottle as shown below. The bottle was placed near a window. Water droplets was observed forming along the inner surface of the bottle.



(a) Explain how the water droplets were formed on the inner surface of the bottle. [2]

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(b) Explain how the plants inside the sealed bottle could get water even though no additional water was added? [1]

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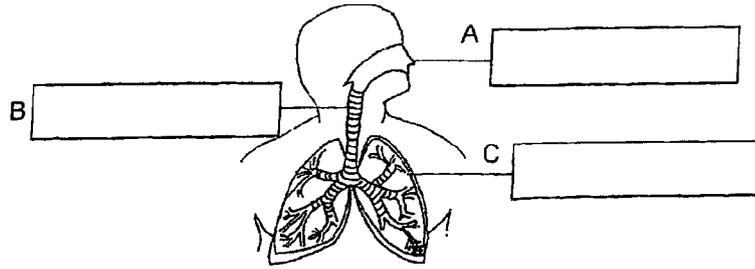
(c) It was observed that the water droplets on the inner surface of the bottle disappeared after the bottle seal was removed. Explain why. [1]

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| SCORE | 4 |
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15 The diagram below shows the human respiratory system.



(a) Name the parts A, B and C of the respiratory system. Write your answers in the boxes above. [1]

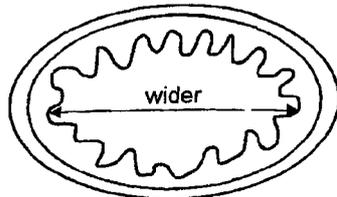
(b) State one difference between the respiratory system of a human and a fish. [1]

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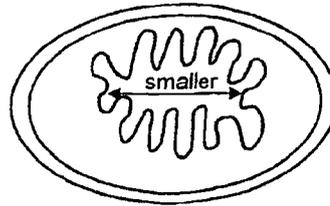
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When Joseph had an asthma attack, the air tubes in his lungs became smaller as shown in Diagram 2. During the asthma attack, Joseph breathed heavily, and his breathing rate increased.



opening of a normal air tube

Diagram 1



opening of air tube during an asthma attack

Diagram 2

(c) Explain why Joseph's breathing rate increased during an asthma attack. [2]

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END OF PAPER

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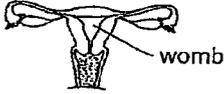
ST. HILDA'S PRIMARY SCHOOL  
PRIMARY 5  
TERM 2 WEIGHTED ASSESSMENT, 2025  
SCIENCE  
Simplified Answer Key

## Section A

|    |   |     |   |     |   |
|----|---|-----|---|-----|---|
| 1. | 4 | 6.  | 2 | 11. | 4 |
| 2. | 1 | 7.  | 1 | 12. | 3 |
| 3. | 3 | 8.  | 3 |     |   |
| 4. | 2 | 9.  | 3 |     |   |
| 5. | 2 | 10. | 2 |     |   |

## Section B

This answer key only provides a reference, and the key concepts have been bolded / underlined. Variations of students' answers have been accepted if they have shown conceptual understanding.

|           |  |
|-----------|--|
| 13<br>(a) |    |
| (b)       | Testis/Testes  |
| (c)       | Yes. An <u>egg can still be produced from the other ovary</u> for fertilisation to take place.   |
| 14<br>(a) | The <u>water in the soil</u> will (gain heat from the sun and) <u>evaporate into water vapour</u> . Water vapour comes into contact with <u>cooler inner surface of the bottle</u> , <u>loses heat &amp; condenses into water droplets</u> . |
| (b)       | The water droplets on the <u>inner surface of the bottle</u> returned back to the soil.  |
| (c)       | The water droplets <u>gained heat from the surrounding(air)/sun</u> and <u>evaporated into water vapour</u> .  |
| 15<br>(a) | A: nose / nostril<br>B: windpipe<br>C: lungs / lung  |
| (b)       | Fish <u>take in oxygen dissolved in water</u> , but <u>humans take in oxygen from the air</u> .  |
| (c)       | When the <u>air tube is smaller</u> , <u>less oxygen</u> is taken into the lungs/body. So, he has to breathe faster to <u>take in more oxygen</u> and <u>give out more carbon dioxide</u> .  |

