



**RAFFLES GIRLS' PRIMARY SCHOOL
WEIGHTED ASSESSMENT 1
PRIMARY FIVE
2025**

SCIENCE

Name: _____ ()

Date : 9 May 2025

Class: P5 _____

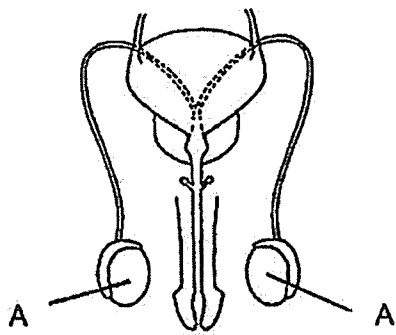
Total Time: 50 min

INSTRUCTIONS

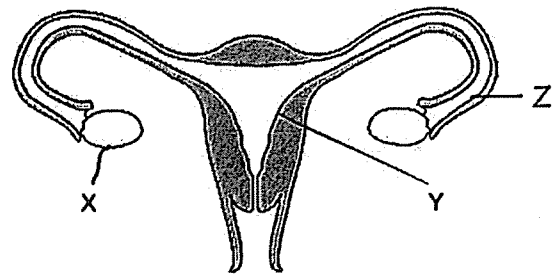
1. Write your name, class and index number in the spaces provided above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For questions 1 to 6, write your answers clearly in the spaces provided.
6. The number of marks is shown in brackets [] at the end of each question or part question.

| | |
|-------------------------|--|
| Your score out of 25 | |
| Parent's signature | |

1. The diagram below shows the human reproductive systems.



Male reproductive system



Female reproductive system

(a) (i) Name part Y.

(ii) State the function of part Y.

[1]

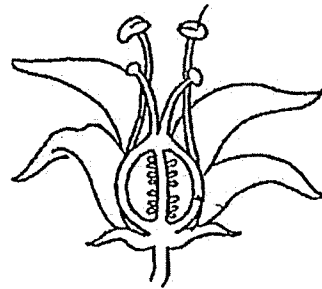
(b) Which part of the female human reproductive system, X, Y or Z, has the similar function as part A?

[1]

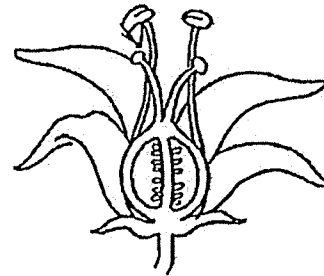
(c) What will happen if both parts, labelled A, in the male reproductive system are removed?

| | |
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| Score | 3 |
|-------|---|

2. The diagram below shows the cross-section of two flowers from plant A. The male and female parts of the flower mature at different times of the year.



Flower 1



Flower 2

- (a) In the diagram above, draw an arrow to show the process of pollination between flower 1 and 2. [1]
- (b) In the diagram above, label and name the part of the flower 1 that will develop into a fruit. [1]
- (c) Apart from pollination, name another process that needs to take place before a fruit can be formed. [1]
-

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| Score | 3 |
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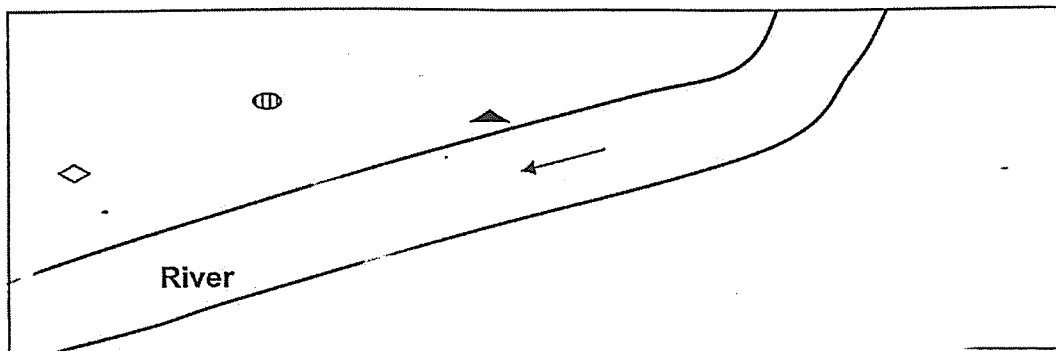
3. Ben studied the distribution of plants P, Q and R in an area over a year. His observations are shown below.

Key:

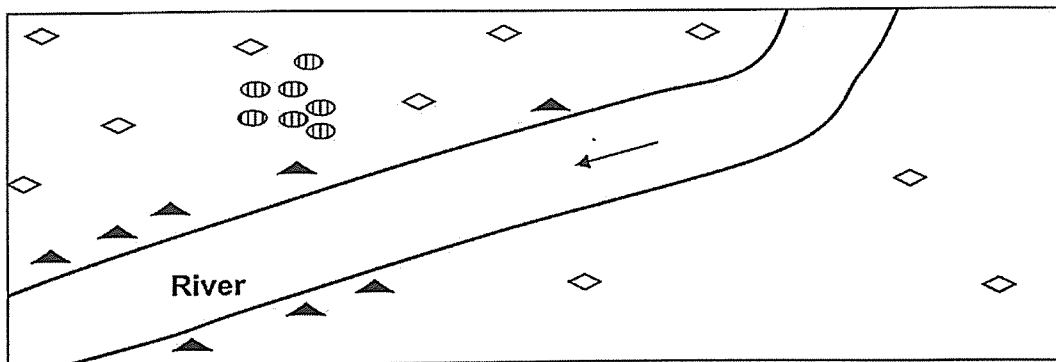
- direction of river flow
- ⊖ Plant P
- ▲ Plant Q
- ◇ Plant R

Observations :

At the start of the year :



At the end of the year :



- (a) Based on the information above, state the method of seed dispersal of plant P and Q in the table below. [1]

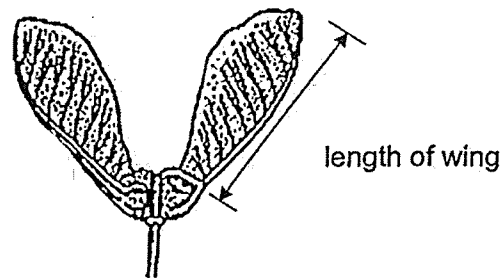
| Plant | P | Q |
|--------------------------|----------|----------|
| Method of seed dispersal | By _____ | By _____ |

| | |
|-------|---|
| Score | 1 |
|-------|---|

Continue on page 4

Continued from page 3

Plant R produced the seed as shown below.



Ben carried out an experiment, in an enclosed laboratory, to find out if the length of the wing of the seed would affect the distance travelled by it.

He recorded the results in the table below.

| Length of wing (cm) | Distance travelled by the seed (cm) |
|---------------------|-------------------------------------|
| 3.0 | 10 |
| 3.4 | 18 |
| 3.8 | 25 |
| 4.2 | 38 |

(b) Based on Ben's experiment, state the following: [1]

(i) Independent / Changed variable:

(ii) Dependent / Measured variable:

Continue on page 5

| | |
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| Score | 1 |
|-------|---|

Continued from page 4

- (c) Based on Ben's results, what is the relationship between the length of the wing and the distance travelled by the seed? [1]

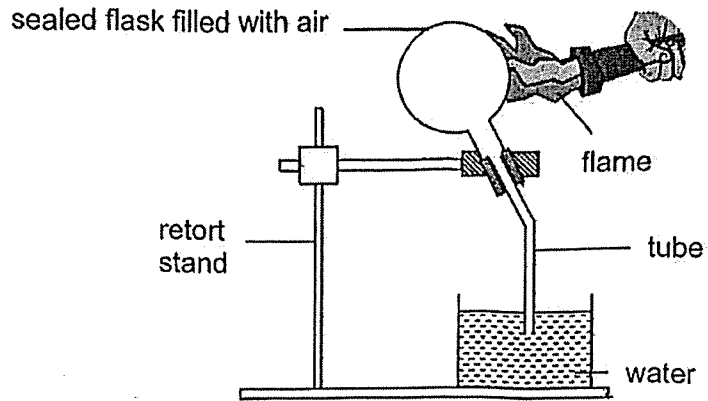
- (d) Ben carried out another experiment to find out if the height at which the seed from plant R is dropped affects the distance it travels.

In the table below, tick (✓) the correct boxes to identify the constant variables. [2]

| | Variables | Tick (✓) |
|-------|-------------------------------------|----------|
| (i) | Height at which the seed is dropped | |
| (ii) | Distance travelled by the seed | |
| (iii) | Size of the seed | |
| (iv) | Amount of wind | |
| (v) | Length of wing | |
| (vi) | Mass of seed | |

| | |
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| Score | 3 |
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4. Claire carried out an experiment in the laboratory with a constant room temperature of 25°C as shown below.



- (a) Tick (✓) the box(es) below to indicate if the objects would gain or lose heat. [1]

| | Gained heat | Lost heat |
|------------------|-------------|-----------|
| Flask | | |
| Air in the flask | | |

- (b) State an observation in the water after some time. [1]

- (c) Explain the observation in (b). [2]

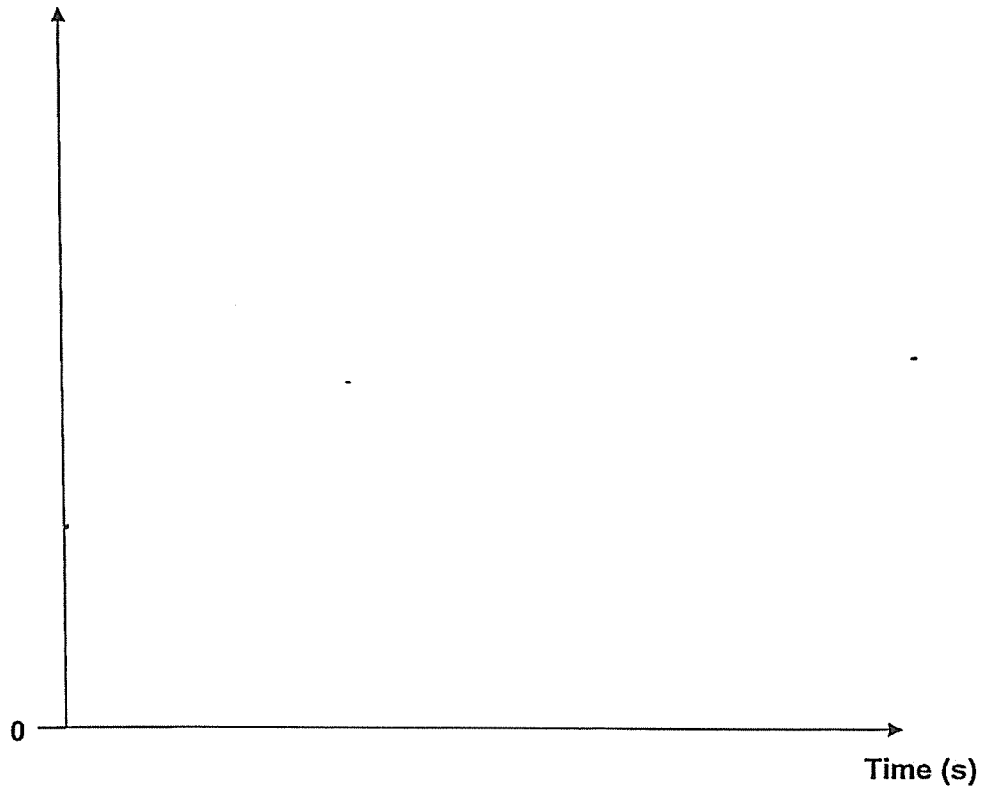
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| Score | 4 |
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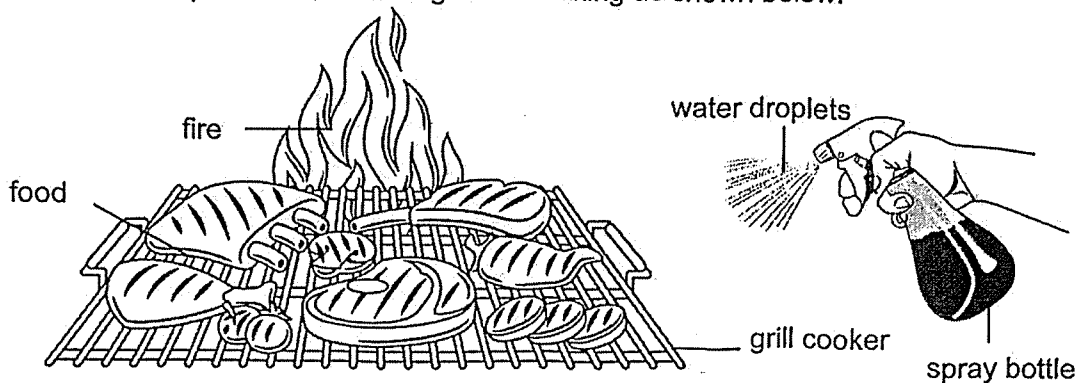
- (d) Draw a line on the graph below to indicate any change in the temperature of the air in the flask over time when a flame was brought near to the flask. [1]

Temperature of the air
in the flask ($^{\circ}\text{C}$)



| | |
|-------|---|
| Score | 1 |
|-------|---|

5. John sprayed some water from a spray bottle onto some meat on a grill cooker to keep them from burning while cooking as shown below.



- (a) He noticed that the water droplets on the meat disappeared after some time. Explain his observation. [2]

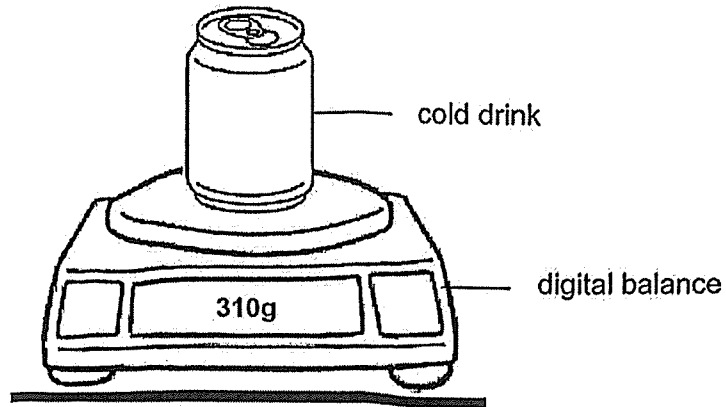
- (b) Name the change of state of water that took place in part (a). [1]

- (c) John used a different spray bottle and sprayed the same amount of water droplets onto the meat. However, the water droplets are of smaller size.

Did the water droplets on the meat disappear faster or slower? Explain your answer. [2]

| | |
|-------|---|
| Score | 5 |
|-------|---|

6. Sally opened the windows in the laboratory before she carried out an experiment. She took a can of drink out from the fridge and placed it on a digital balance as shown.



She immediately took the reading on the digital balance and recorded it in the table below.

After five minutes, she recorded the reading on the digital balance again as shown below.

| | Reading on the digital balance(g) |
|-----------------|-----------------------------------|
| At the start | 310 |
| After 5 minutes | 313 |

- (a) Explain why there is an increase in the reading on the digital balance after five minutes. [2]

- (b) Sally repeated the experiment in an enclosed air-conditioned laboratory using a similar can of drink taken out from the fridge.

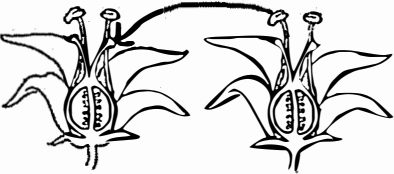
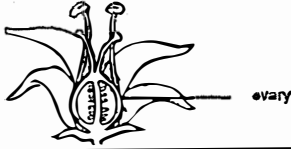
She observed that after five minutes, the reading was more than 310g but less than 313g, compared to the previous experiment. Explain her observation. [2]

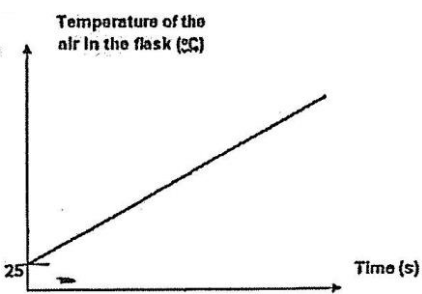
| | |
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| Score | 4 |
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Science P5 WA1 (2025)

Key Concepts

Name: _____ Class: _____ ()

| 1a (i) | Womb / uterus | | | | | | | | | |
|------------------|---|-----------|-------------|-----------|-------|---|--|------------------|---|--|
| 1a(ii) | The fertilised egg develops in the womb. | | | | | | | | | |
| 1b | Part X _____ | | | | | | | | | |
| 1c | The male reproductive cells/sperm cannot be produced. | | | | | | | | | |
| 2a |  | | | | | | | | | |
| 2b |  | | | | | | | | | |
| 2c | Fertilisation _____ | | | | | | | | | |
| 3a | P- by spitting / explosive action Q- by water | | | | | | | | | |
| 3b(i) | length of wings | | | | | | | | | |
| 3b(ii) | distance travelled by the seed [$\frac{1}{2}$] | | | | | | | | | |
| 3c | As the length of the wings increases, the distance travelled by the seed increases. | | | | | | | | | |
| 3d | Variables to be kept constant: Size of the seed, amount of wind, length of wing, mass of seed | | | | | | | | | |
| 4a | <table border="1"> <thead> <tr> <th></th> <th>Gained heat</th> <th>Lost heat</th> </tr> </thead> <tbody> <tr> <td>Flask</td> <td>></td> <td></td> </tr> <tr> <td>Air in the flask</td> <td>></td> <td></td> </tr> </tbody> </table> | | Gained heat | Lost heat | Flask | > | | Air in the flask | > | |
| | Gained heat | Lost heat | | | | | | | | |
| Flask | > | | | | | | | | | |
| Air in the flask | > | | | | | | | | | |

| | |
|----|--|
| 4b | Bubbles were formed. |
| 4c | The air in the flask gained heat from the flame/ flask and expanded . It escaped through the tube into the water in the form of bubbles . |
| 4d |  |
| 5a | The water droplets on the meat gained heat from the fire/meat . It evaporate to form water vapour . |
| 5b | From liquid to gas |
| 5c | C: Faster E: The water droplets are of smaller size. R: So they have more exposed surface area of water to the meat/fire and evaporated faster . |
| 6a | The warmer water vapour in the surrounding air lost heat to the cooler outer surface of the can and condensed into tiny water droplets . These additional water droplets on the can add on to the mass of the can. So the reading on the balance increased. |
| 6b | The tiny droplets between the cooler surface of the can and the water vapour in the air in the air-conditioned laboratory is reduce , resulting in a slower rate of condensation of water vapour from the surrounding colder air. Thus, water droplets were formed on the can. |