



RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT ( 1 )

2007

Name : \_\_\_\_\_ Index No: \_\_\_\_\_ Class: P5 \_\_\_\_\_

10 May 2007

SCIENCE

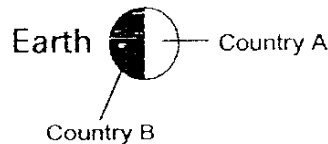
Att: 1 h 45 min

Section A	<b>60</b>	
Section B	<b>40</b>	
Out of <b>100</b> marks		
Highest score	<u>Class</u>	<u>Level</u>
Average score		
Parent's Signature		

**SECTION A (30 X 2 marks)**

For each question from 1 to 30, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

- The picture below shows the positions of the Sun and Earth.

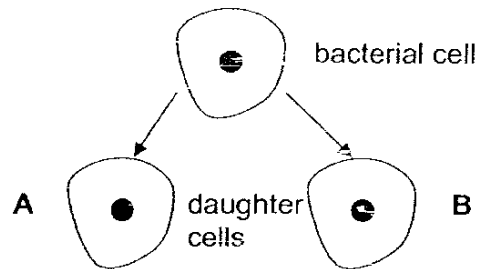


Country A is experiencing daylight and Country B is experiencing darkness. This is because the \_\_\_\_\_.

- Moon moves round the Earth
  - Sun revolves round the Earth
  - Earth revolves around the Sun
  - Earth rotates on its own axis all the time
- Which one of the following explains why the Moon appears to change its shape?
  - The Earth rotates on its own axis.
  - The Moon rotates on its own axis.
  - The Earth revolves around the Sun.
  - The Moon revolves around the Earth.

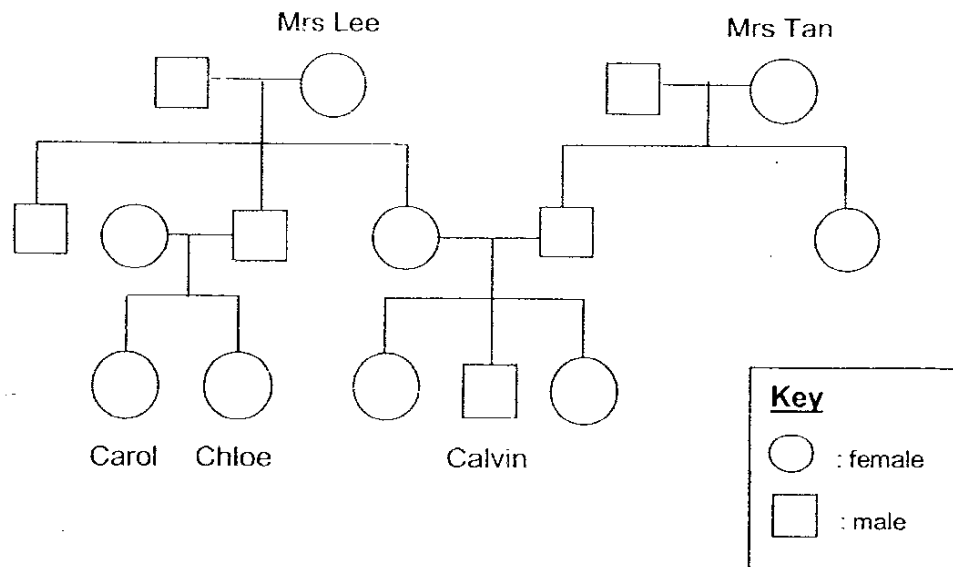
4

3. The following diagram shows a bacterial cell undergoing cell division to produce 2 daughter cells, A and B.



How many daughter cells will be produced from a parent cell at the 5<sup>th</sup> division?

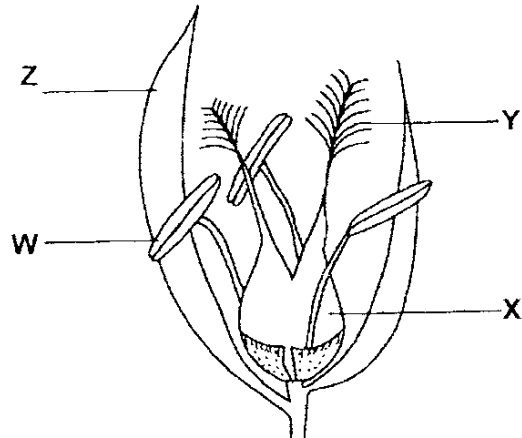
- (1) 16  
 (2) 32  
 (3) 64  
 (4) 128
4. The family tree of Carol, Chloe and Calvin is shown below.



Which one of the following can be concluded from the above?

- (1) Carol and Chloe are twins.  
 (2) Calvin's mother has 4 nieces.  
 (3) Both Carol and Chloe have 2 uncles.  
 (4) Chloe's mother and Calvin's mother are sisters.

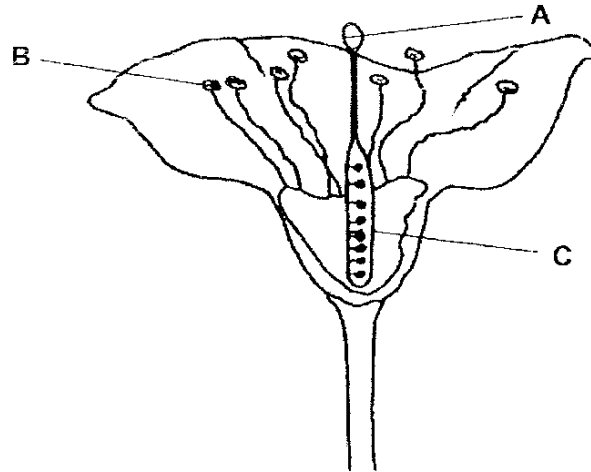
5. The diagram below shows parts of a flower.



In which parts of the flower are the ovules and pollen grains produced?

	ovules	pollen grains
(1)	W	Z
(2)	X	W
(3)	Z	X
(4)	Y	W

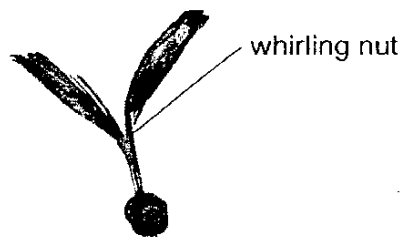
6. The diagram below shows parts of a flower.



What are the functions of the parts, A, B and C?

	A	B	C
(1)	receives pollen grains	produces pollen grains	grows into a fruit
(2)	produces pollen grains	receives pollen grains	protects the flower bud
(3)	receives pollen grains	grows into a fruit	protects the flower bud
(4)	grows into a fruit	protects the flower bud	produces pollen grains

7. The diagram below shows a whirling nut.



The whirling nut is easily carried far away from the parent plant. Which one of the following statements about the whirling nut is **TRUE**?

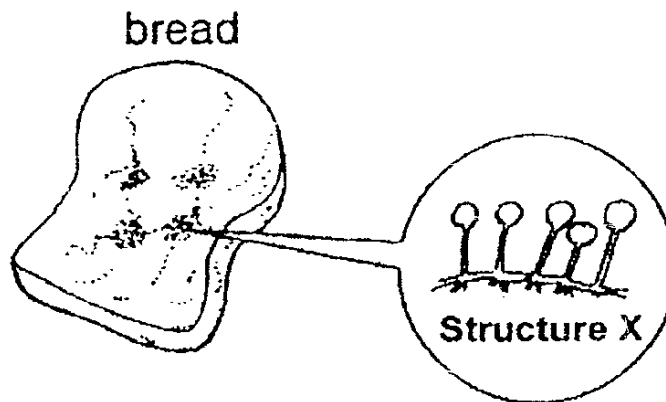
- (1) It is fleshy and can be eaten by animals.
- (2) It splits open when ripe and falls to the ground.
- (3) It has hooks and can be stuck to the fur of an animal.
- (4) It has a wing-like structure that can be carried away by the wind.

8. A young plant is seen to grow from the underground stem as shown below.



The young plant gets its food from \_\_\_\_\_.

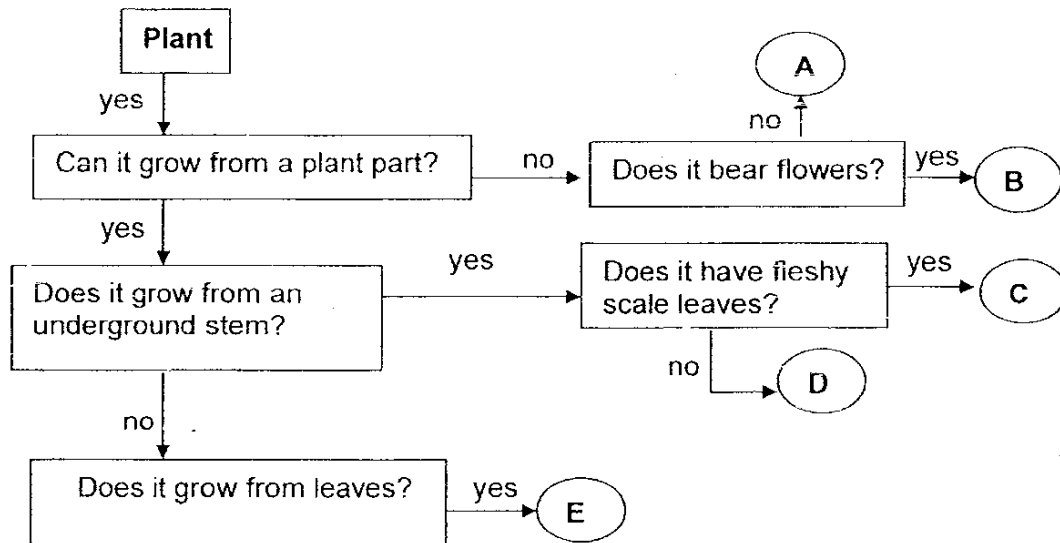
- (1) its roots
  - (2) its seed leaves
  - (3) the buds of the underground stem
  - (4) the food stored in the underground stem
9. Structure X is found growing on a piece of damp bread which has been left in the cupboard for a few weeks.



Structure X is reproduced by \_\_\_\_\_.

- (1) seeds
- (2) spores
- (3) suckers
- (4) pollen grains

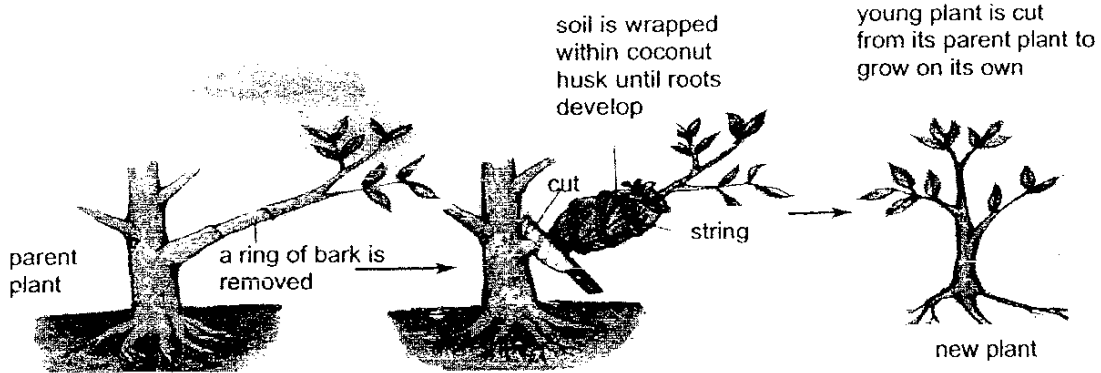
10. The chart below shows the characteristics of some plants and the different ways in which they reproduce.



Based on the chart above, which one of the following correctly represents the plants?

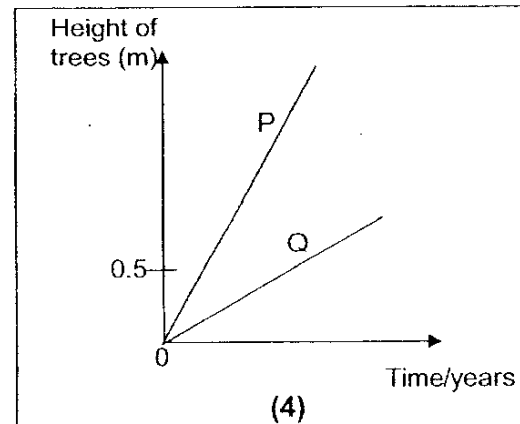
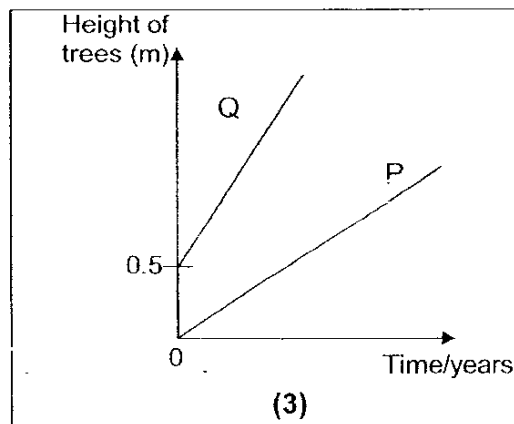
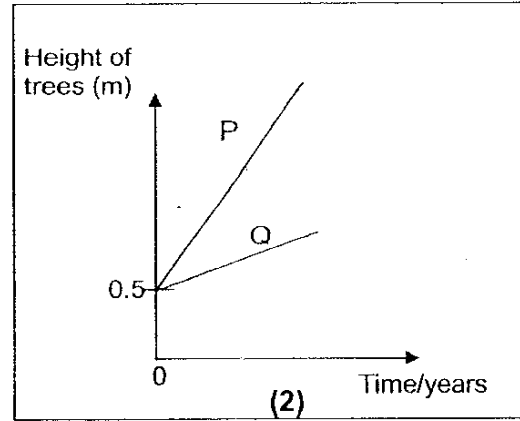
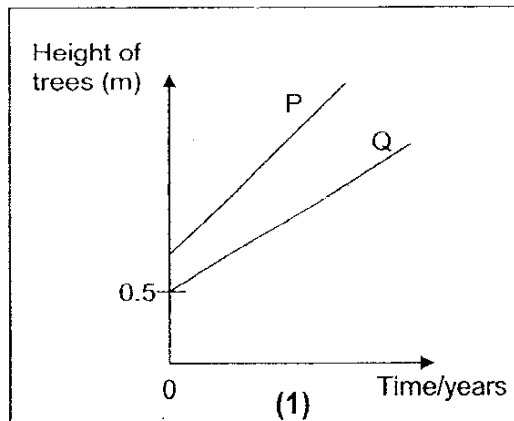
	A	B	C	D	E
(1)	money plant	coconut	orchid	ginger	African violet
(2)	fern	papaya	onion	water chestnut	begonia
(3)	hydrilla	orchid	bryophyllum	potato	African violet
(4)	pineapple	lalang	fern	onion	sansevieria

11. The pictures below show how some fruit trees are reproduced from an artificial method such as branch cutting.

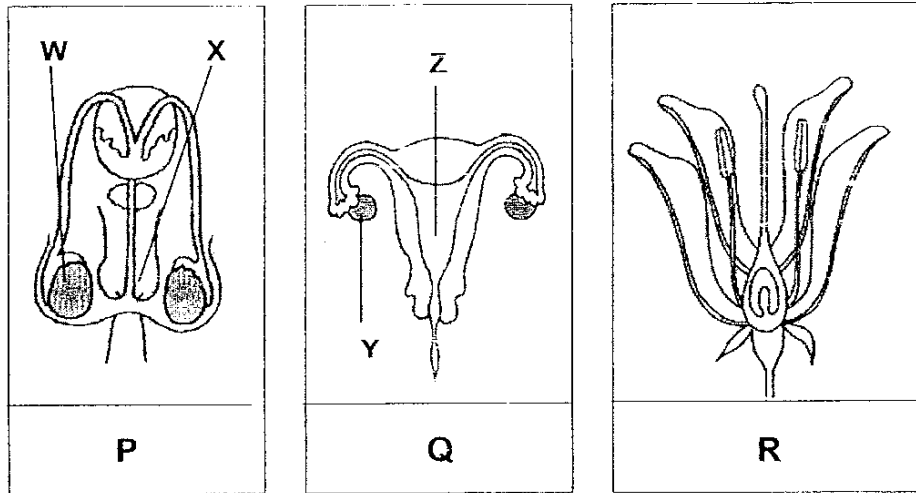


Mr Tan has been growing two durian trees, P and Q, for several years. He grew Tree P from a seed. Tree Q was grown from a branch cutting with an initial height of 0.5 m. He plotted a graph to show the growth of these 2 trees from the time they were planted till they flowered.

Which one of the following graphs most likely shows the growth of these two trees?



The diagrams, P, Q and R, are reproductive organs of some organisms.



Based on the diagrams above, answer **Questions 12, 13 and 14.**

12. Where are the sex cells of P and Q produced?

	P	Q
(1)	W	Y
(2)	W	Z
(3)	X	Y
(4)	X	Z

13. What processes take place when the sex cells from P and Q fuse?

- A pollination
- B fertilisation
- C germination
- D cell division

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

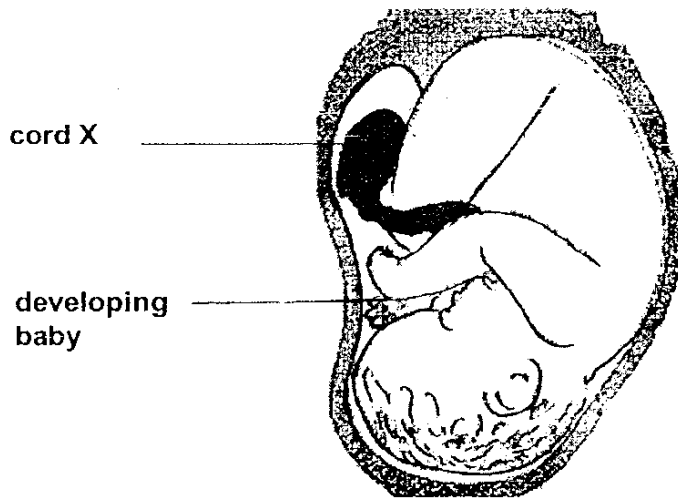


14. Which of the following statements about the reproductive organs of P, Q and R is/ are **INCORRECT**?

- A Fertilisation can take place within R itself.
- B R contains both the male and female sex cells.
- C The reproductive organs of P and Q produce different type of sex cells.
- D The reproductive organs of P, Q and R produce both male and female sex cells.

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

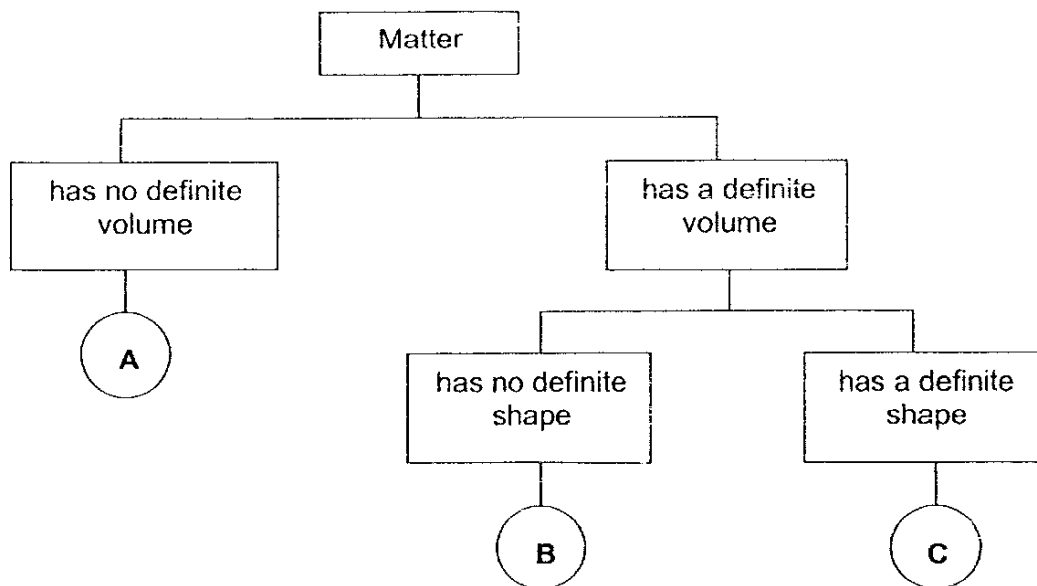
15. The diagram below shows a developing baby in a mother's womb.



Which of the following statements about cord X are **CORRECT**?

- A Fertilisation takes place in cord X.
  - B it connects the developing baby to the mother.
  - C It carries food and oxygen from the mother to the developing baby.
  - D Wastes from the developing baby are passed out through cord X.
- (1) A and B only  
(2) B and C only  
(3) C and D only  
(4) B, C and D only

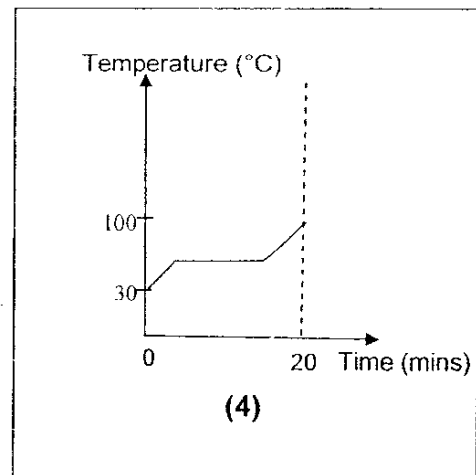
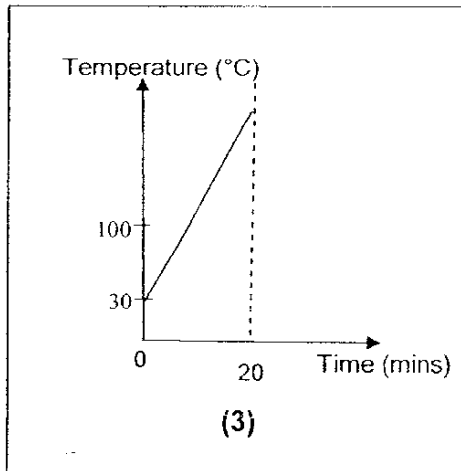
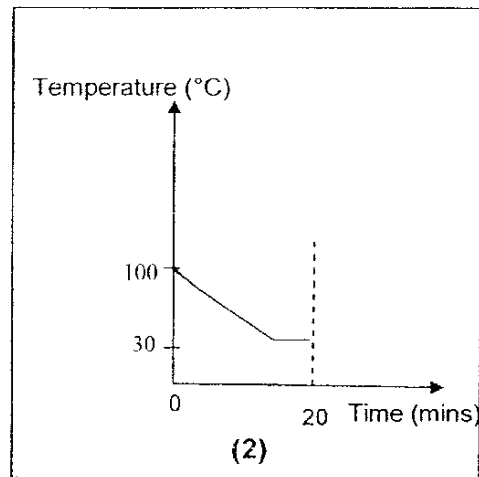
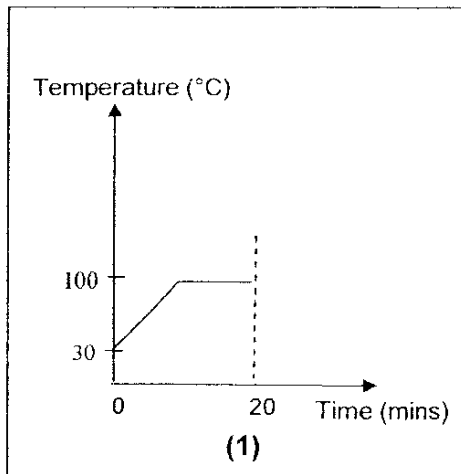
16. The classification table below shows how matter can be grouped.



Which one of the following correctly shows what A, B and C are at room temperature?

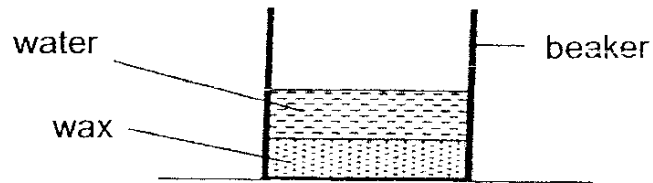
	<b>A</b>	<b>B</b>	<b>C</b>
(1)	oil	stone	oxygen
(2)	water vapour	milk	brown sugar
(3)	carbon dioxide	red bean	salt
(4)	pen	cough syrup	nitrogen

17. A beaker half-filled with water at room temperature was heated for 20 minutes. Which one of the following graphs shows the temperature of the water as it was being heated?



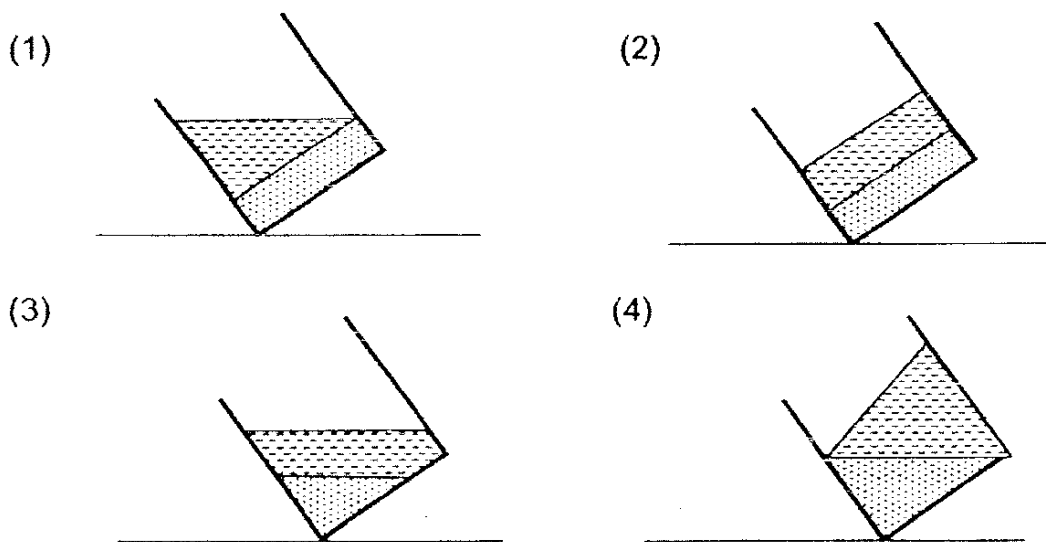
15

18. Tom poured some melted wax into a beaker. The next day, he added some cold water into the same beaker. Tom drew the diagram below based on his observation.



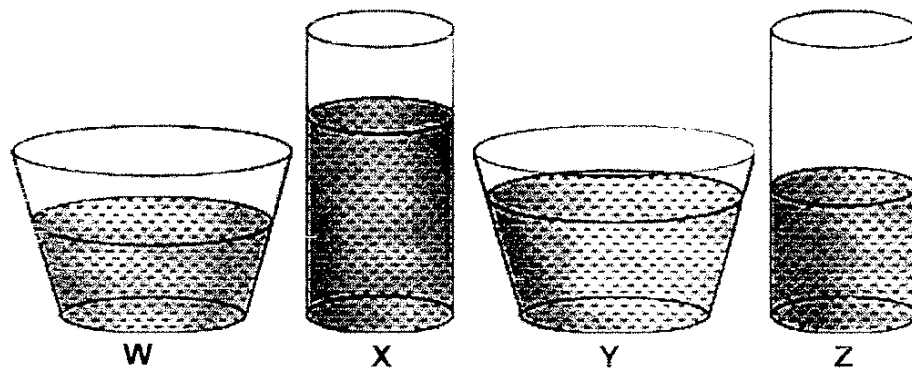
Tom tilted the beaker slightly.

Which one of the following diagrams correctly shows how the contents in the beaker should look like when the beaker was tilted?



Name: \_\_\_\_\_ Index No: \_\_\_\_\_ Class: P5 \_\_\_\_\_

19. Peter wanted to find out if the exposed surface area of water in a container affects the rate of evaporation. Containers, W, X, Y and Z, are made of the same material but filled with different amounts of water as shown below.

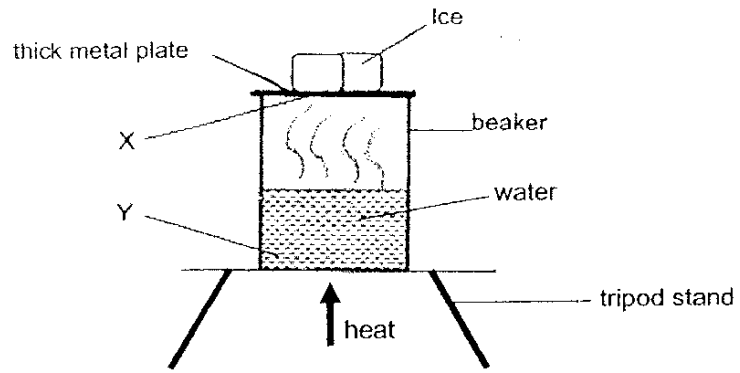


Containers	Amount of water in the container (ml)
W	50
X	80
Y	80
Z	50

Which 2 containers should Peter use?

- (1) W and X
- (2) W and Y
- (3) X and Y
- (4) Y and Z

20. The set-up below shows some processes taking place.

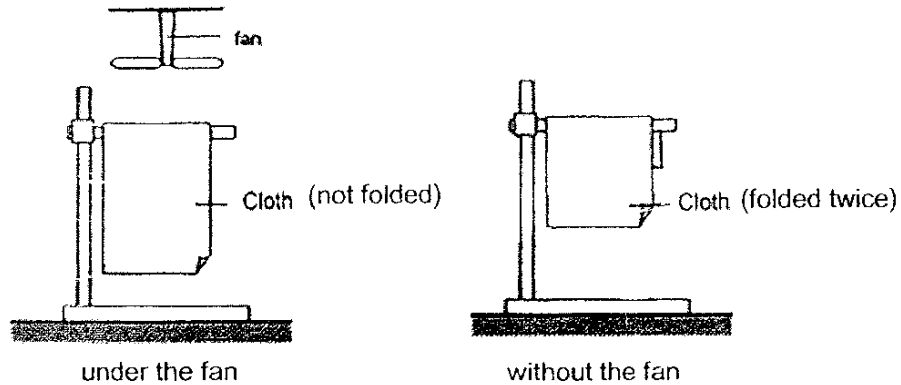


X and Y represent two parts of the water cycle.

Which one of the following correctly shows whether heat is gained or lost at X and Y?

	at X	at Y
(1)	Heat is gained.	Heat is gained.
(2)	Heat is lost.	Heat is lost.
(3)	Heat is gained.	Heat is lost.
(4)	Heat is lost.	Heat is gained.

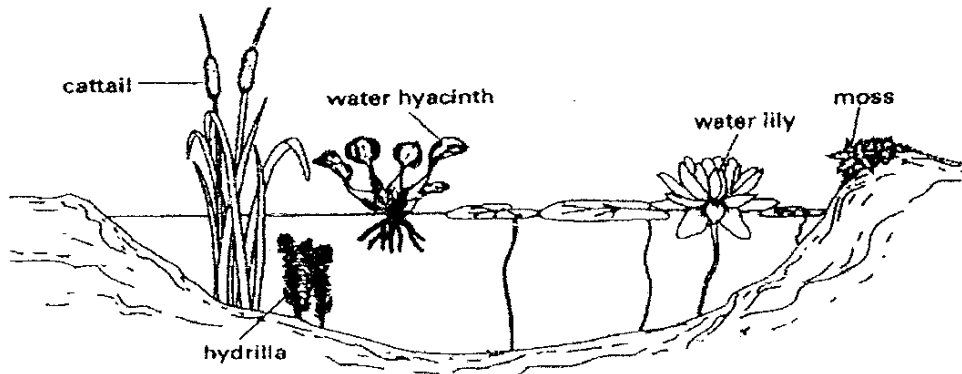
21. David used the 2 set-ups below to find out how the presence of wind affects the rate at which water evaporates.



David soaked the two identical pieces of cloth completely with an equal amount of water and conducted the experiment in a classroom during the day.

Why is his experiment **NOT** a fair test?

- (1) The thickness of the cloth is the same.
  - (2) The amount of water present is the same.
  - (3) He should place one set-up in the garden.
  - (4) The exposed surface area of the cloth is different.
22. Some plants are found growing in or near a pond as shown below.



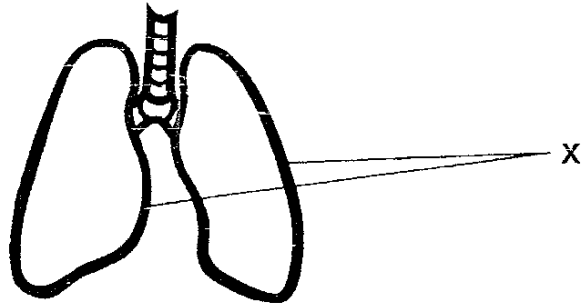
On rainy days, parts of the soil where no plants are growing will slowly be washed into the water of the pond, causing the water to turn murky. Which one of the following would be the most badly affected when this happens?

- (1) moss
- (2) cattail
- (3) hydrilla
- (4) water lily

28



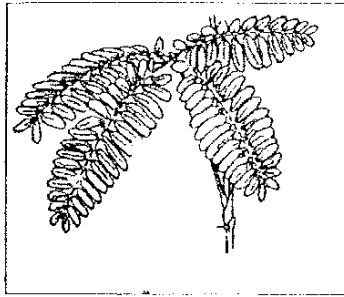
23. The diagram below shows parts of the respiratory system of a man.



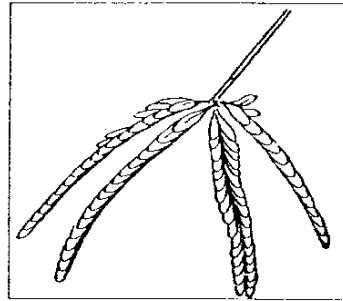
Which one of the following protects X?

- (1) skull
  - (2) ribcage
  - (3) backbone
  - (4) shin bone
24. Gisela and her 10 friends were trapped in a lift.
- Why did some of her friends complain about giddiness after a while?
- (1) More oxygen and carbon dioxide were present in the lift.
  - (2) Less oxygen and carbon dioxide were present in the lift.
  - (3) Less oxygen and more carbon dioxide were present in the lift.
  - (4) Less carbon dioxide and more oxygen were present in the lift.

25. Lynda found a mimosa plant in the school field. The leaves of the mimosa plant closed up immediately when she touched it.



**before Lynda touched it**



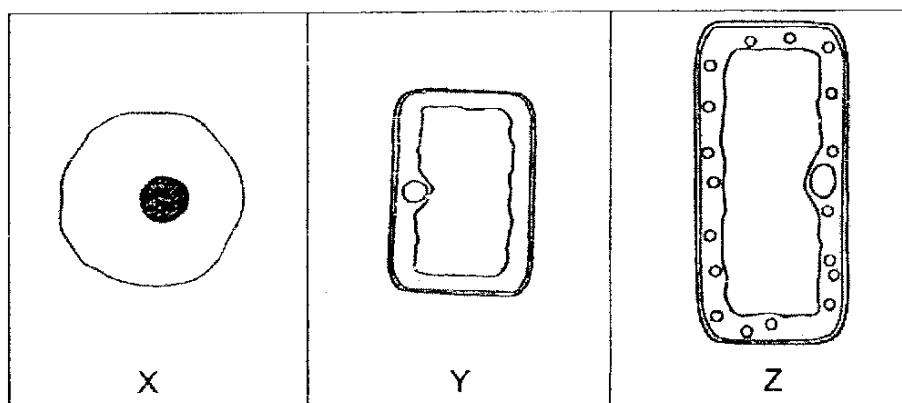
**after Lynda touched it**

Which of the following statements explain(s) her observations?

- A The mimosa plant can grow and reproduce.
  - B The mimosa plant needs air, water and food.
  - C The mimosa plant can respond to changes around it.
- 
- (1) B only
  - (2) C only
  - (3) A and B only
  - (4) B and C only

22

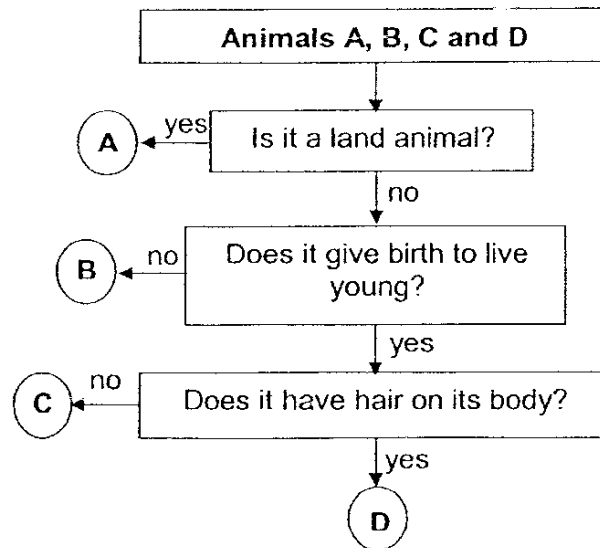
26. The cells, X, Y and Z, shown below are each taken from a part of some organisms.



Which one of the following correctly matches where the cells, X, Y and Z, are taken from?

	X	Y	Z
(1)	flower of a plant	inside the cheek of a man	leaf of a plant
(2)	inside the cheek of a man	flower of a plant	leaf of a plant
(3)	leaf of a plant	inside the cheek of a man	flower of a plant
(4)	swollen leaf of an onion	leaf of a plant	inside the cheek of a man

27. The chart below shows how some animals, A, B, C and D, are classified.

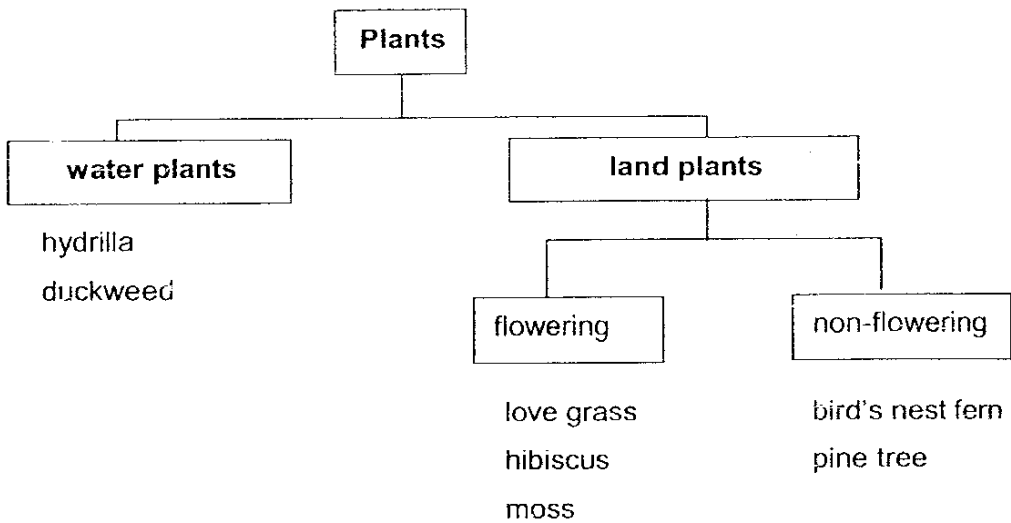


Which one of the following correctly matches A, B, C and D?

	A	B	C	D
(1)	starfish	dolphin	butterfly	whale
(2)	chicken	spiny anteater	emu	shark
(3)	mudskipper	platypus	bat	dolphin
(4)	horse	turtle	mollyfish	seal

24

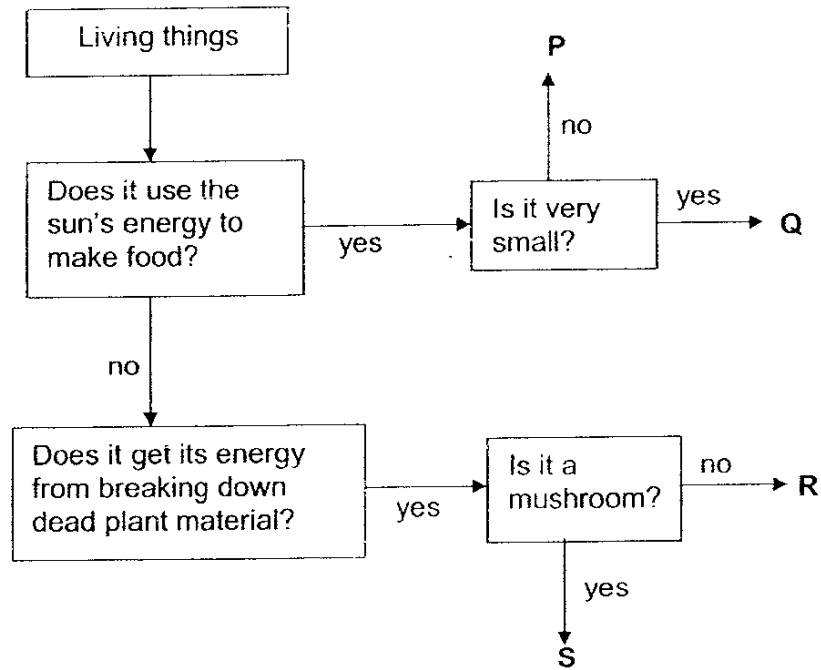
28. The classification chart below shows how some plants are classified.



Which one of the following is **WRONGLY** classified?

- (1) moss
- (2) duckweed and moss
- (3) love grass and pine tree
- (4) duckweed, moss and pine tree

29. The chart below shows some differences between some living things in a particular environment.

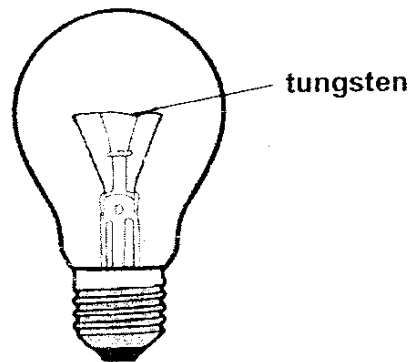


Based on the information above, which of the following is/are true?

- A Q has chlorophyll.
  - B P and R are plants.
  - C S reproduces by seeds.
- (1) A only  
(2) C only  
(3) A and B only  
(4) B and C only

26

30. The diagram below shows a light bulb.



a light bulb

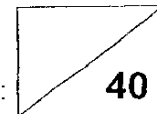
Which of the following properties of tungsten are taken into consideration when it is used to make light bulbs?

- A It is breakable.
- B it conducts electricity.
- C It allows light to pass through.
- D It gives off a lot of light when heated.

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

27

Name : \_\_\_\_\_ Index No: \_\_\_\_\_ Class: P5 \_\_\_\_\_ Marks:

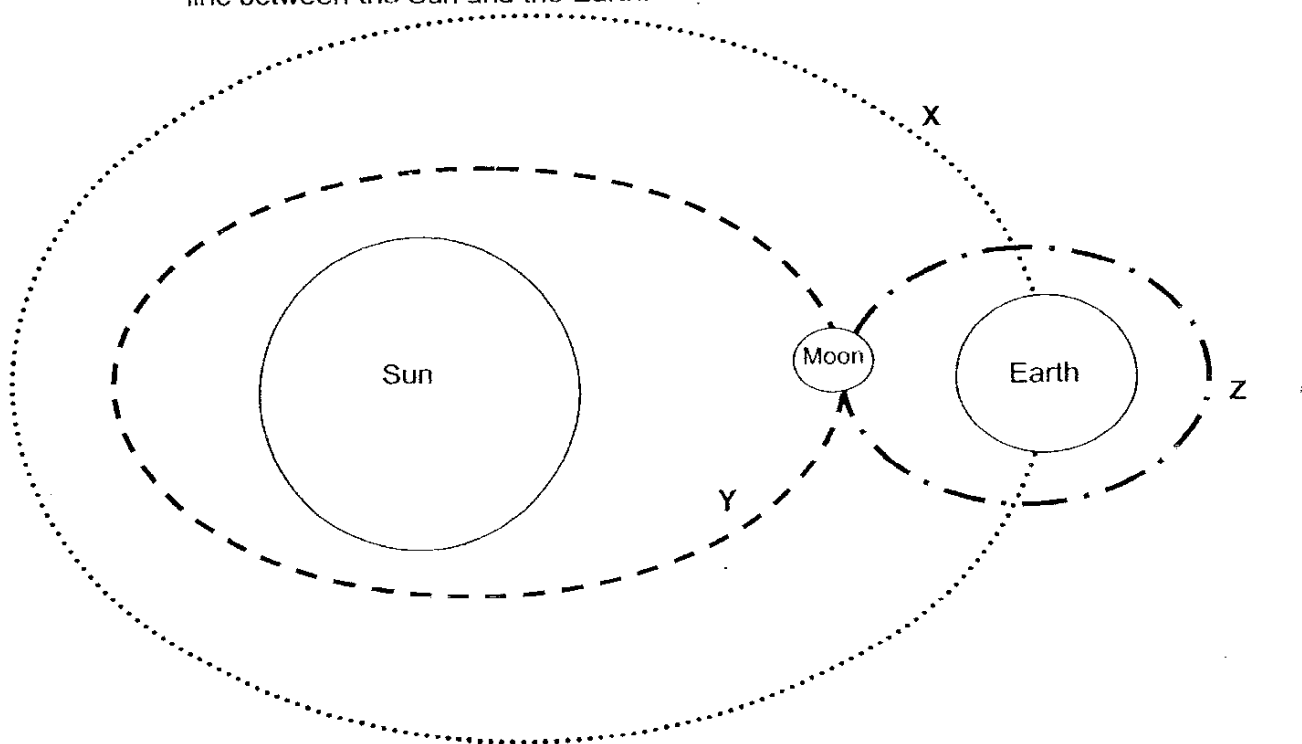


**SECTION B (40 marks)**

For questions 31 to 46, write your answers in this booklet.

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

31. The diagram below (**NOT** drawn to scale) shows that the Moon lies in a straight line between the Sun and the Earth.



Based on the information above, answer the following questions:

- (a) The shadow of the \_\_\_\_\_ is formed on the

\_\_\_\_\_ [2]

- (b) Which path, X, Y or Z, shows the path of the Moon which enables people on Earth to see the different moon phases?

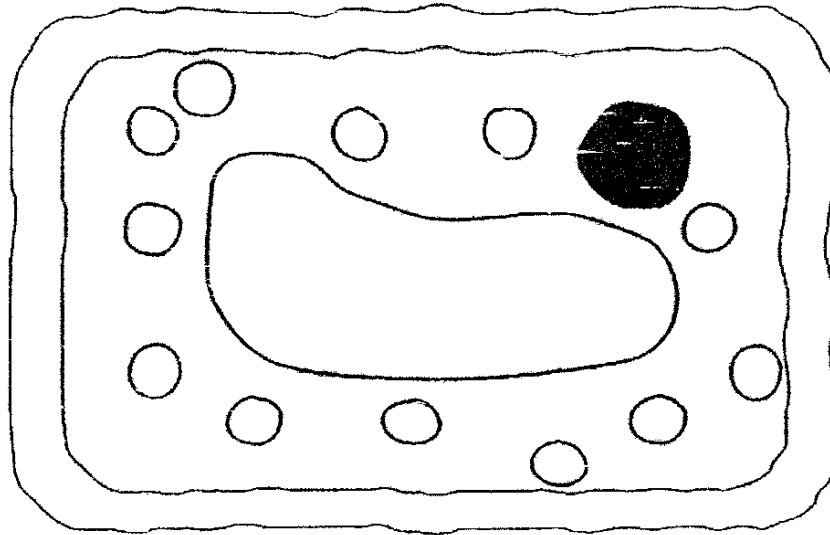
Path  [1]

- (c) How long does the Earth take to rotate completely on its own axis? [1]

\_\_\_\_\_



32. The picture below shows a plant cell (**NOT** drawn to scale).



Based on the picture above, answer the following questions:

- (a) (i) Use a letter 'X' to identify the part of the cell which helps the plant to carry out photosynthesis. [½]
- (ii) **NAME** the part that you labelled as 'X'. [½]

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

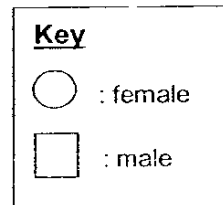
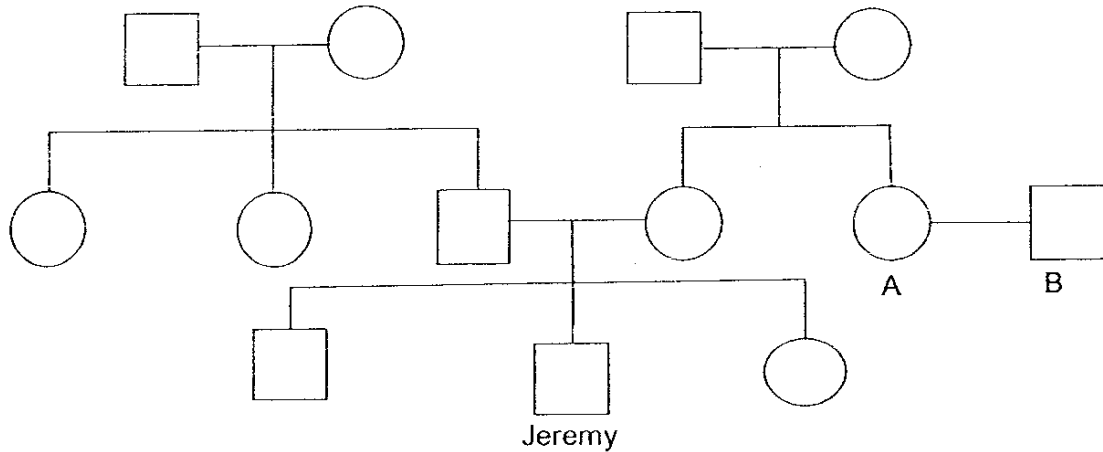
- (b) John says that the above plant cell came from a ginger. Do you agree with John? Why? [2]

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33. Jeremy drew his family tree as shown below.



Based on the information above, answer the following questions:

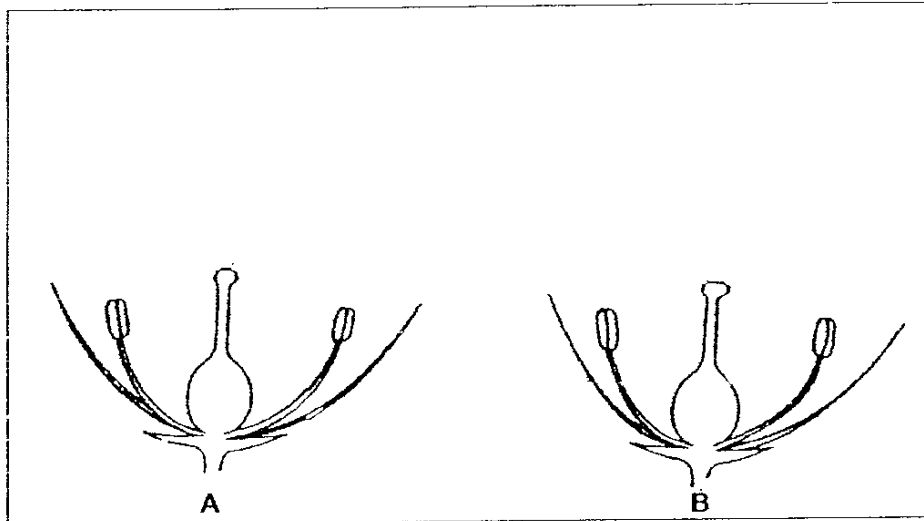
(a) How many aunts does Jeremy have? [1]

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(b) Jeremy's relative A got married to B and gave birth to a baby boy. On the diagram, add an appropriate symbol to show the son of relative A in the family tree. [1]

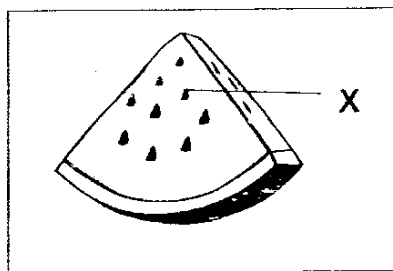
30

34. The diagrams below show the cross-sections of flowers A and B from plants of the same species.



- (a) In the diagrams above, **DRAW** 2 arrows to illustrate **TWO** different ways in which pollen grains can be transferred during pollination. [2]

Peter cut a watermelon and saw part X in the flesh of the fruit. His teacher told him that X had developed from a part of a flower.



- (b) Which part of the flower was part X developed from? [1]

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- (c) Give a reason why part X is important to the watermelon plant. [1]

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35. The picture below shows a banana plant.



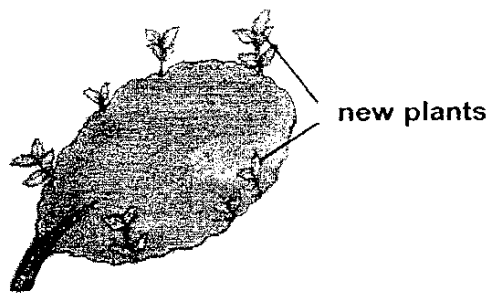
(a) What is the function of Y? [1]

\_\_\_\_\_

(b) Name **ANOTHER** plant that has part Y just like the banana plant. [1]

\_\_\_\_\_

The bryophyllum leaf shown below has new plants growing along its edge.

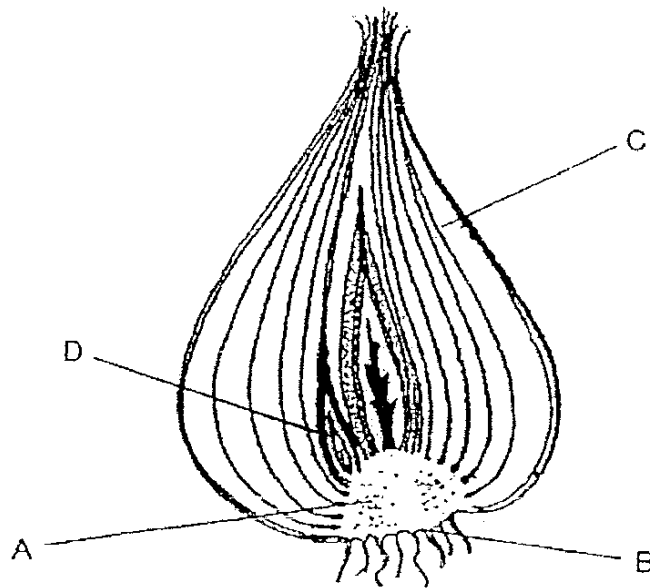


(c) What is **ONE** similarity between the bryophyllum and banana plants in their method of reproduction? [1]

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

32

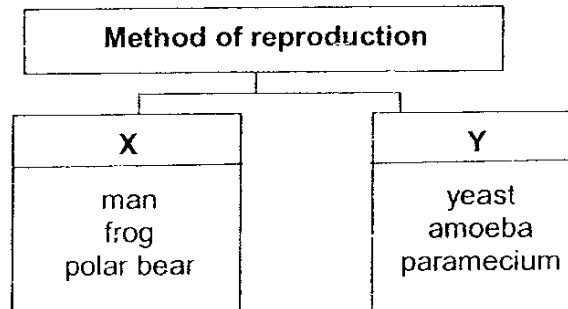
The diagram below shows an underground stem which can develop into a new plant.



- (d) Which part, A, B, C or D, of the underground stem shown above can grow into a new plant? [1]

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36. The classification chart below shows how some organisms reproduce.



Based on the chart above, answer the following questions:

- (a) What is the main difference between the two methods of reproduction, X and Y? [1]

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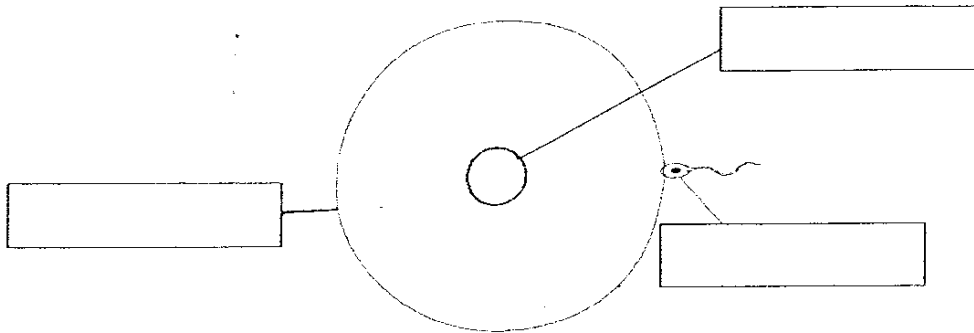
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- (b) Name the reproduction method, X. [1]

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37. The diagram below shows how fertilisation of an organism takes place.



(a) LABEL 'egg' and 'sperm' in 2 of the boxes in the diagram above. [1]

(b) What happens to the fertilised egg before it can develop into a foetus? [1]

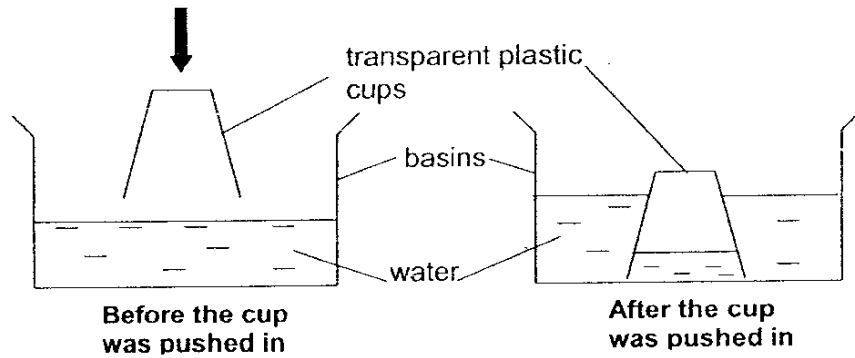
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38. Janice was given a basin of water and a transparent plastic cup. She inverted the cup and pushed it down slowly into the basin of water as shown below.



- (a) Janice observed that the water level in the transparent plastic cup is **LOWER** than the water level in the basin. Explain why this is so. [1]

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- (b) Suggest a way how Janice can fill the inverted plastic cup completely with water **WITHOUT** lifting it up. [1]

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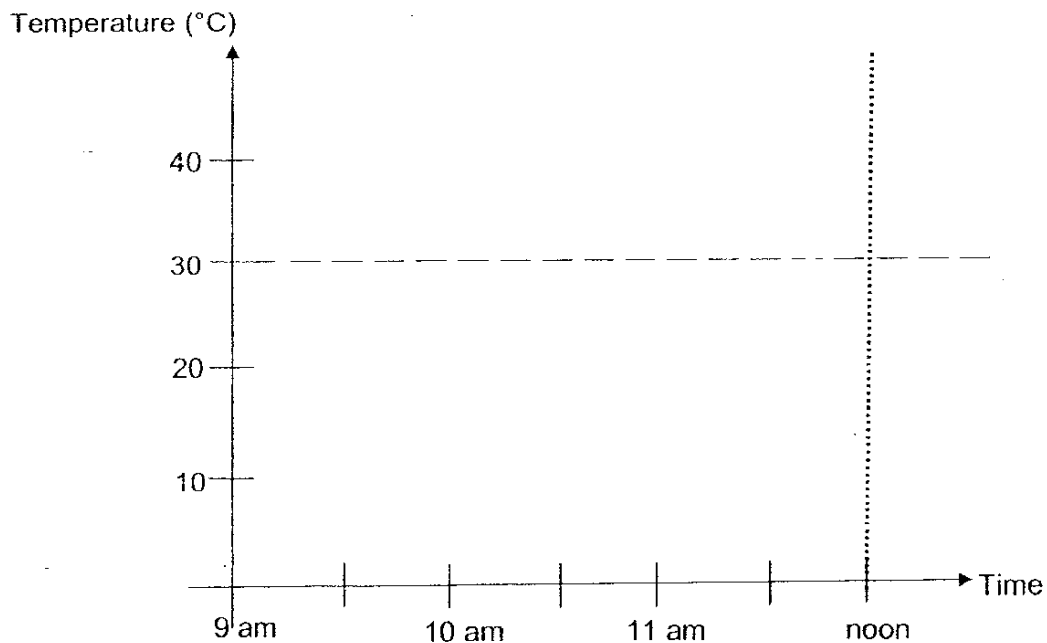


39. David had 4 identical glass containers. Each container was filled with the same amount of different liquids, P, Q, R and S. He placed them in the freezer at the same time. He recorded the time taken for the liquids, P, Q, R and S, to be frozen completely in a table as shown below.

Liquids in containers	Time taken to freeze completely (min)
P	80
Q	30
R	60
S	50

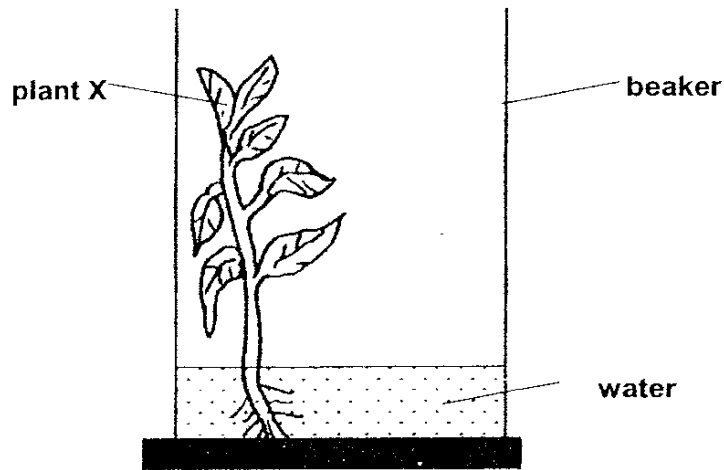
Based on the information given above, answer the following questions:

- (a) What is the aim of David's experiment? [1]
- 
- (b) Name **ANOTHER** variable that must be **FIXED** to ensure that a fair test was conducted. [1]
- 
- (c) A beaker of water at 30°C was placed in a freezer at 9 am for 3 hours. It froze completely at 10.30 a.m. **DRAW** in the space below a graph to show the change in the temperature of the water in the beaker for the whole duration of 3 hours. [1]

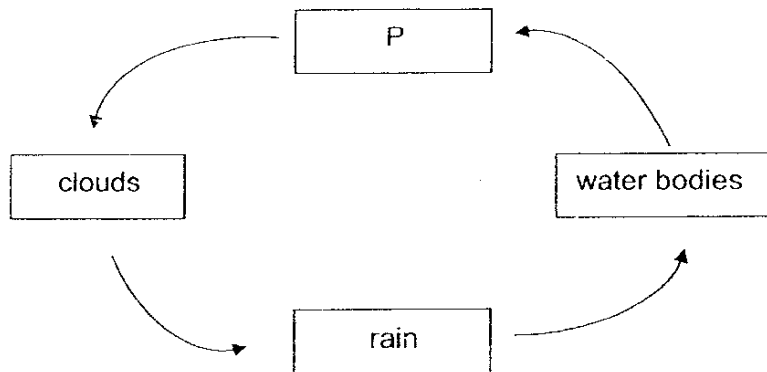


37

40. Melissa put plant X in a beaker of water at room temperature and placed the set-up on a table in the living room. The next day, she found that the water level in the beaker had dropped.



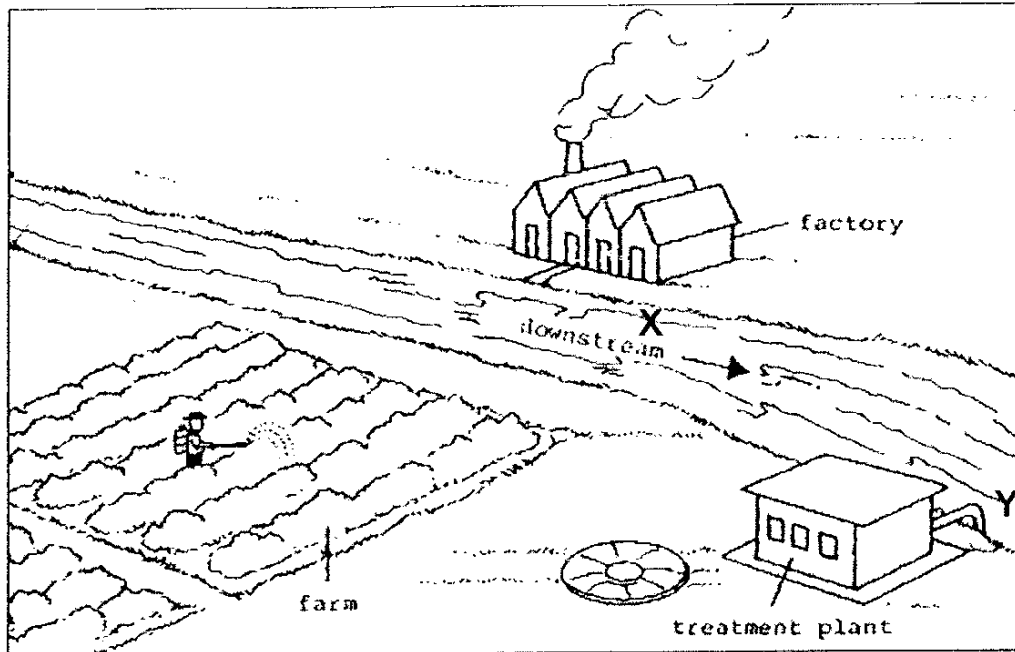
- (a) In the water cycle below, mark with an 'X' on the arrow(s) to show where a similar process could have taken place. [1]



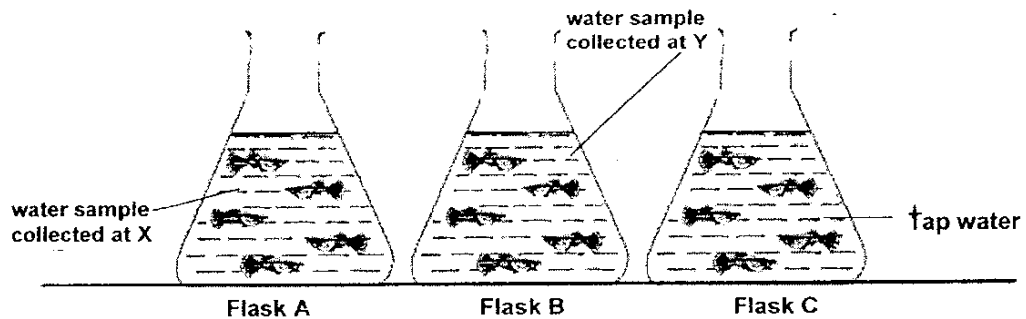
- (b) What does P in the above water cycle represent? [1]

P: \_\_\_\_\_

41. Lim Heng collected samples of water (at Points X and Y) from the stream as shown below.



Using 3 identical flasks, A, B and C, Lim Heng set up an experiment with the same type of fish as shown below. Each flask had the same number of fish of similar size.



Lim Heng put 500 ml of tap water in Flask C to act as a control.

Using the information above, answer the following questions:

- (a) How much of the water sample collected should Lim Heng put in Flask A? [1]

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The next day, Lim Heng recorded the observations he had made on the fish in each flask shown in the table below.

Flasks	Observations
Flask A with water sample collected at X	▪ All the fish died.
Flask B with water sample collected at Y	▪ 2 fish died.
Flask C with tap water	▪ None of the fish died.

- (b) What do the results above tell Lim Heng about the water samples collected at X and Y? [1]

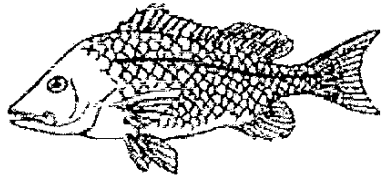
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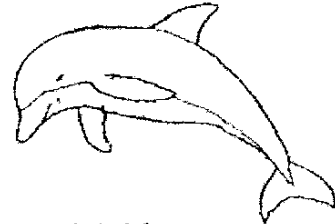
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40

42. The diagrams below show a red snapper and a dolphin (**NOT** drawn to scale).



red snapper



dolphin

- (a) Sierra says, "Since red snappers and dolphins are found living in the sea, they breathe through their gills." Explain why her statement is **NOT** correct. [1]

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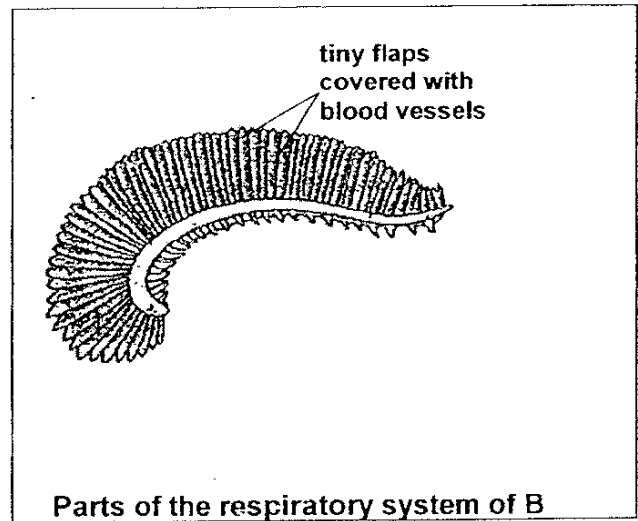
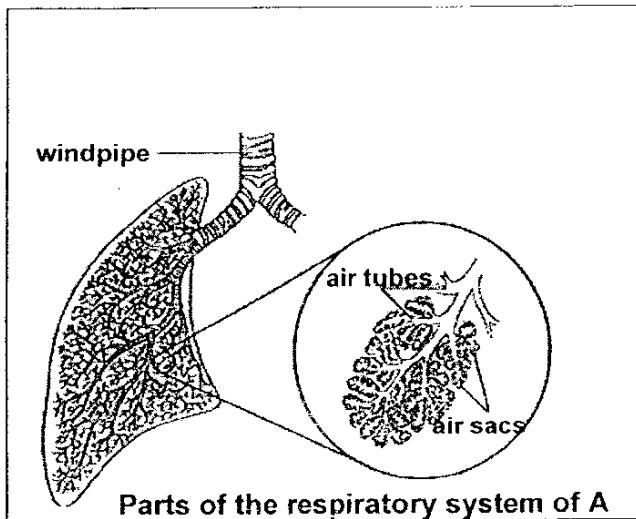


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The diagrams below show parts of the respiratory system of 2 organisms, A and B.



- (b) What is similar in **BOTH** diagrams to allow a faster rate of gaseous exchange between carbon dioxide and oxygen to take place? [1]

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- 43 Marlini did a study on some living and non-living things, P, Q, R and S. She drew a checklist and placed a tick ( √ ) based on the characteristics she had observed of P, Q, R and S.

At the end of the study, the completed checklist is as follows:

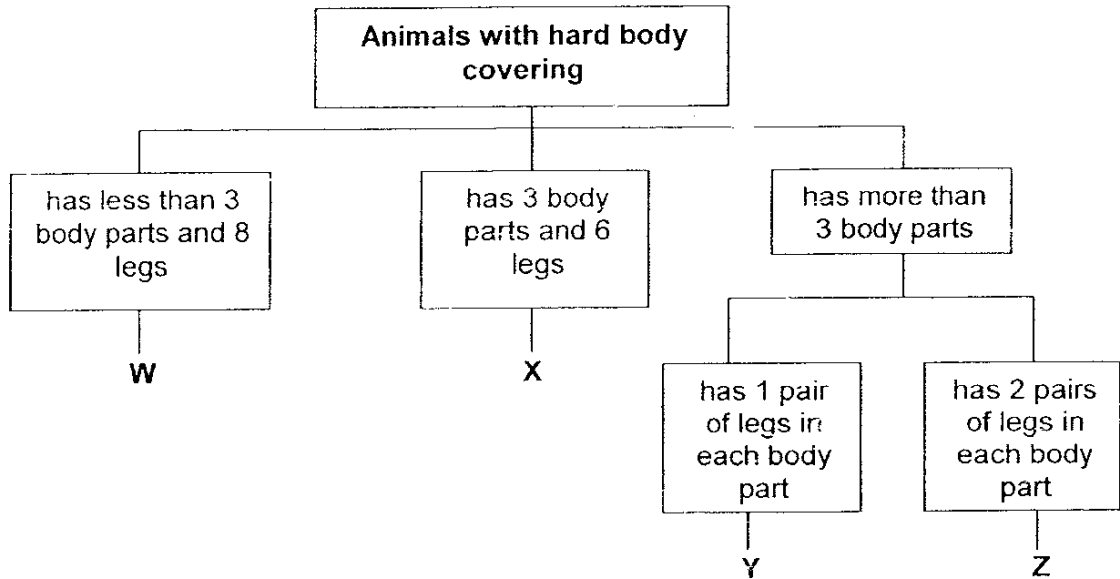
Observations	P	Q	R	S
cannot grow		√	√	
made up of dead cells			√	
can make its own food				√
can grow and reproduce	√			√
needs air, water and food to grow	√			√
wastes are produced from its body	√			√
can respond to changes in the environment	√			√

Using the checklist above, classify the following things in the correct group, P, Q, R or S. Use each letter only **ONCE**. [2]

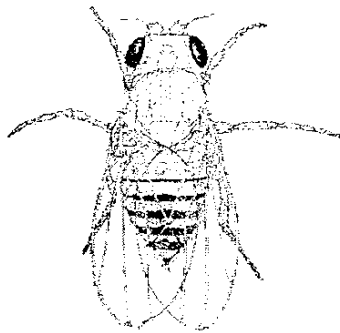
	Things	Group
(a)	robot	
(b)	elephant	
(c)	rose plant	
(d)	dried flower	

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44. The classification chart below shows how some animals, W, X, Y and Z, are classified.



Mrs Tan found an animal in her house (as shown below) and noticed that it had a hard body covering.



- (a) Which group, W, X, Y or Z, does this animal belong to? [1]

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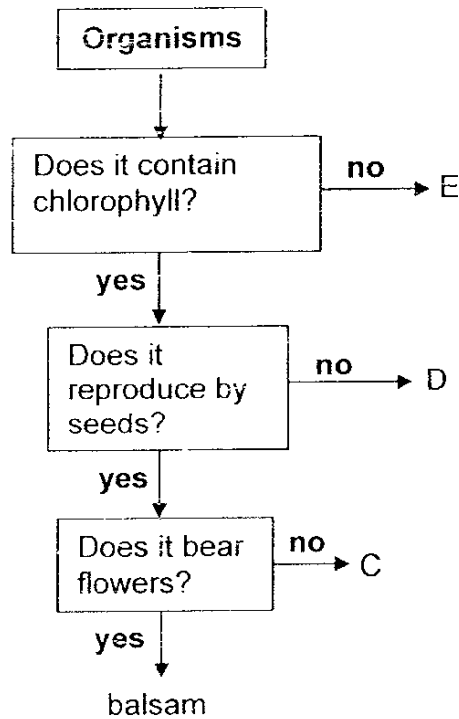
- (b) Is this animal an insect? Give a reason for your answer. [1]

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45. Some organisms are distinguished according to the chart below.



Based on the information above, answer the following questions:

- (a) Conifers are mainly evergreen trees which do not bear flowers. They reproduce by seeds produced in cones. Spruce tree is one such example.

Which letter, C, D or E, represents the spruce tree? [1]

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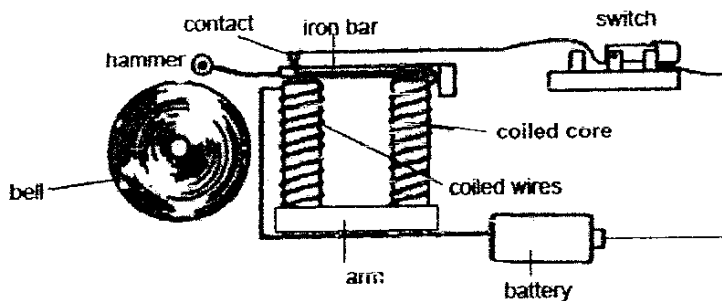
- (b) 'D' is green and is similar to mosses in the method of reproduction. Give a specific example of D. [1]

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46. The diagram below shows an electric bell that rings when the switch is closed.



- (a) Name one specific material to make the coiled cores. [1]

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- (b) Give a reason why the material in (a) is used to make the coiled cores. [1]

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- END OF PAPER -

Setters : Mrs Lily Ng  
Mrs Christina Lim  
Ms Pek Xueyan  
Mrs S M Seet



# RAFFLES GIRLS' PRIMARY SCHOOL

## 2007 Primary 5 SCIENCE SA 1

Setters : Mrs Lily Ng  
Mrs Christina Lim  
Ms Pek Xue Yan  
Mrs S M Seet

### ANSWER KEY

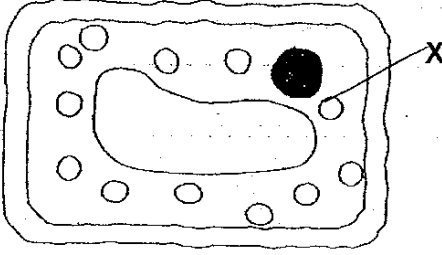
#### Section A (30 X 2 marks)

##### Multiple Choice questions

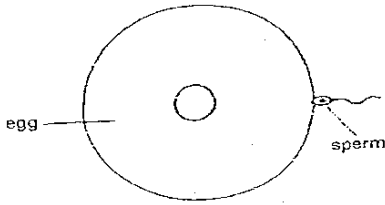
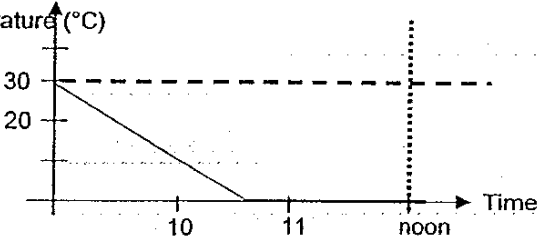
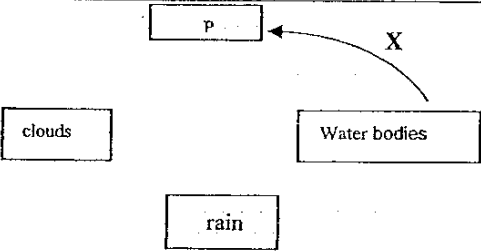
1. 4	6. 1	11. 3	16. 2	21. 4	26. 2
2. 4	7. 4	12. 1	17. 1	22. 3	27. 4
3. 2	8. 4	13. 3	18. 1	23. 2	28. 1
4. 3	9. 2	14. 2	19. 3	24. 3	29. 1
5. 2	10. 2	15. 4	20. 4	25. 2	30. 3

#### Section B (40 marks)

##### Open-ended questions

No.	Marks	Answers	Remarks
31.	(a)	2 Moon; Earth/Surface of the Earth	- ½ m for wrong spelling
	(b)	1 Z	
	(c)	1 ▪ 24 hours ▪ one day	
32.	(a) (i)	½ 	
	(a) (ii)	½ chloroplast(s)	0 m for wrong spelling
	(b)	2 No, the plant cell has chloroplasts (½ m) but cells from ginger does not have them as - it does not make food (½ m). - it is a storage stem - it does not have chlorophyll  Ginger is a storage stem/underground stem which does not have chloroplast/chlorophyll <b>*MUST state that:</b> - The plant cell has chloroplast (½ m) - Ginger is an underground stem which does not carry out photosynthesis/does not contain chloroplast/chlorophyll (½ m) - No, ginger is not green (1m)	<b>No marks for "No".</b> - It does not have chloroplasts (0 m) - No, ginger is not a plant (0m) - No, ginger does not have green leaves (0m)

No.	Marks	Answers	Remarks	
33.	(a)	1	3	
	(b)	1		- ½ m for line not touching A and B.
34.	(a)	2		No marks for arrows that show stigma to anther. Arrows must touch anther to stigma. No marks for two arrow heads from each line or no arrow heads at all. 1m each for: - self-pollination - cross-pollination
	(b)	1	ovule	- ½ m for ovules
	(c)	1	<ul style="list-style-type: none"> <li>▪ for reproduction</li> <li>▪ to ensure the survival (½ m) of the same kind (½ m)</li> <li>▪ helps plant to multiply/reproduce</li> </ul>	
35.	(a)	1	<ul style="list-style-type: none"> <li>▪ to grow a new plant</li> <li>▪ to reproduce</li> <li>▪ to multiply</li> </ul>	
	(b)	1	<ul style="list-style-type: none"> <li>▪ pineapple</li> <li>▪ heliconia plant</li> <li>▪ sealing wax plant</li> </ul>	Accept any other possible answer
	(c)	1	<ul style="list-style-type: none"> <li>- Both do not need male and female reproductive cells</li> <li>- Both reproduce asexually</li> <li>- Both reproduce by asexual reproduction</li> <li>- Both reproduce from plant parts.</li> <li>- Both grow from plant parts</li> <li>- Both reproduce by vegetative propagation</li> <li>- Both do not need pollination/fertilisation to take place</li> </ul>	
	(d)	1	D	
36.	(a)	1	<ul style="list-style-type: none"> <li>- Method X needs both a male and female parent but Method Y only needs 1 parent</li> <li>- Y takes a shorter time to multiply/reproduce than X.</li> <li>- Method X involves internal fertilisation but Method Y does not</li> <li>- Method X can reproduce sexually but Method Y can reproduce asexually/both sexually and asexually.</li> </ul>	- ½ m for wrong spelling
	(b)	1	<ul style="list-style-type: none"> <li>- Sexual reproduction</li> <li>- Reproduce sexually/involving both: male and female sex cells</li> </ul>	Award 1m to (b) only if (a) is correct.

No.	Marks	Answers	Remarks	
37.	(a)	1		<p>½ m each No marks for wrong spelling Do NOT accept 'eggs'/'sperms'</p>
	(b)	1	<p>The fertilised egg starts to</p> <ul style="list-style-type: none"> <li>• <u>cell divide</u> (1 m)</li> <li>• <u>an embryo is formed</u> (1m)</li> <li>• <u>to form more cells</u> (½ m)</li> <li>• <u>go through cell division</u> (½ m)</li> <li>• <u>split/develop to form more cells</u> (½ m)</li> <li>• <u>form more cells</u> ((½ m)</li> </ul>	-½ m for misspelt underlined words
38.	(a)	1	Air takes up space in the inverted plastic cup (½ m) and the air cannot escape. (½ m)	
	(b)	1	Pierce a hole (½ m) at the base/top/side of the inverted cup (½ m).	
39.	(a)	1	<p>To find out</p> <ul style="list-style-type: none"> <li>▪ if P, Q, R and S have different freezing points.</li> <li>▪ how long each liquid takes to freeze.</li> <li>▪ how long each liquid takes to turn into solid/ the solid state.</li> <li>▪ The freezing points of each of the liquids</li> </ul>	-½ m for no mention of P, Q, R, S
	(b)	1	Temperature of P, Q, R and S at the start of the experiment	<p><b>Do not accept:</b></p> <ul style="list-style-type: none"> <li>• Identical containers</li> <li>• Same material</li> <li>• same size</li> </ul>
	(c)	1	<p>Temperature (°C)</p>  <p>Time</p>	<p>-½m if horizontal line: - exceeds noon - does not start exactly at 10.30am</p>
40.	(a)	1		<p>-½ m for each incorrect answer/ arrow.  <b>Max. deduction -1 m</b></p>
	(b)	1	P: water vapour	-½ m for wrong spelling.

No.	Marks	Answers	Remarks	
41.	(a)	1	500 ml	0m for no/wrong units
	(b)	1	<ul style="list-style-type: none"> <li>▪ water sample collected at X is more harmful/polluted for the fish (½ m) than the water sample collected at Y (½ m)</li> <li>▪ water sample collected at Y has been treated so fish can survive better in Flask B than in Flask A which has polluted water/untreated water</li> </ul>	Comparison must be given ½ m if there is no comparison.
42.	(a)	1	<ul style="list-style-type: none"> <li>▪ Red snapper, [a fish], breathes through its gills (½ m)</li> <li>▪ but a dolphin, [a mammal], breathes through its lungs/blowhole (½ m).</li> </ul>	Red snapper is a fish but dolphin is a mammal (½ m)
	(b)	1	increased surface area.	
43.		2	(a) Q (b) P (c) S (d) R	½ m for each correct answer
44.	(a)	1	X	
	(b)	1	it is an insect (½ m) as it has <ul style="list-style-type: none"> <li>- 3 body parts (½ m); thorax, abdomen, head</li> <li>- 6 legs (½ m)</li> <li>- feelers (½ m)</li> <li>- hard covering (½ m)</li> </ul>	Must state what it is before stating its characteristics
45.	(a)	1	C	
	(b)	1	<ul style="list-style-type: none"> <li>▪ bird's nest fern</li> <li>▪ stag's horn fern</li> <li>▪ maidenhair fern</li> <li>▪ adder's tongue fern</li> <li>▪ royal fern</li> <li>▪ filmy fern</li> </ul>	1m for any kind of fern -½ m for wrong spelling. - Fern (½ m)
46.	(a)	1	any magnetic material (metal) e.g. nickel, steel, iron, cobalt, stainless steel	Metal (½ m) -½ m for wrong spelling.
	(b)	1	<ul style="list-style-type: none"> <li>• It can be made into a <u>temporary magnet/an electromagnet</u> (½ m) when an <u>electric current/electricity</u> flows through it (½ m).</li> <li>• It can be made into a <u>temporary magnet/an electromagnet</u> (½ m) and it is a <u>good conductor of electricity</u> (½ m).</li> </ul>	-½ m for wrong spelling of underlined words. Good conductor of heat (0m) 0m for (b) if (a) is wrong

- END OF PAPER -