



RAFFLES GIRLS' PRIMARY SCHOOL

P3 SCIENCE

SEMESTRAL ASSESSMENT (2)

Section A	48
Section B	32
Your score out of 80 marks	
Parent's signature	

Name: _____ Index No: _____ Class: P3 _____

27 October 2015

SCIENCE

ATT: 1 h 15 min

SECTION A (24 x 2 marks)

For each question from 1 to 24, four options are given.

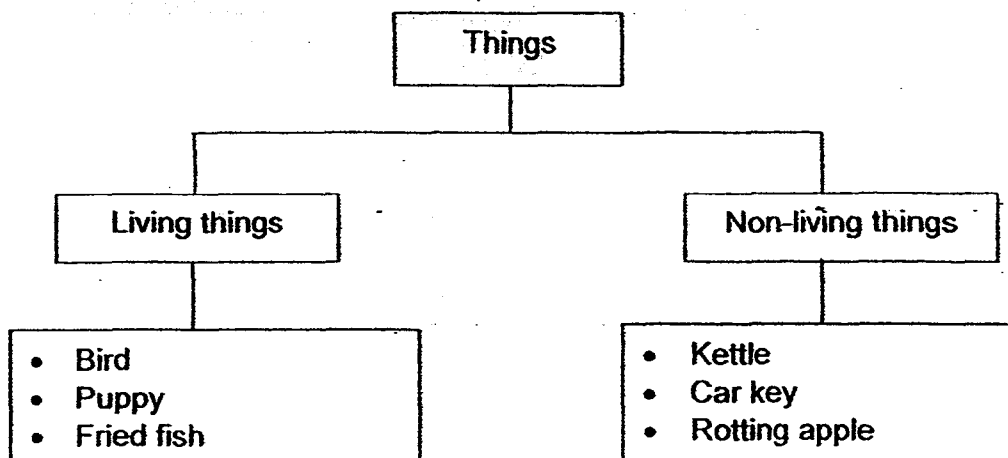
One of them is the correct answer. Make your choice (1, 2, 3 or 4).

Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. Which one of the following statement shows that living things grow?

- (1) Mrs Tan gave birth to a baby girl.
- (2) Peter drinks 8 glasses of water every day.
- (3) The new television is bigger than the old one.
- (4) Ariel needs a new blouse as the old one was too small for her.

2. Study the classification chart below.



Which object(s) is/ are classified wrongly?

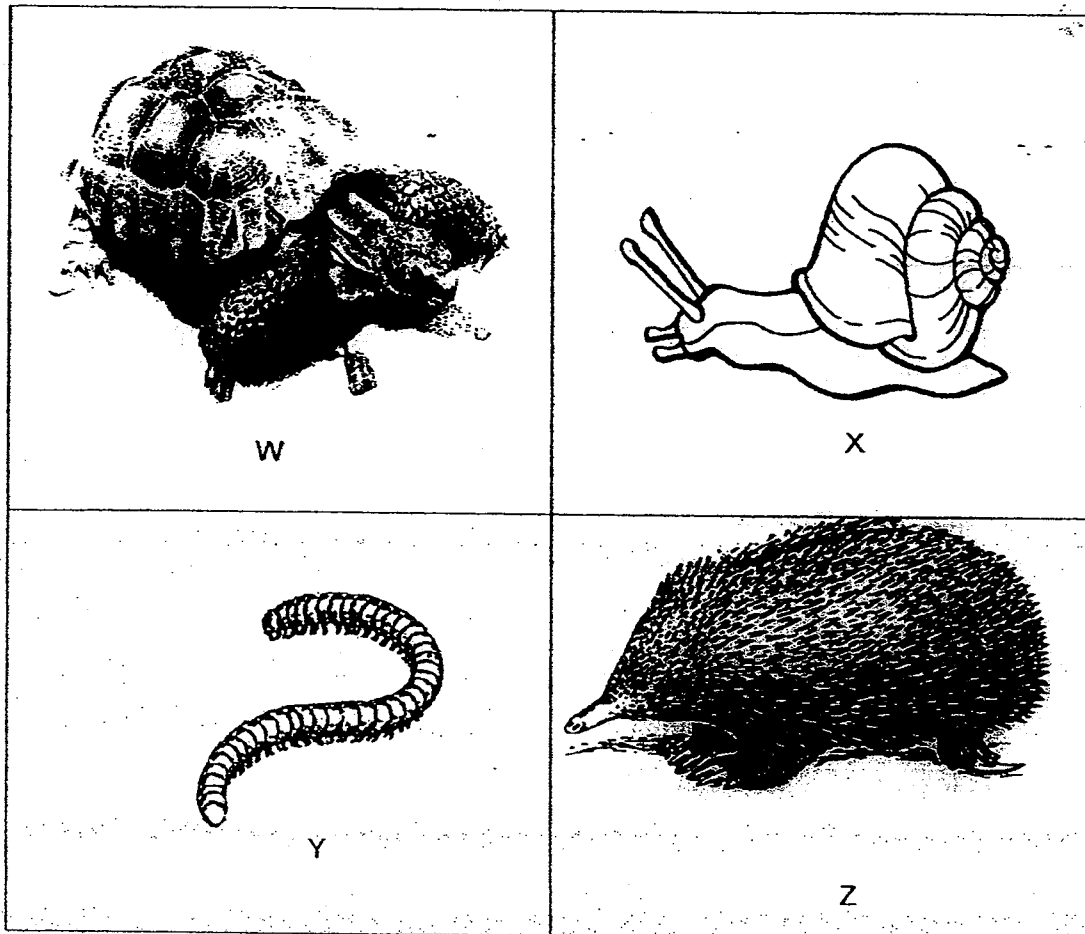
- (1) Kettle only
 - (2) Fried fish only
 - (3) Kettle and fried fish only
 - (4) Kettle, fried fish and rotting apple only
3. The table below shows the characteristics of organisms P and Q.
A tick (✓) shows the presence of the characteristic.

Characteristics	P	Q
Has scaly outer covering	✓	
Can live on both land and water	✓	
Female produces milk for young		✓

Which of the following best represent organism P and Q?

	P	Q
(1)	reptile	amphibian
(2)	reptile	mammal
(3)	amphibian	reptile
(4)	amphibian	mammal

4. The diagrams below show animals, W, X, Y and Z.



Which of the above animals is a reptile?

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

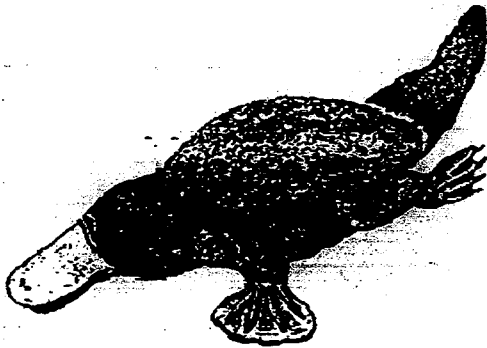
5. The table below shows the characteristics of animals, A, B, and C.
A tick (✓) shows the presence of the characteristic.

Characteristics	A	B	C
Does it have hair?	✓		
Does it have feathers?		✓	
Does it lay eggs?		✓	✓
Does it has 3 body parts?			✓

Which of the animals in the table below correctly represent animals A, B and C?

	A	B	C
(1)	reptile	insect	bird
(2)	Insect	mammal	fish
(3)	mammal	bird	insect
(4)	fish	reptile	bird

6. The diagram below shows some animals.



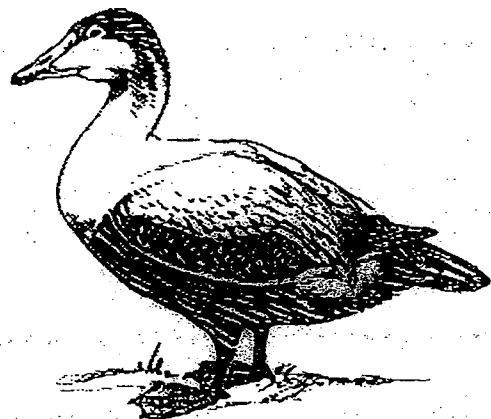
Platypus



Owl



Penguin



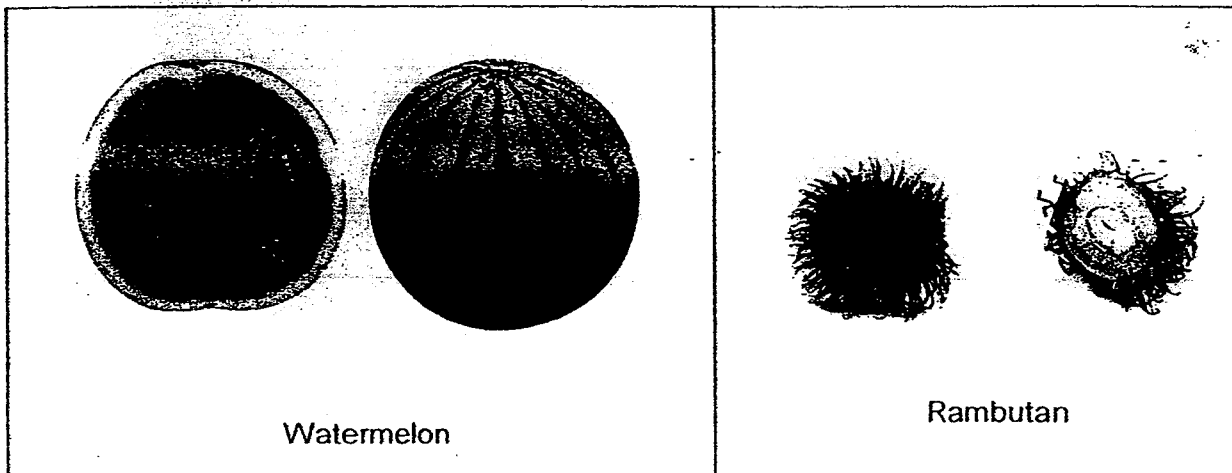
Duck

Based on your observation only, what is/are the common characteristic(s) of the animals above?

- A They have hair.
- B They have wings.
- C They have a tail.
- D They have feathers.

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

7. The diagram below shows 2 fruits.

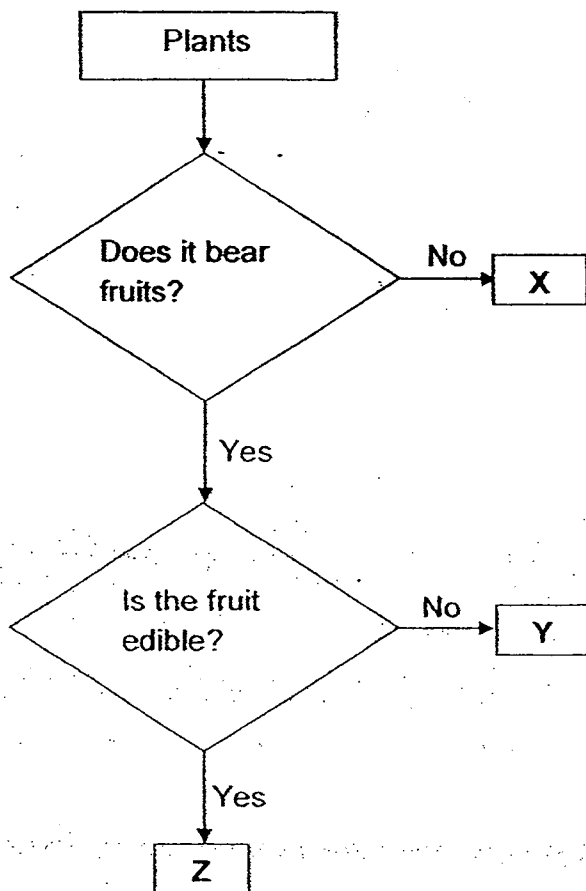


Which of the following statement(s) about the fruits above is/are true?

- A Both are round.
- B Both have a seed only.
- C Both have soft spiny outer covering.

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

8. Study the flow chart below.



Based on the flow chart above, which plant(s) is/ are flowering plant(s)?

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

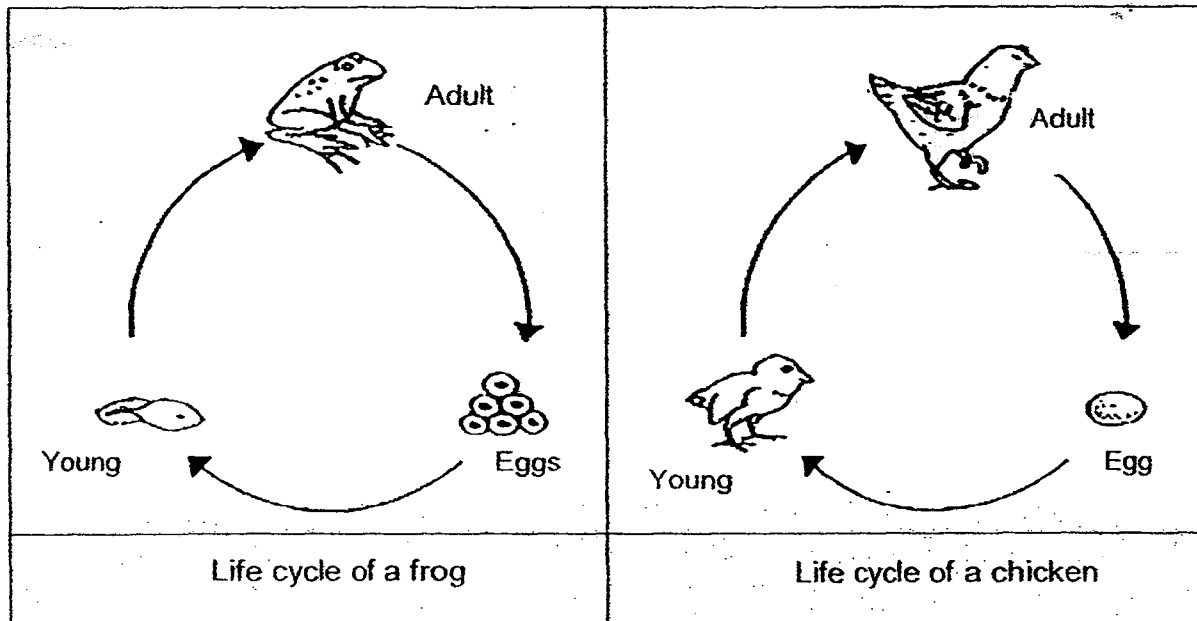
9. Jenny found a piece of mouldy bread.

Which of the following condition(s) is/ are necessary for the growth of bread mould?

- A warmth
- B moisture
- C light
- D air

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

10. The diagram below shows the life cycles of a frog and a chicken.

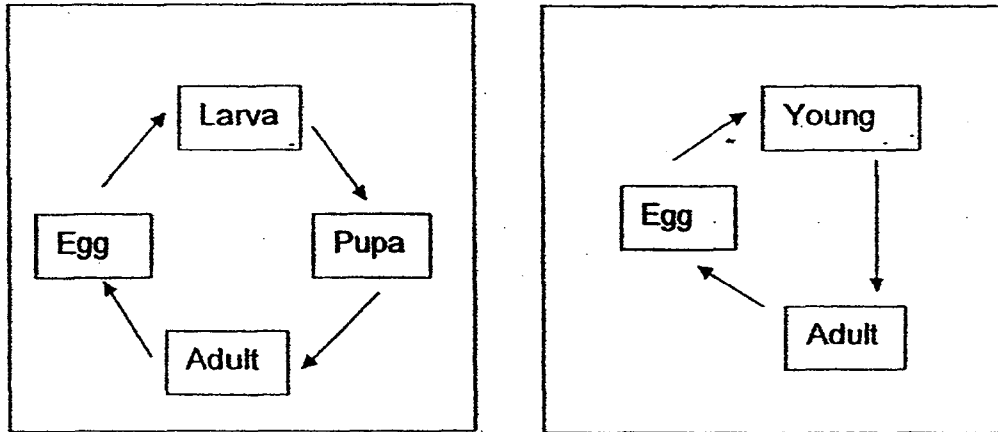


What are the similarities between the life cycles of a chicken and frog?

- A Both lay eggs on land.
- B Both young look like their adults.
- C Both life cycles have the egg stage.
- D Both have 3 stages in their life cycle.

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

11. Alex drew the life cycles of 2 animals, A and B, as shown in the diagram below.



Which one of the following identifies animals A and B correctly?

	A	B
(1)	butterfly	mosquito
(2)	cockroach	butterfly
(3)	mosquito	grasshopper
(4)	grasshopper	cockroach

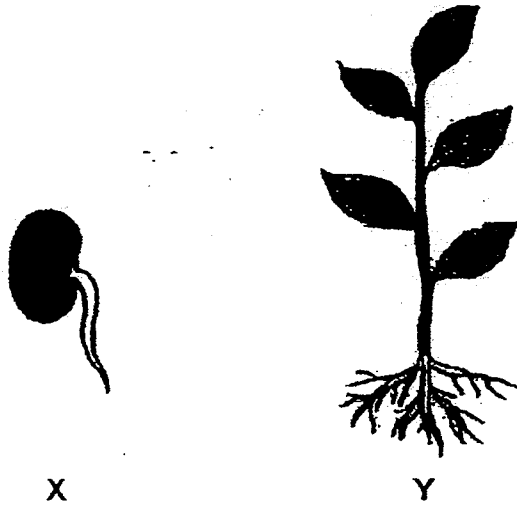
12. The table below shows characteristics of two animals, P and R.
A tick (✓) shows the presence of the characteristic.

Animals Characteristics	P	R
Lay eggs in water	✓	✓
Moult several times	✓	
Young looks like adult		

Based on the above information, which of the following best represent animals P and R?

	P	R
(1)	butterfly	mosquito
(2)	mosquito	frog
(3)	frog	cockroach
(4)	frog	mosquito

13. The diagrams below show two different stages, X and Y, of a plant.



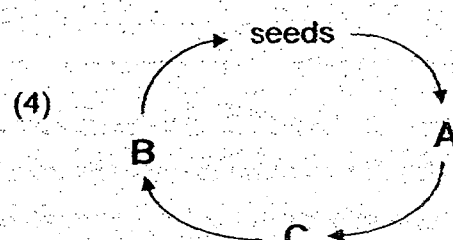
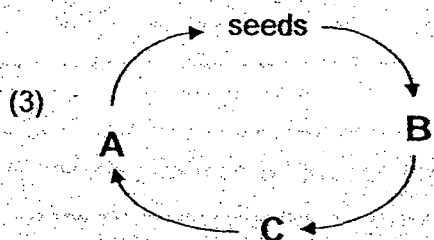
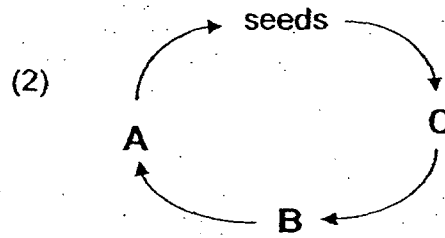
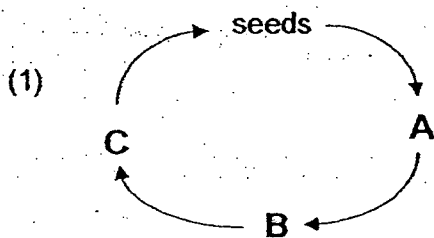
Based on the information above, which one of the following statements is correct?

- (1) Both stages X and Y have root.
- (2) Both stages X and Y have stem.
- (3) Both stages X and Y have leaves to make food.
- (4) Both stages X and Y only need water to survive.

14. Siti recorded her observations at the different stages of development of a flowering plant within a month as shown in the table below.

	Stage A	Stage B	Stage C
Leaves seen	Yes	Yes	Yes
Flowers seen	Yes	Yes	No
Fruits seen	Yes	No	No

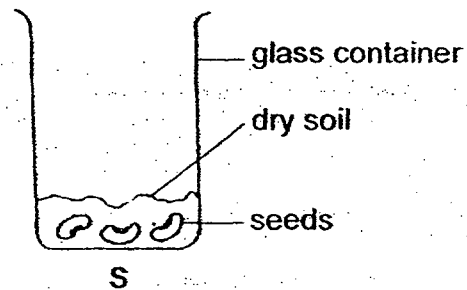
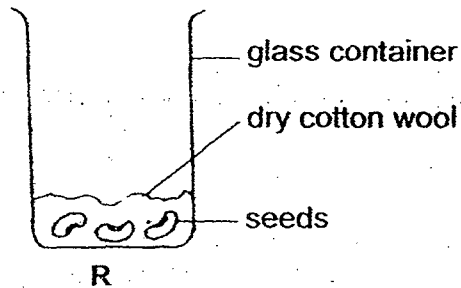
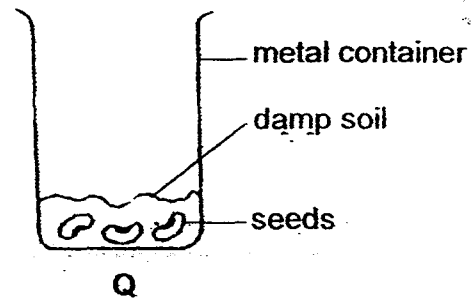
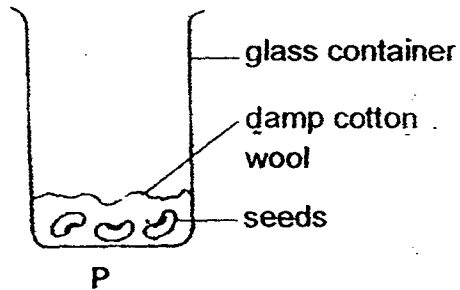
Based on the information above, which of the following has the correct arrangement of the stages of development of the flowering plant?



BLANK

PAGE

15. The diagrams below show four different set-ups, P, Q, R and S.



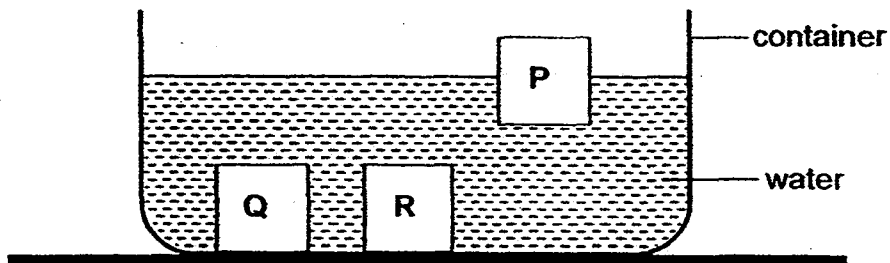
Song Meng wanted to find out whether seeds need water to germinate.

Which two set-ups should Song Meng use for his experiment?

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

16. Siew Li conducted a test on 3 cubes, P, Q and R, to find out a property of the material as shown in the diagram below.

Cubes P, Q and R are made of different materials but have similar shapes and sizes.

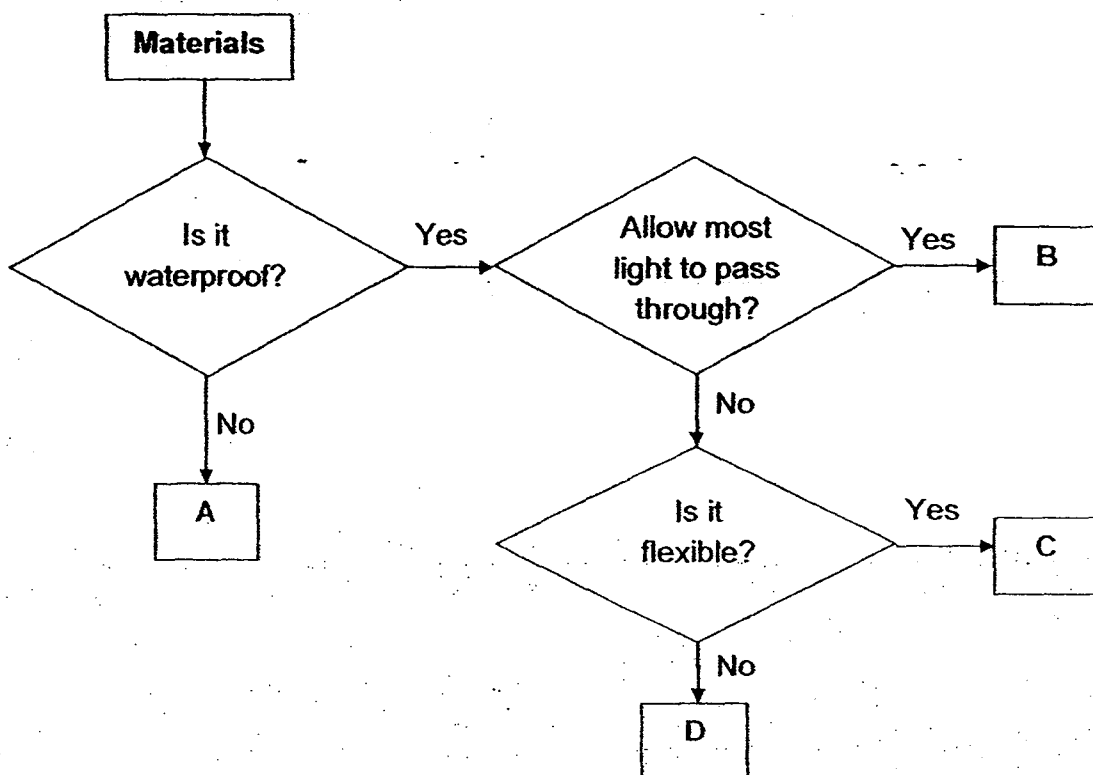


Which property of the material was Siew Li testing?

- (1) Strength
- (2) Flexibility
- (3) Degree of transparency
- (4) Ability to float or sink in water

four

17. The flow chart below shows the classification of three materials, A, B, and C, and D



The diagram below shows a pair of swimming goggles with two labelled parts, T and S.

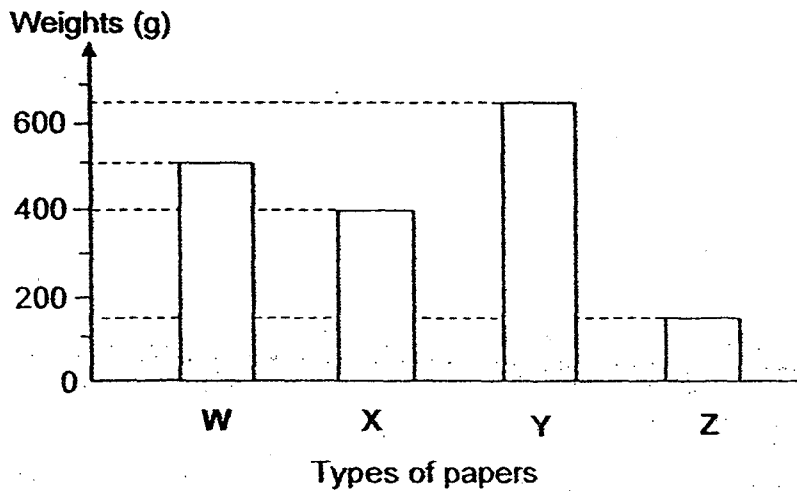


Based on the information provided above, which of the following materials are most suitable to use to make into part T and S of the goggles respectively?

	T	S
(1)	A	C
(2)	A	D
(3)	C	B
(4)	B	D

18. The graph below showed the amount of weights 4 types of papers, W, X, Y and Z, could hold respectively before it started to tear.

The papers were of similar size and thickness.



Mr Tan needed to make a paper bag that can hold a mass of at least 300g.

Which type of paper(s) should he use to make the paper bag?

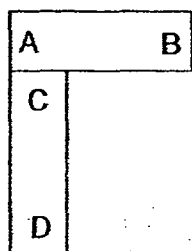
- (1) Y only
- (2) Z only
- (3) W and Y only
- (4) W, X and Y only

19. Jiemin set up three magnets, AB, CD and EF as shown in the arrangement below.

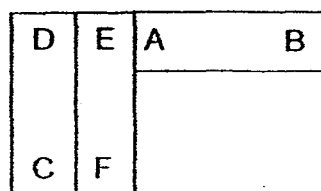


Which one of the following arrangement is possible?

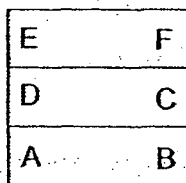
(1)



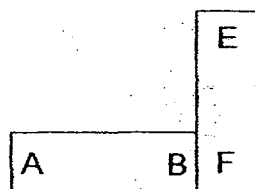
(2)



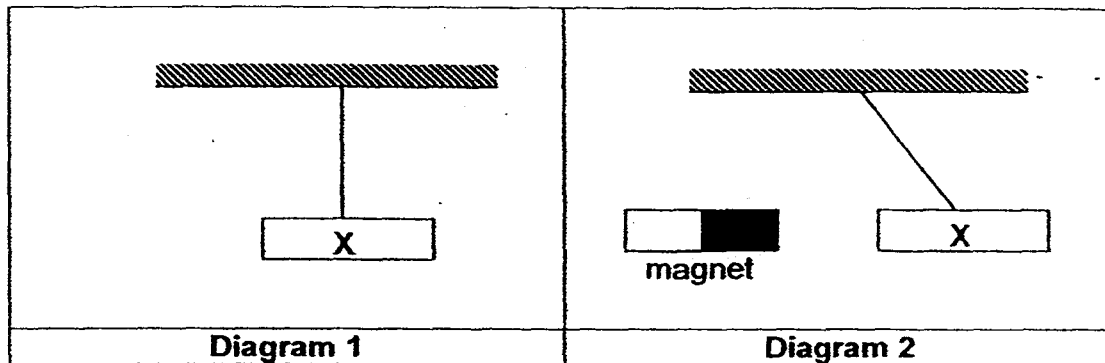
(3)



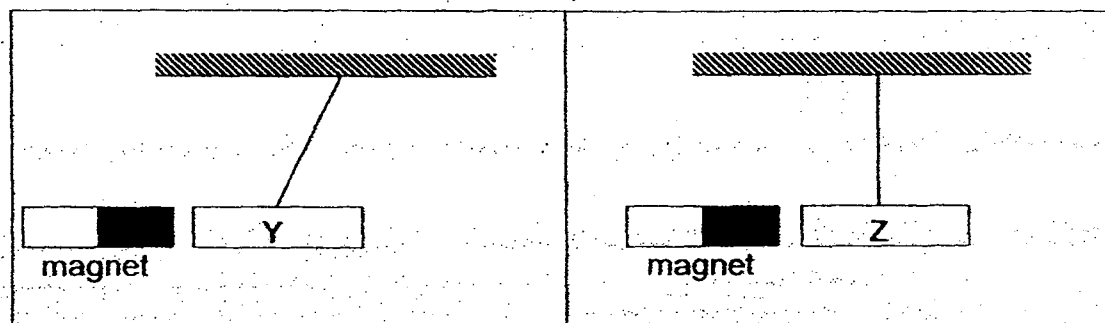
(4)



20. A bar X was hung from a string as shown in diagram 1. Fatimah moved a magnet near to the bar X and recorded her observation in diagram 2.



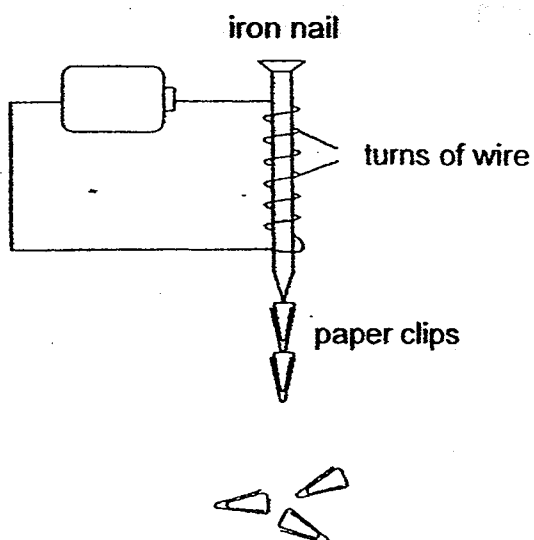
She repeated the same process on bar Y and Z, and recorded her observations in the diagrams below.



Based on the information provided above, which statement is definitely correct?

- (1) All bars are magnetic objects.
- (2) Both bars X and Y are magnets.
- (3) Only bar Z is a non-magnetic object.
- (4) Only bar X is a magnet and the rest are magnetic objects.

21. Study the set-up below.

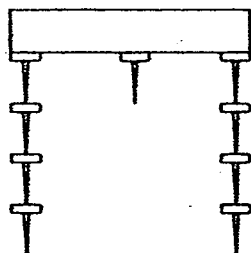


Which of the following changes made to the set-up will allow the magnetised nail attract more paper clips?

- A Increase the number of battery.
- B Replace the iron nail with a longer iron nail.
- C Increase the number of turns of wire around the iron nail.
- D Decrease the number of turns of wire around the iron nail.

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

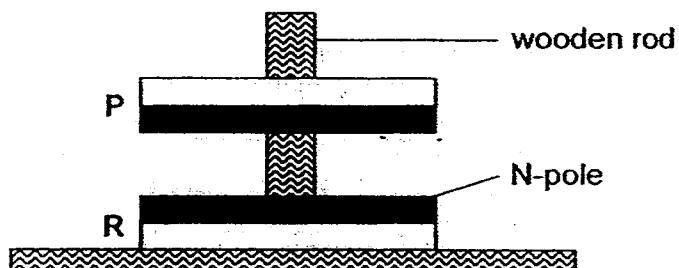
22. Roy placed similar iron nails one by one at different parts of the bar magnet. The diagram below showed his result.



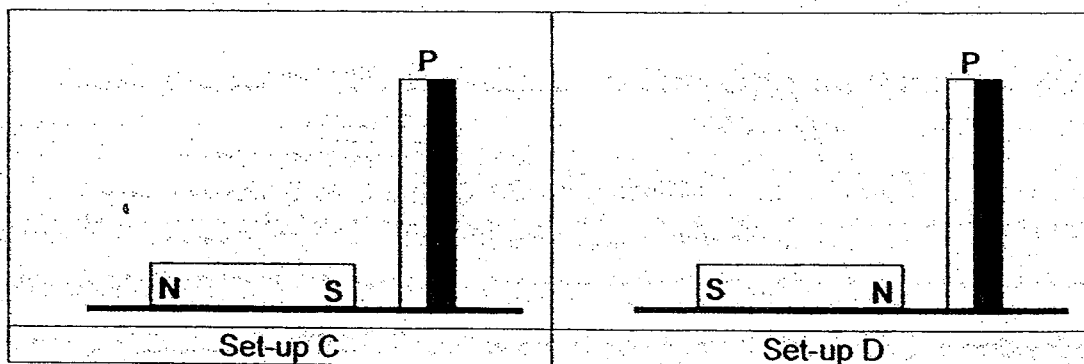
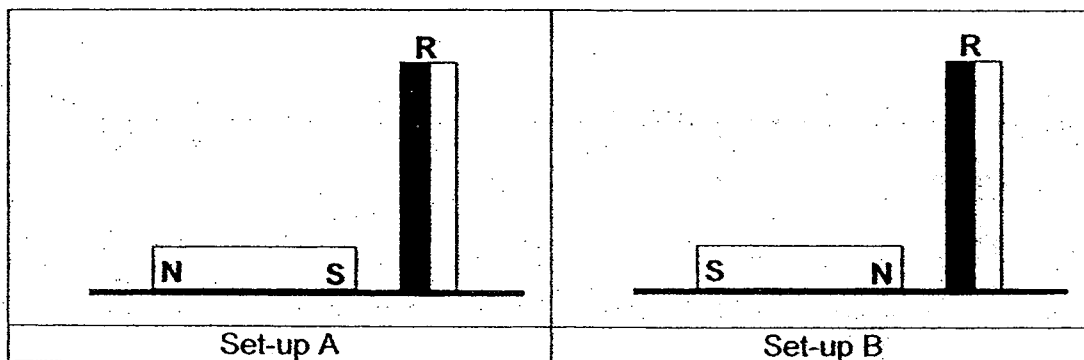
What conclusion could Roy make from the above observation?

- (1) The bar magnet is made of iron.
- (2) The bar magnet has two different poles.
- (3) The iron nails at the side are lighter than the iron nails in the middle.
- (4) The bar magnet has stronger magnetic strength at the two poles than its centre.

23. Siti placed ring magnet P and R through a wooden rod and made the observation as shown in the diagram below.



Based on the information provided above, which of the following set-ups will Siti observe the bar magnet being pushed away by the ring magnet?



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

24. Two different objects were placed in four containers, W, X, Y and Z as shown in the table below.

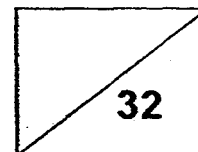
Container	Objects placed in the container
W	iron rods and steel balls
X	iron rods and silver coins
Y	steel balls and aluminium rods
Z	silver coins and aluminium rods

Which container(s) will the two objects be separated using a bar magnet?

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

Name: _____ ()

Class: P 3 ()

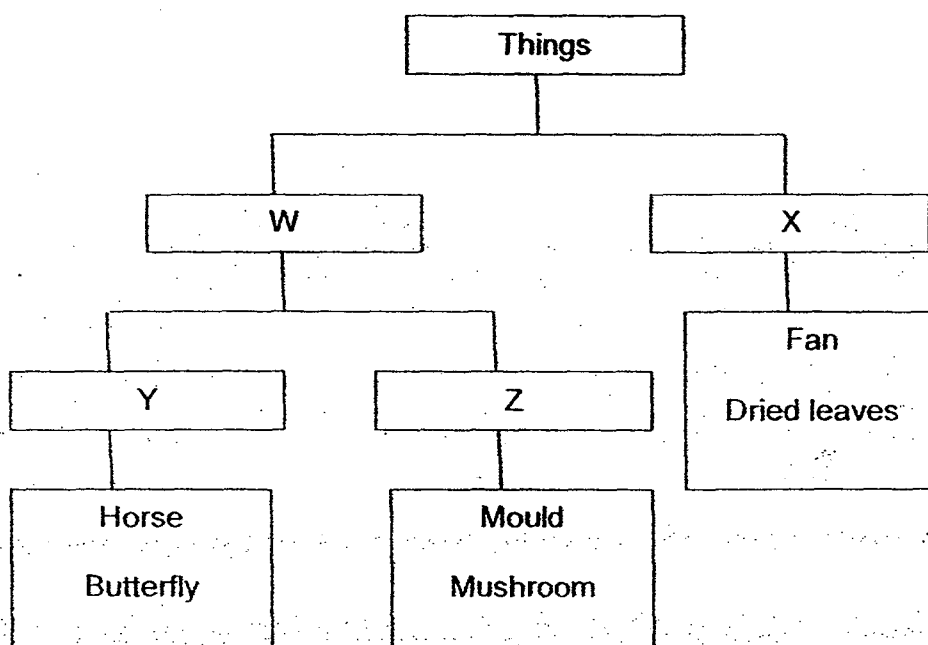


SECTION B (32 marks)

For questions 25 to 39, write your answers clearly in the spaces provided.

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

25. Karen classified some things as shown in the classification chart below.

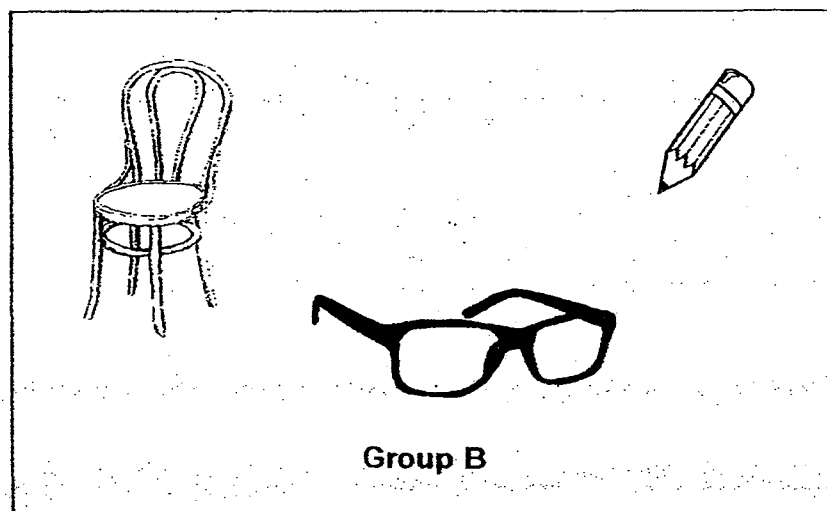
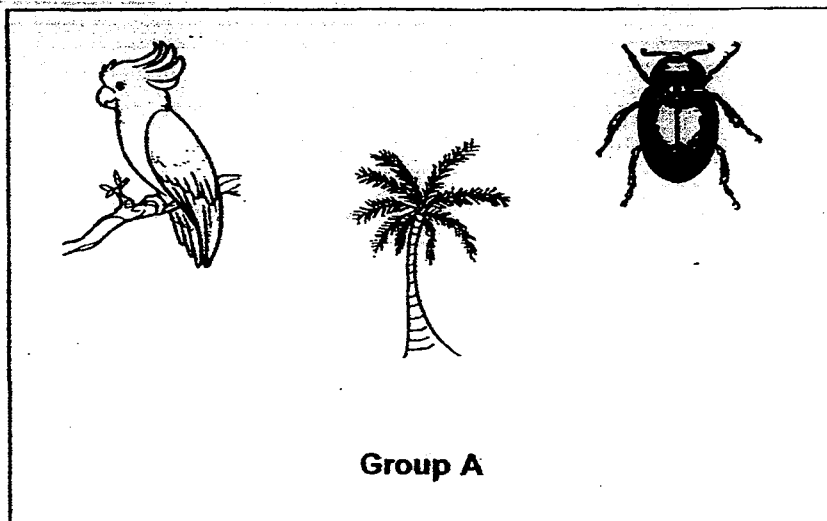


In the diagram above, write a suitable sub-heading each for W, X, Y and Z. [2]

W	
X	
Y	
Z	

Score	2
-------	---

26(a) Study the objects in group A and B as shown in the diagrams below.



- (a) Give suitable headings for group A and B to show how the objects are grouped. [1]

Group A: _____

Group B: _____

Continue on the next page

Score	1
-------	---

Continue from previous page

- 26(b) Sharon wanted to keep a parrot as a pet.
Suggest how she should take care of it to ensure its survival and growth [1]

- 27 Peter found two animals, X and Y, in the garden.
The table below shows what he had observed.

Animals	X	Y
Characteristics		
Body coverings	Moist skin	Feathers
Number of legs	4	2
Number of wings	0	2

Based on the information above, answer the following questions:

- (a) Name the animal group for X and Y. [1]

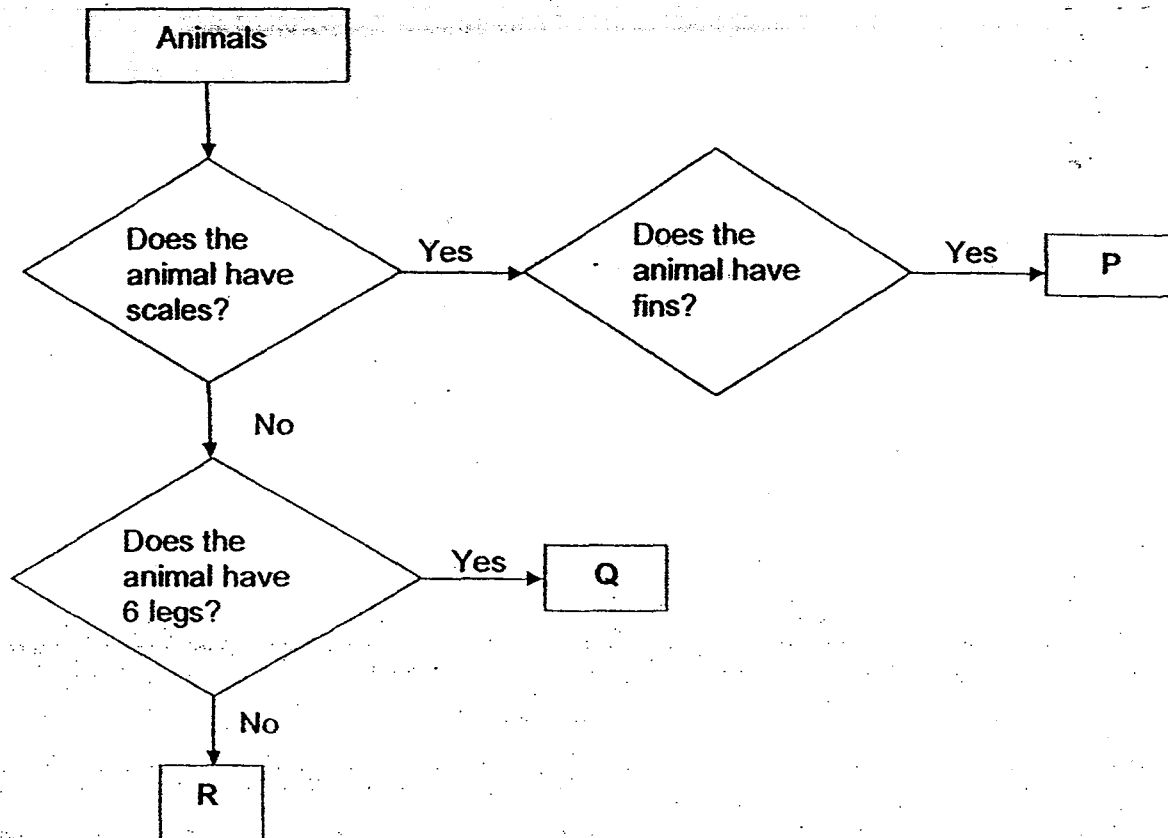
Animal X: _____

Animal Y: _____

- (b) Name a possible animal for X. [1]

Score	3
-------	---

Study the flow chart below carefully.



- (a) Based on the information provided above, write down 2 characteristics of animal Q. [1]

Characteristic 1	_____
Characteristic 2	_____

- (b) Based on the information above, state a difference between animals P and R. [1]

Score	2
-------	---

29. (a) State one similarity between a fern and fungus.

[1]

(b) State one difference between a fern and fungus.

[1]

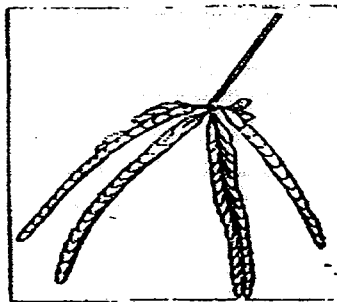
Score	2
-------	---

30.

The diagram below shows a section of a mimosa plant before and after being touched.



Before being touched



After being touched

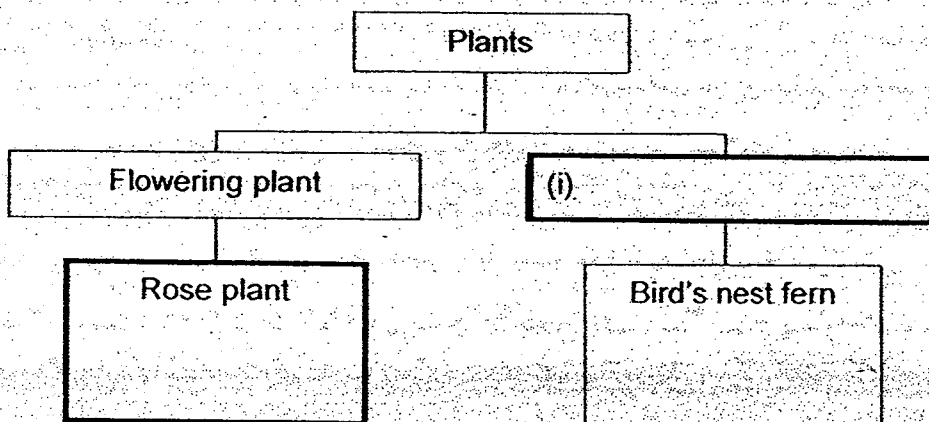
- (a) Name the characteristic of living thing shown by the above observation. [1]

The diagram below shows a plant X.



plant X

- (b) Observe plant X carefully and complete the table below by: [2]
 (i) Provide a suitable sub-heading;
 (ii) Put plant X in the correct box.



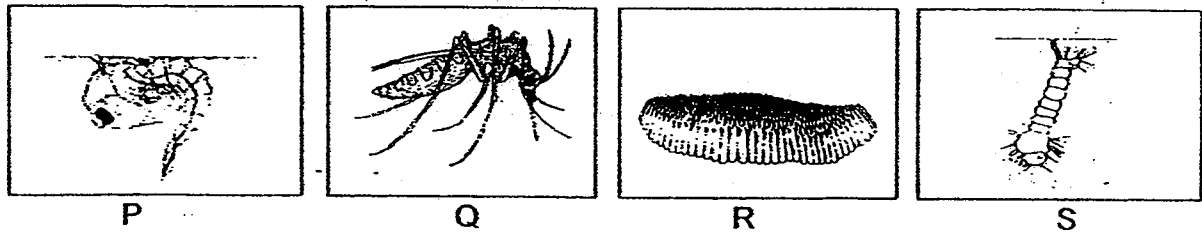
Score	3
-------	---

31. For each of the statement below, fill in the blanks with the letter "T" for "True" and the letter "F" for False. [2]

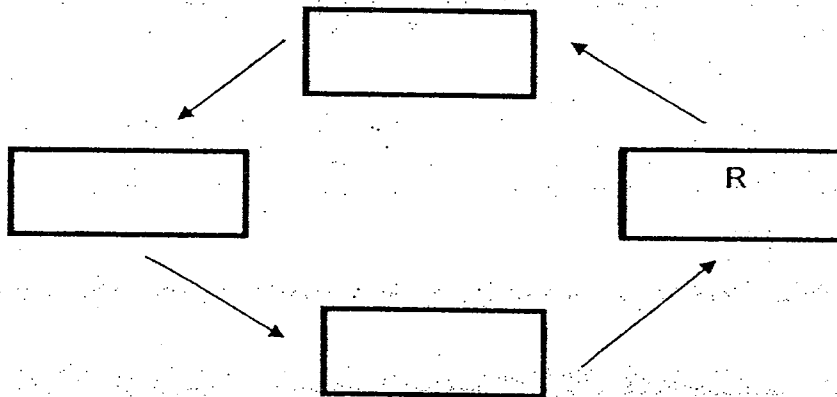
	Statements	"T" or "F"
(a)	All insects have 3-stage life cycle.	
(b)	Mealworms stop feeding at pupa stage.	
(c)	Both cockroach and grasshopper have young that look like their adults.	
(d)	The life cycle of an animal begins with an egg.	

Score	2
-------	---

32. Study the diagram below carefully.
P, Q, R and S show the different stages in the life cycle of a mosquito.



- (a) Fill in the letters, P, Q, R and S, into the correct boxes to show the correct stages of the life cycle of a mosquito. [1]



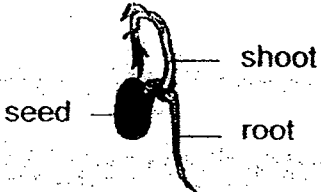


- (b) Name another animal that has a four-stage life cycle. [1]

Score	2
-------	---

33. Peiling placed a seed on a piece of wet cotton wool. After a day, she observed that the seed started to germinate.

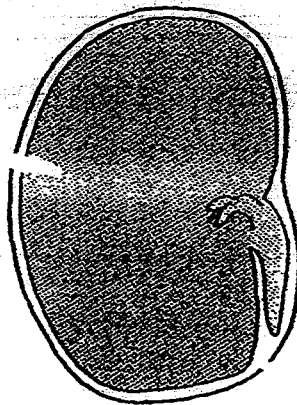
(a) Based on the information above, which picture(s) would Peiling likely to observe after a day? Put a tick in the box(es) for your answer. [1]

	Tick (✓)
	
	
	

(b) Besides air and water, name one other condition needed for the seed to germinate. [1]

Score	2
-------	---

34. The diagram below shows a germinating seed.



(a) Name and label the part that provides food for the germinating seed in the diagram above. [1]

Mr Lim put 10 seeds X into different types of soil, P, Q and R. He provided the seeds with the same conditions.

After 7 days, he recorded the number of seedlings observed and the tallest height of the seedlings as shown in the table below.

Types of soil	P	Q	R
Number of seedlings observed	3	8	8
Tallest height of seedlings (cm)	4	10	6

(b) Based on the information provided above, which type of soil is best suited to grow seed X? Give a reason for your answer. [1]

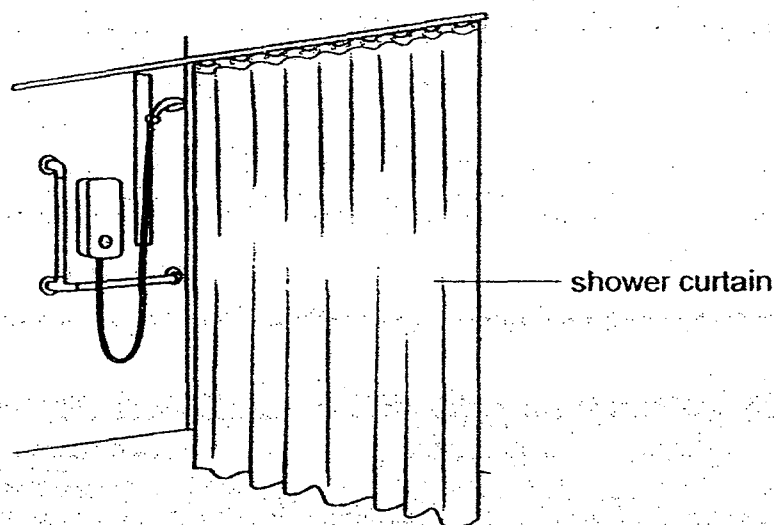
Score	2
-------	---

35. Fatimah shone a torch on four different types of materials to test their degree of transparency.

(a) Put a tick (✓) against the condition(s) below that has to be kept the same to ensure her test is fair. [1]

Condition	Tick (✓)
The torch used	
The type of material used	
The thickness of the material used	
The distance between the torch and the material	

The picture below shows a shower curtain.



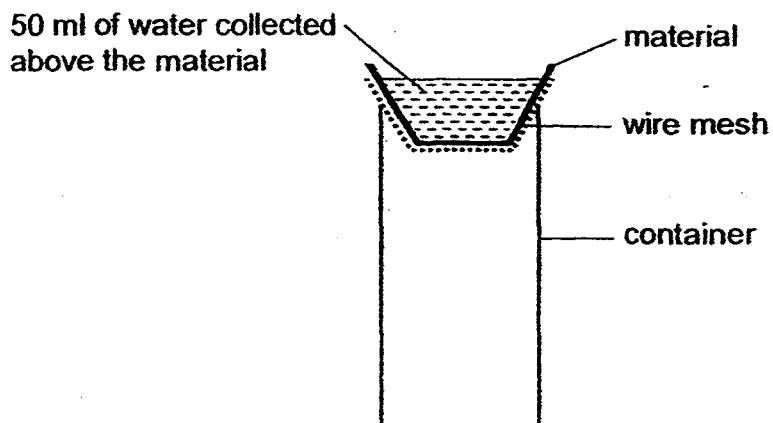
Fatimah decided to use one of the materials tested in part (a) to make into the shower curtain.

(b) Name ONE OTHER property of material that is taken into consideration when it is used to make the shower curtain. [1]

Score	2.
-------	----

36. Ali had 3 different pieces of materials, X, Y and Z, of similar size and thickness.

He set up his experiment using the apparatus as shown in the diagram below and poured 50 ml of water on each material. He recorded the amount of water collected in the container as well as above the material.



After 5 minutes, he recorded his readings in the table below.

Material	Amount of water collected in the container (ml)	Amount of water collected above the material (ml)
X	50	0
Y	5	0
Z	0	50

Based on the information above, answer the following questions:

- (a) Which material, X, Y or Z, is most suitable to be made into a bath towel?

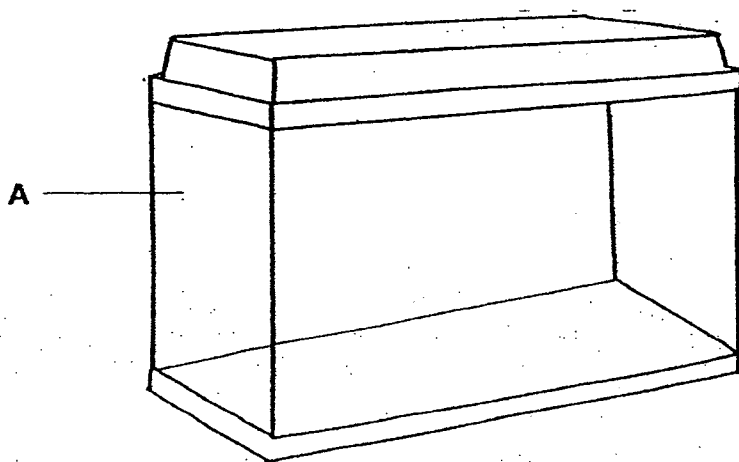
Give a reason for your answer.

[1]

Score	1
-------	---

Continue from the previous page

The diagram below show part A of a fish tank that is made from one of the materials, X, Y or Z.



- (b) Based on the information in the result table, which material, X, Y or Z, was most likely used to make part A? Give a reason for your answer. [1]

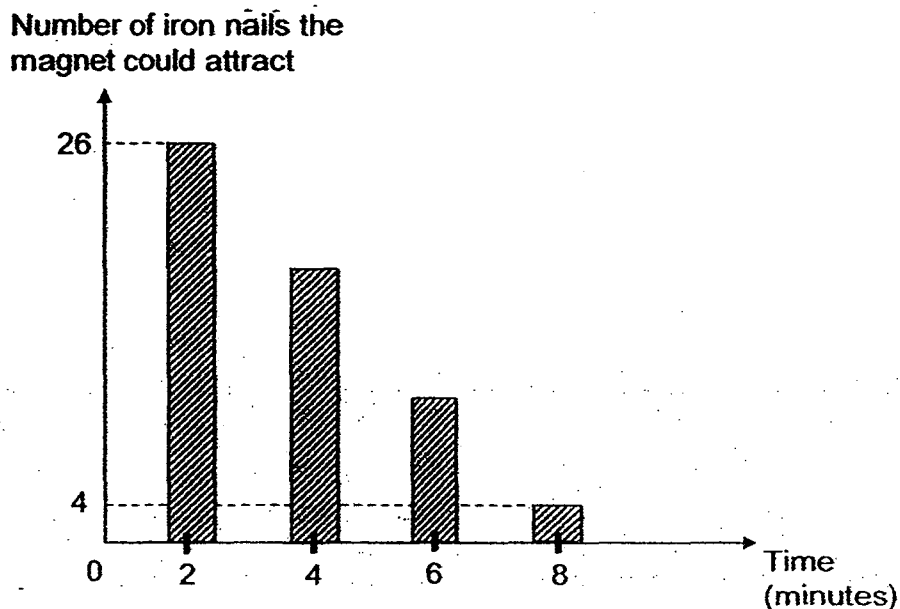
- (c) Name a material that has the property mentioned in your answer in (b) which is suitable to make part A of the fish tank. [1]

Score	2
-------	---

37. Sarah tested a magnet and found that it could attract 30 iron nails. She then placed the magnet over a candle flame for 2 minutes and recorded the number of iron nails it could attract.

She continued the same process but each time she placed the magnet over the candle for 2 more minutes.

The bar graph below shows her results.



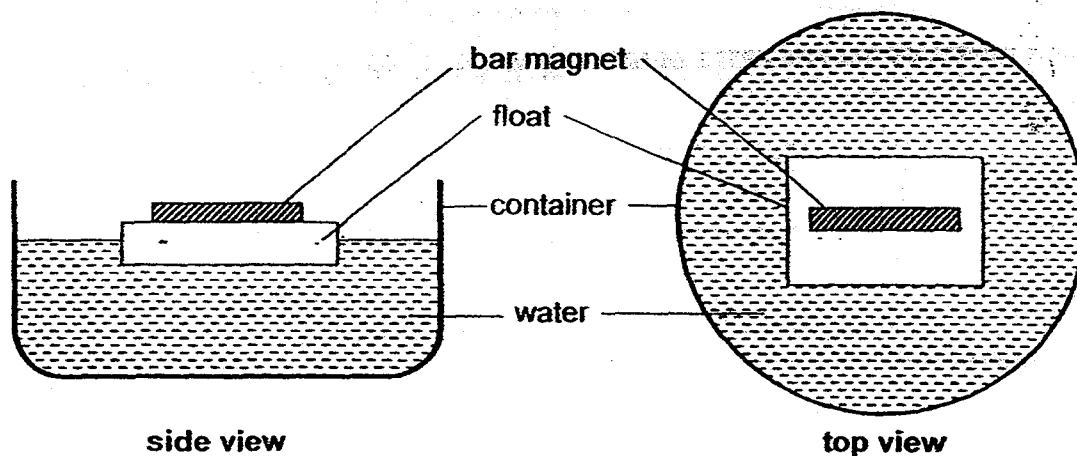
Based on the information above, answer the following questions:

- (a) What was the relationship between the amount of time the magnet was placed over the candle flame and the number of nails it could attract? [1]

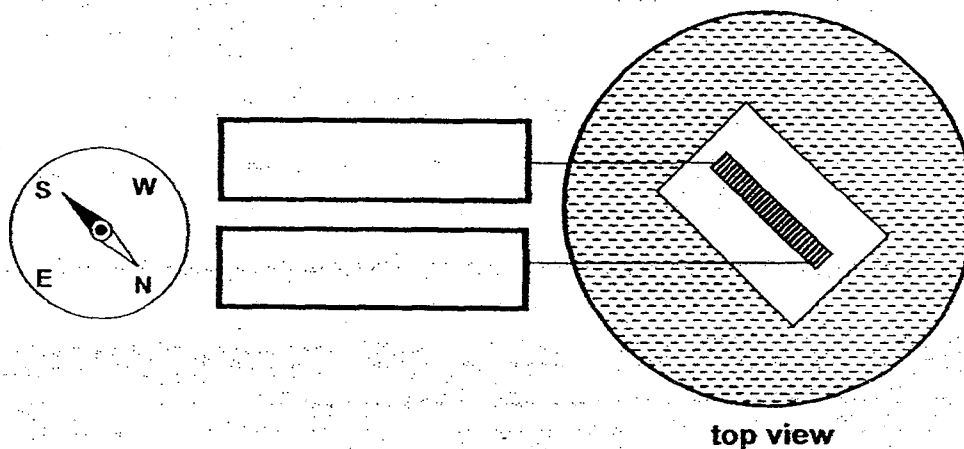
- (b) Predict the number iron nails the magnet could attract after it was placed over the candle flame for over 10 minutes. [1]

Score	2
-------	---

38. Ben tied a piece of bar magnet on a float and placed it on a container of water. The diagrams below showed the side and top view of the set-up.



The bar magnet came to a rest after a few minutes and Ben took a compass and checked the direction as shown in the diagrams below.



(a) Identify the pole of the bar magnet above.

Write "N-pole" and "S-pole" in the boxes provided.

[1]

Continue on next page

Continued from previous page

Ben next took another piece of bar magnet as shown in the diagram below.



He broke the bar magnet into 3 smaller pieces as shown in the diagram below.

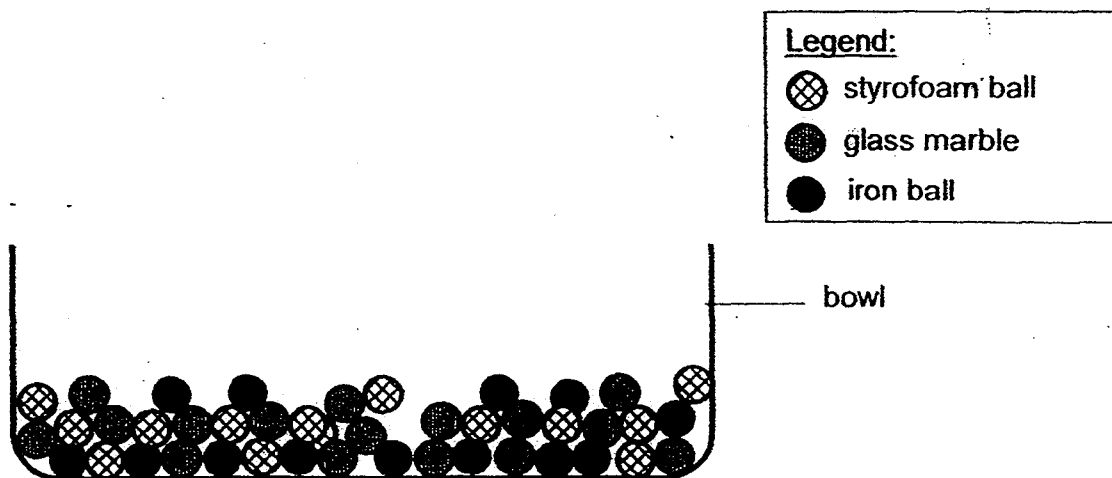


(b) Describe what would Ben observe when he placed pole X near to pole Y?

[1]

Score	1
-------	---

39. Aishah was given a bowl that contained a mixture of iron balls, glass marbles and styrofoam balls as shown in the diagram below.



Below were the steps Aishah took to separate the mixture in the bowl.

Arrange the steps in a logical order by writing the **numbers 1, 3 and 4** in the table below.

Step 2 has been filled in for you.

[2]

Description of the steps	Order
Pour some water into the bowl and stir the mixture of balls with a wooden rod.	
Pour away the water to leave the bowl with only the glass marbles.	
Use a piece of bar magnet to attract the iron balls from the bowl.	
Scoop out the styrofoam balls that are floating on the water.	2

-END OF PAPER-

Score	2
-------	---

EXAM PAPER 2015**LEVEL : PRIMARY 3****SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL****SUBJECT : SCIENCE****TERM : SA2**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
4	2	2	1	3	3	1	2	4	3
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
3	4	1	2	1	4	3	4	3	3
Q21	Q22	Q23	Q24						
1	4	3	3						

Q25. W – Living things

Q25. X – Non – living things

Q25. Y – Animals

Q25. Z – fungi

Q26a. Group A: Living things

Q26a. Group B : Non – living things

Q26b. She has to give it air, food and water to survive.

Q27a. Animal X: amphibian Animal Y: bird

Q27b. Frog

Q28a. Characteristic 1 – It does not have scales.

Q28a. Characteristic 2 – It has six legs.

Q28b. P has scales but R does not.

Q29a. Both reproduces by spores.

Q29b. Fungus does not need sunlight to grow, but fern does.

Q30a. Living things responds to changes around them.

Q30b. (i) Non – flowering plant

Q30b (ii) Plant X – Rose plant

Q31a. FALSE

Q31b. TRUE

Q31c. TRUE

Q31d. FALSE

Q32a. SEE PICTURE

Q32b. Butterfly

Q33a. SEE PICTURE

Q33b. Presence of warmth

Q34a. SEE PICTURE

Q34b. Q. Q makes the seedlings grow the tallest.

Q35a. The torch used / The thickness of material used / The distance between the torch and the material

Q35b. It must be waterproof

Q36a. Material Y. Material Y was able to absorb water.

Q36b. Z. It is waterproof. - Q36c. Glass

Q37a. The longer the magnet was placed over the candle flame, the lesser number of nails it could attract. Q37b. One

Q38a. **SEE PICTURE** Q38b. Both poles will move away from each other .

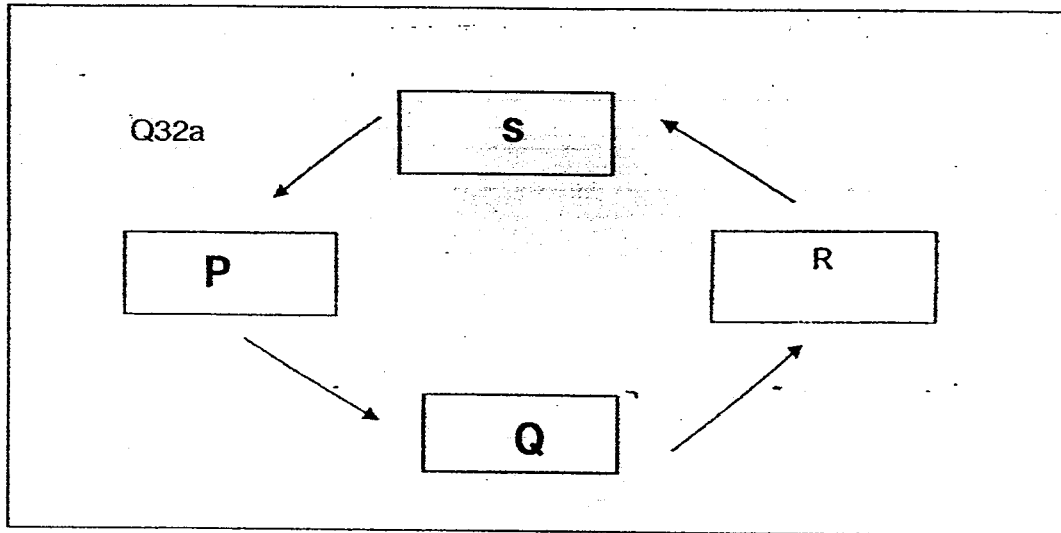
Q39. 1 – Pour some water into the bowl and stir the mixture of balls with a wooden rod.

Q39. 2 – Scoop out the Styrofoam balls that are floating on the water.

Q39. 3 – Use a piece of bar magnet to attract the iron balls from the bowl.

Q39. 4- Pour away the water to leave the bowl with only the glass marbles.

THE END



Q33a.	Tick (✓)
<p>seed — shoot</p>	
<p>seed — root</p>	✓
<p>seed — shoot — root</p>	

