



HENRY PARK PRIMARY SCHOOL
SECOND SEMESTRAL ASSESSMENT 2018
PRIMARY 3
SCIENCE
BOOKLET A (40 MARKS)

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers on the Optical Answer Sheet (OAS) provided.

Name: _____ ()

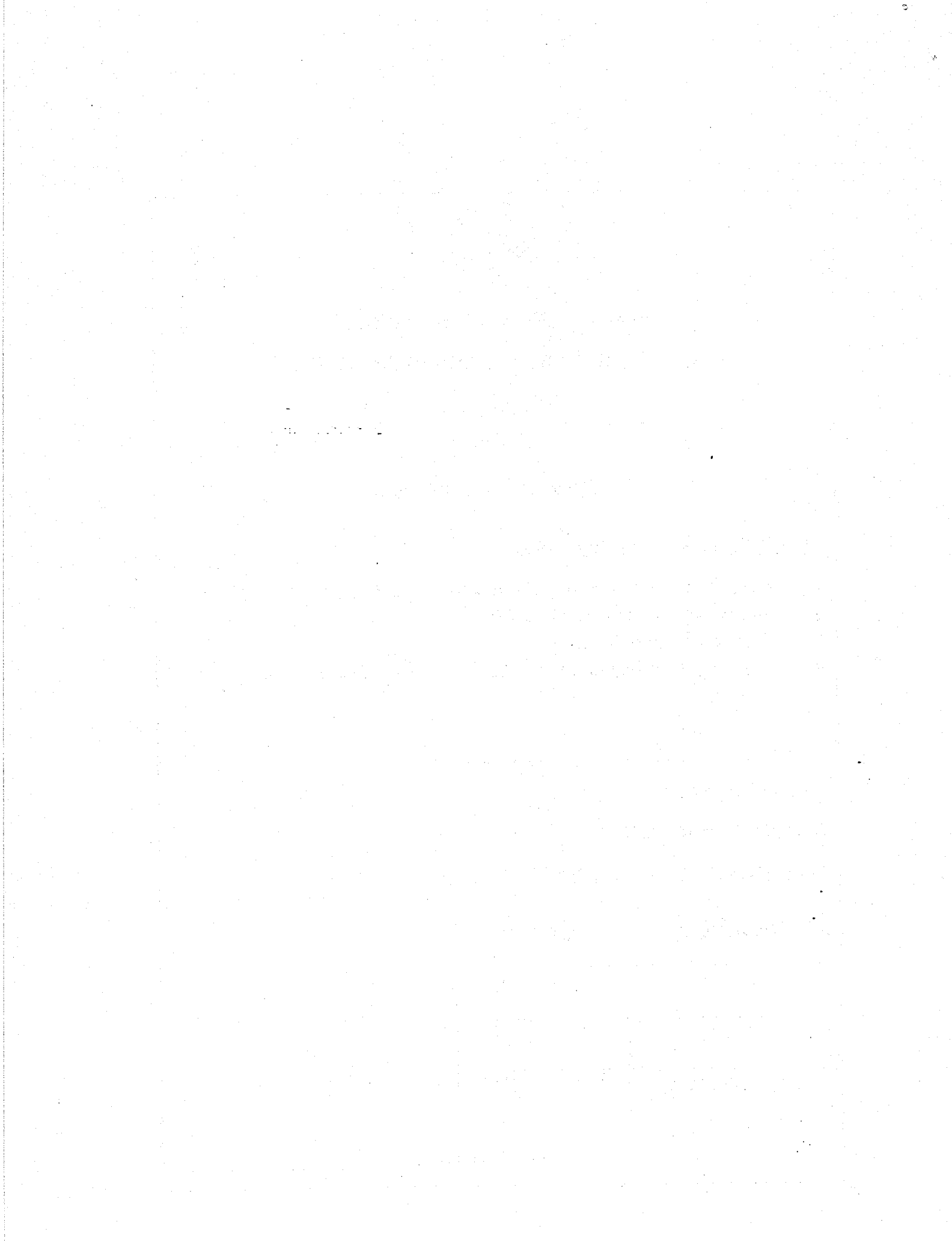
Class: Primary 3 ()

Date: 26 October 2018

Total Time for Booklets A, B & C : 1 h 30 min

Booklet	Marks
A	/ 40
B + C	/ 40
Total (A+B+C)	/ 80

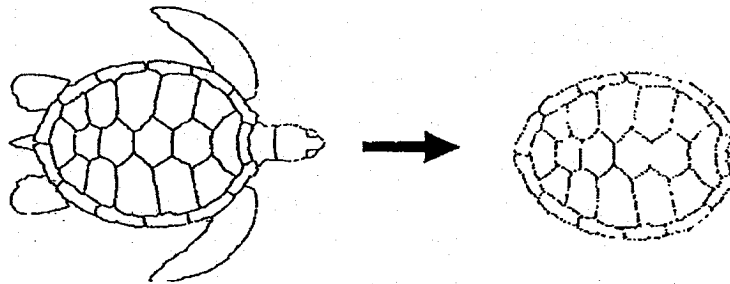
Parent's Signature: _____



Section A: (20 x 2 marks = 40 marks)

For each question from 1 to 20, 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.

1. When John touched a turtle, it felt threatened and retreated into its shell, as shown in the diagram below.



Which one of the following characteristics of living things does the turtle show?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things respond to changes.
- (4) Living things need air, food and water.

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2. Look at the classification table below.





Group 1	Group 2
shorts	knife
skirt	shirt
towel	fork
pants	scissors

Which one of the following is classified wrongly?

- (1) fork
- (2) shirt
- (3) knife
- (4) scissors

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3. Study the classification table shown below.

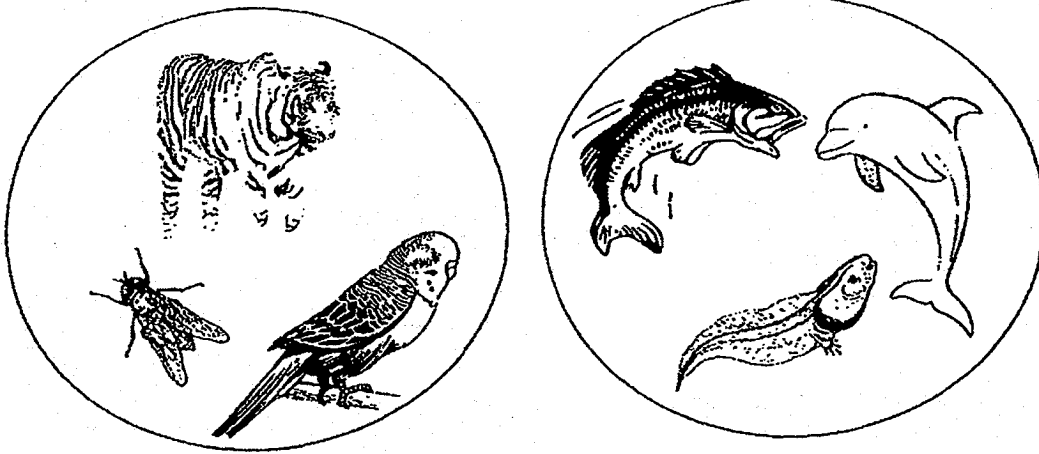
Group X	Group Y
 <p data-bbox="515 721 654 752">rose plant</p>	 <p data-bbox="898 721 1045 752">bird's nest</p>
 <p data-bbox="526 1160 646 1191">hibiscus</p>	 <p data-bbox="885 1160 1061 1191">rabbit's foot</p>

How have the plants been classified?

	Group X	Group Y
(1)	land plants	water plants
(2)	flowering	non-flowering
(3)	strong stem	weak stem
(4)	reproduce by spores	reproduce by seeds

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4. Look at the two groups of animals.



Which one of the following characteristics is used to group the animals?

- (1) size of body
- (2) types of food
- (3) body covering
- (4) where they live

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5. Three students made the following statements on fungi.

- Xin Yan : Yeast is a type of fungi.
- Yasman : Fungi reproduce from spores.
- Zachary : Fungi make their own food.

Which of the following statements about fungi are correct?

- (1) Zachary and Yasman only
- (2) Xin Yan and Yasman only
- (3) Xin Yan and Zachary only
- (4) Yasman, Xin Yan and Zachary only

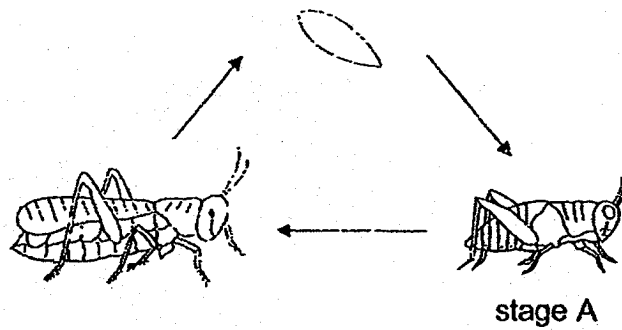
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6. Which of the following organisms can only be seen through a microscope?

- (1) Bacteria and yeast
- (2) Moss and yeast
- (3) Mould and ferns
- (4) Mushroom and bacteria

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7. The diagram below shows the life cycle of animal X.

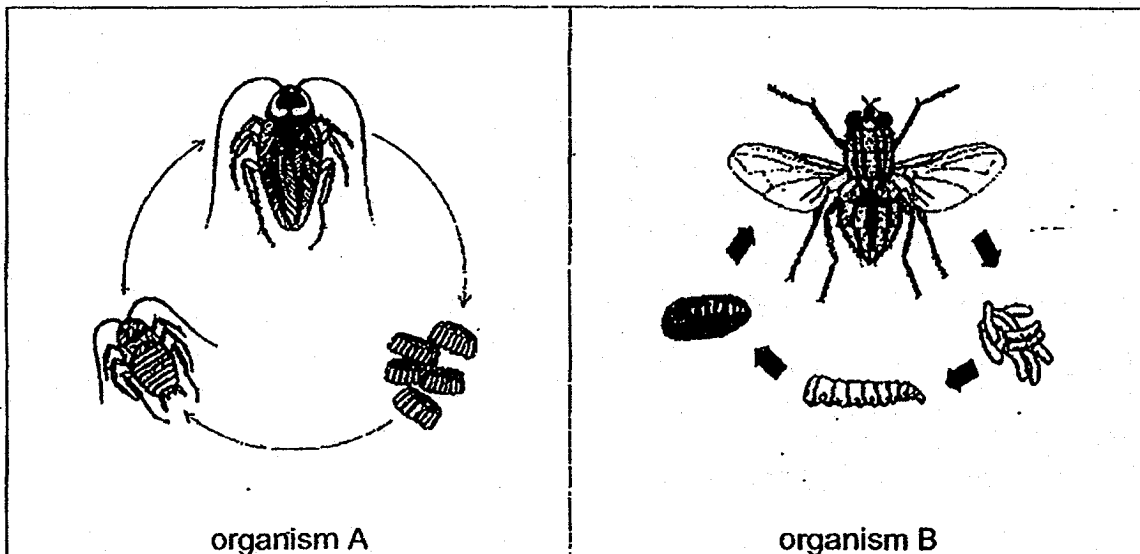


Which one of the following correctly describes animal X at stage A?

- (1) Animal X does not eat at all.
- (2) Animal X does not have wings.
- (3) Animal X does not move around.
- (4) Animal X does not respond to changes.

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8. The diagram below shows the life cycle of organism A and organism B.

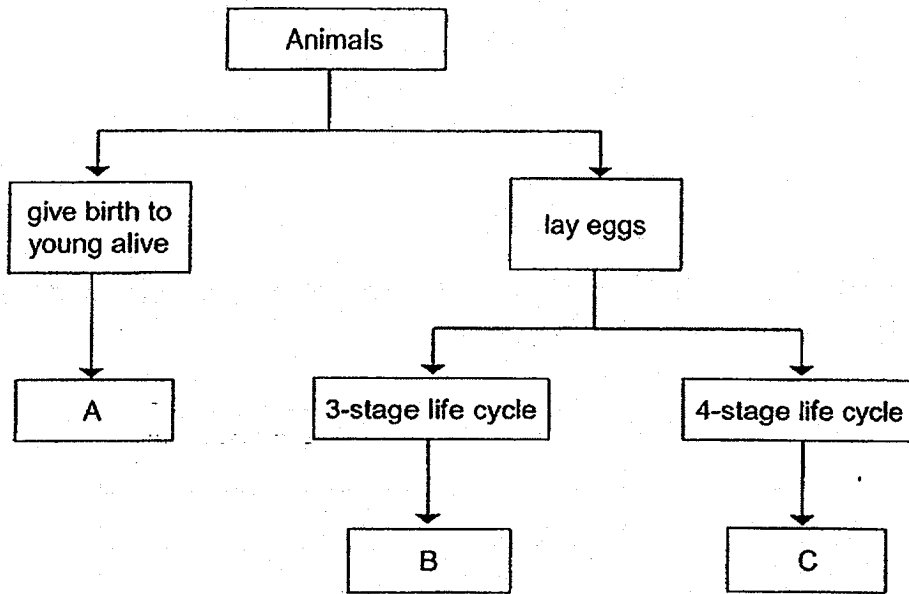


Which statement is **not** correct?

- (1) Organism A has three stages in its life cycle.
- (2) Organism B has four stages in its life cycle.
- (3) The young of organism A resembles the adult.
- (4) The young of organism B resembles the adult.

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9. Study the classification table below.

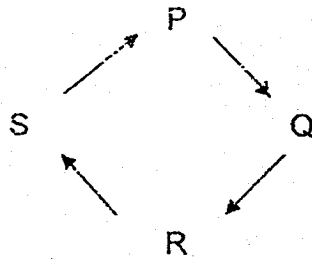


Which one of the following correctly identifies A, B and C?

	A	B	C
(1)	frog	cockroach	beetle
(2)	cat	mosquito	frog
(3)	horse	chicken	beetle
(4)	chicken	frog	cockroach

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10. The diagram below shows the life cycle of a butterfly.



Jenny observed and recorded the number of leaves eaten by a butterfly at the different stages, P, Q, R and S, in the table below.

Stage	Number of leaves eaten in a day
P	0
Q	0
R	0
S	8

Which stage is most likely the adult stage?

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

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11. Michael has four objects K, L, M and N made of different materials. He measured the mass of each object before putting it in water. He recorded his observations in the table below.

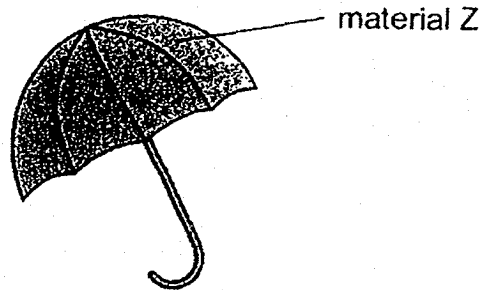
Object	Material	Mass (g)	Floats in water
K	metal	6	x
L	plastic	6	✓
M	wood	15	✓
N	plastic	18	x

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

- (1) Object N has the biggest mass.
- (2) All objects made of plastic float.
- (3) All objects with a small mass float.
- (4) Object K has a bigger mass than object L.

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12. An umbrella protects the user from the Sun and rain.



The table below shows some properties of materials.

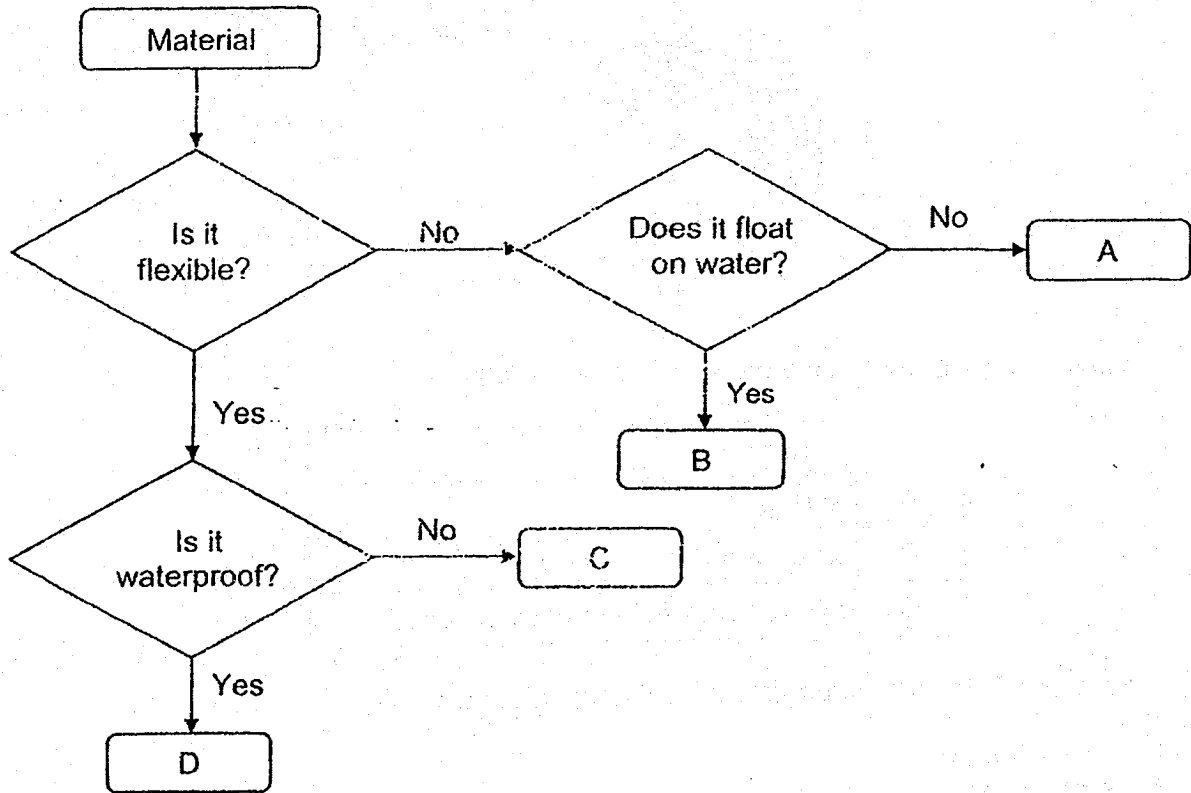
	Properties
A	strong
B	waterproof
C	allows most light to pass through

Which of the following properties should material Z have?

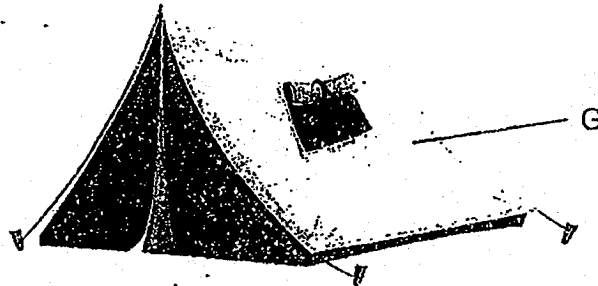
- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) A, B and C

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13. Study the flowchart below.



Based on the flowchart given, which material, A, B, C or D, is suitable for making part G of the camping tent shown below?

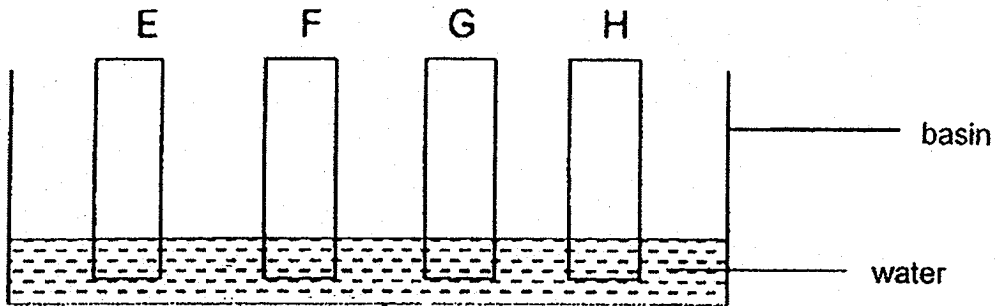


- (1) A
- (2) B
- (3) C
- (4) D

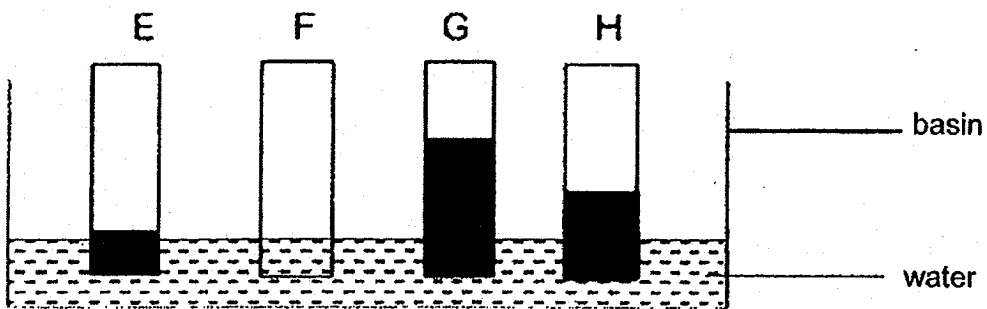
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14. Ahmad set up an experiment to find out which material, E, F, G or H absorbed the most amount of water.

He placed four similar strips of materials E, F, G and H into a basin of water as shown below.



The diagram below shows the strips of materials after 30 minutes. The black patches represent the water absorbed by the materials.



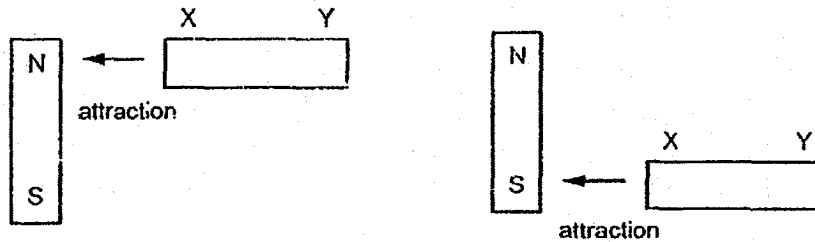
Which material is **most** suitable to make a bath towel?

- (1) E
- (2) F
- (3) G
- (4) H

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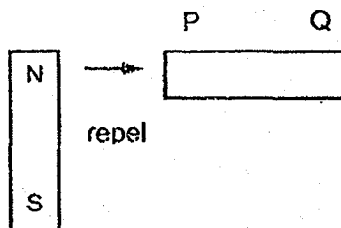
15. A metal rod XY is placed near a bar magnet.

End X is **attracted** when it is placed near to the North Pole (N) of the magnet, and also when it is placed near to the South Pole (S) as shown below.



Another metal rod PQ is also placed near the same bar magnet.

End P **repelled** when it is placed near to the North Pole (N) of the magnet as shown below.

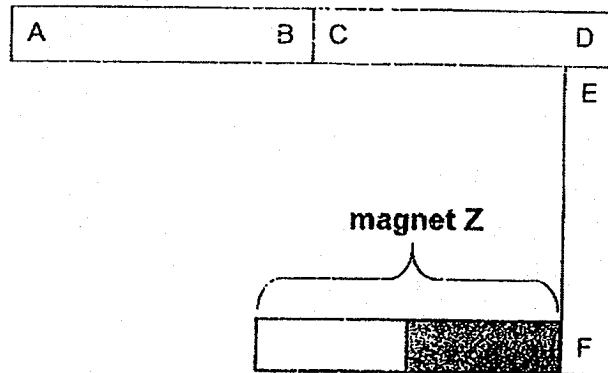


Which of the following will be observed when end Y and end P are placed near to the South Pole (S) of the bar magnet?

	end Y near South Pole (S)	end P near South Pole (S)
(1)	attract	attract
(2)	attract	repel
(3)	repel	attract
(4)	repel	repel

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16. Three similar bar magnets with their poles labelled A, B, C, D, E and F are arranged with the bar magnet Z as shown in the diagram below.



Which one of the following arrangements is possible?

- (1)

A	B	D	C
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- (2)

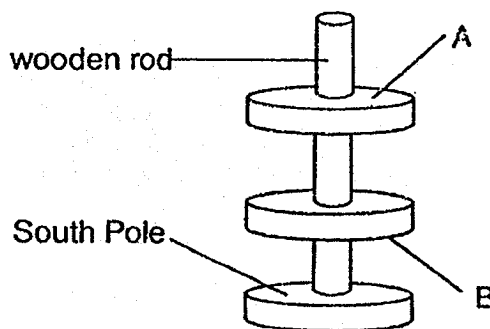
C	D	F	E
---	---	---	---
- (3)

F	E	A	B
---	---	---	---
- (4)

C	D	A	B
---	---	---	---

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17. The diagram shows the positions of 3 ring magnets when they are put through a wooden rod.

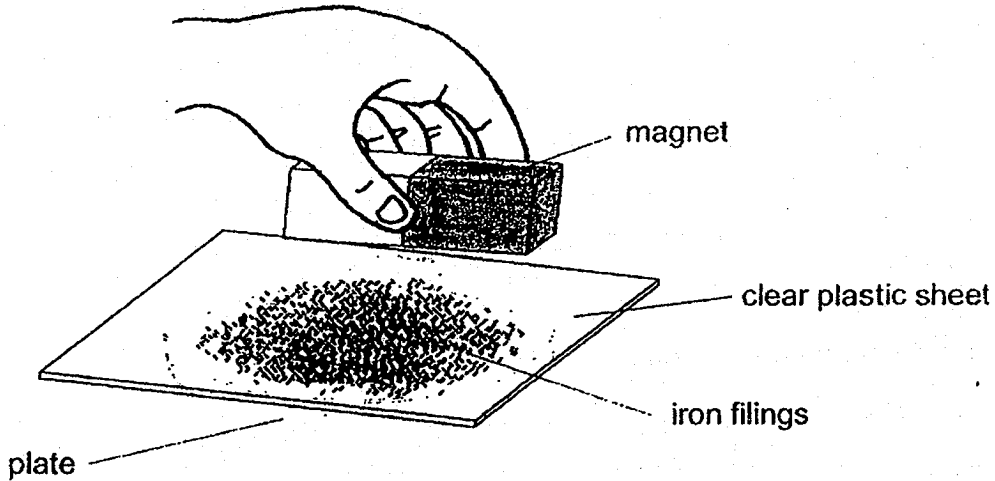


Which one of the following shows correctly the poles marked A and B?

	A	B
(1)	north	north
(2)	north	south
(3)	south	south
(4)	south	north

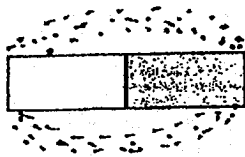
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18. Susan poured some iron filings into a plate and placed a clear plastic sheet over the plate as shown below. She then placed a bar magnet on the clear plastic sheet and observed that the iron filings were attracted to the magnet.

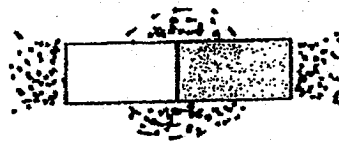


Which one of the following diagrams best shows what Susan would observe after some time?

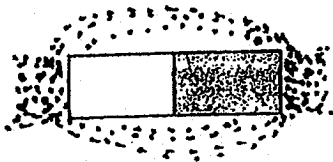
(1)



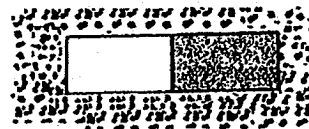
(2)



(3)



(4)



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19. James conducted an experiment with magnets, S, T and U.

He brought each magnet 3 cm away from a container of paper clips and recorded the number of paper clips attracted to each magnet in the table below.

He then heated each magnet over a candle flame for 10 minutes and repeated the experiment.

Magnet	Number of paper clips attracted	
	Before heating	After heating
S	7	0
T	13	0
U	5	0

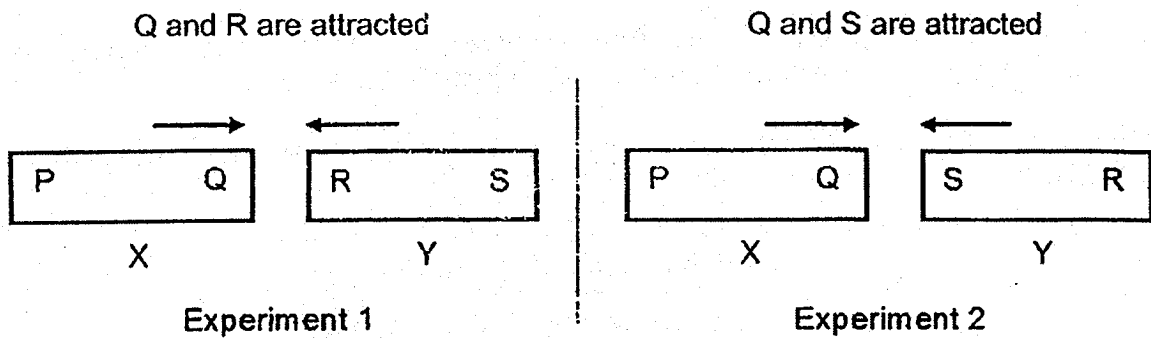
Based on the results shown in the table above, what could James conclude?

- A Magnet S is the weakest magnet before heating.
- B Magnet T is the strongest magnet before heating.
- C Magnet U is the strongest magnet after heating.
- D All magnets lost their magnetism after being heated.

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

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20. Two objects, X and Y, are placed side by side as shown in the diagrams below.



Based on the diagrams above, which of the following statement(s) is/are correct?

- A : One of the objects (X or Y) is a magnet.
- B : Q and R are **definitely** unlike poles.
- C : Both objects, X and Y, are made of magnetic materials.

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

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End of Section A



HENRY PARK PRIMARY SCHOOL
SECOND SEMESTRAL ASSESSMENT 2018
PRIMARY 3
SCIENCE
BOOKLET B and C (40 MARKS)

INSTRUCTIONS TO CANDIDATES

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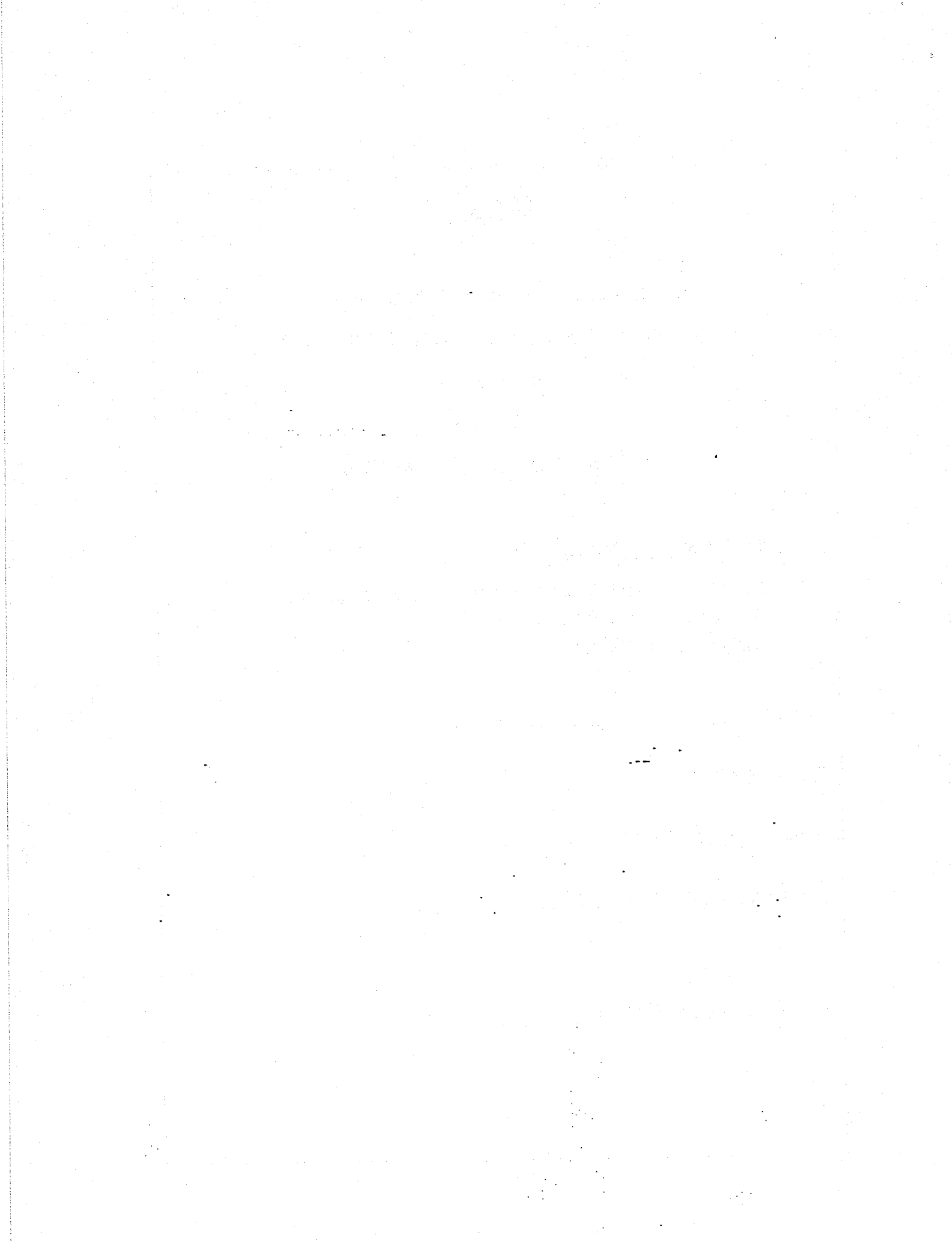
Name: _____ ()

Class: Primary 3 ()

Date: 26 October 2018

Total Time for Booklets A, B & C : 1 h 30 min

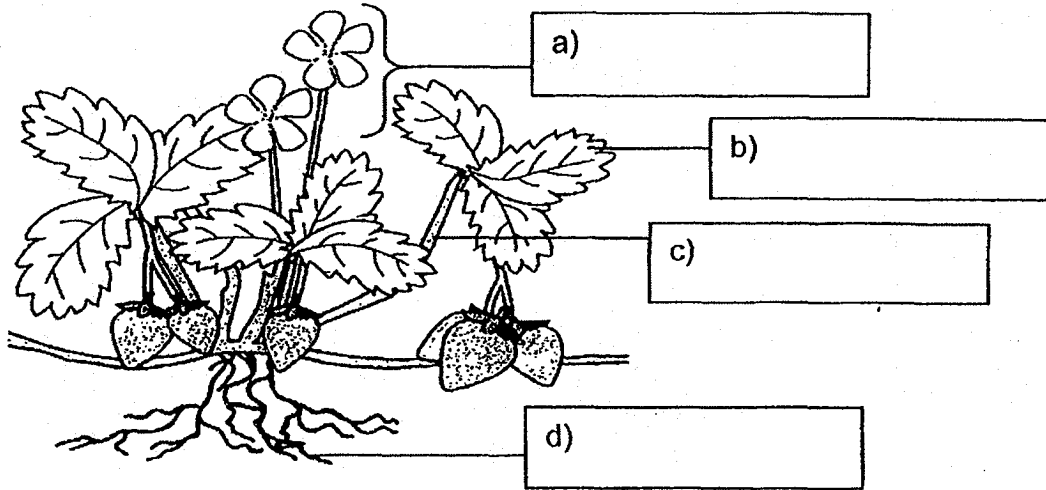
Marks for Booklet B and C: _____



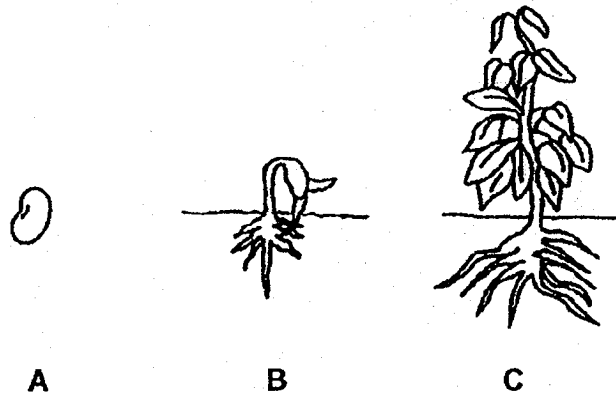
Section B : (8 x 2 marks = 16 marks)

Write your answers to questions 21 to 28 in the spaces given. Each question is 2 marks.

21. Identify and label correctly the parts of the plant shown in the diagram below. [2]



22. The diagram below shows the 3 stages in the life cycle of a bean plant.



Name the stages A and B in the life cycle of the bean plant. [2]

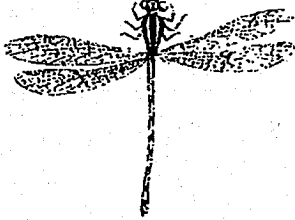
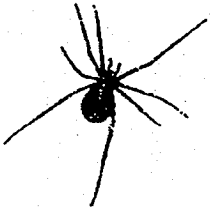
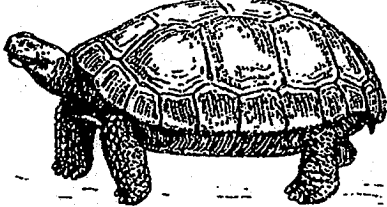
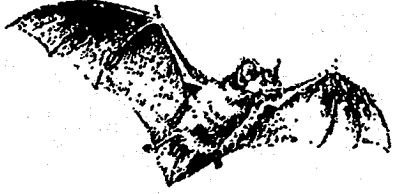
A : _____

B : _____

23. A description of animal A is given below.

"I am a small animal. My body, which has a hard outer covering, is divided into three parts. I reproduce by laying eggs. What am I?"

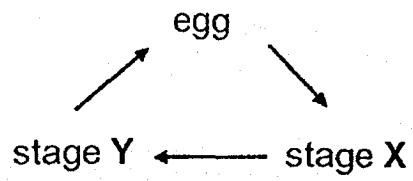
a) Study the diagrams given below and put a tick (✓) in the box that represents animal A. [1]

b) Put a tick (✓) beside the animal group that animal A belongs to. [1]

Animal group	Put a tick (✓) in the correct box
fish	
bird	
insect	
mammal	

24. The diagram below shows the life cycle of a frog.



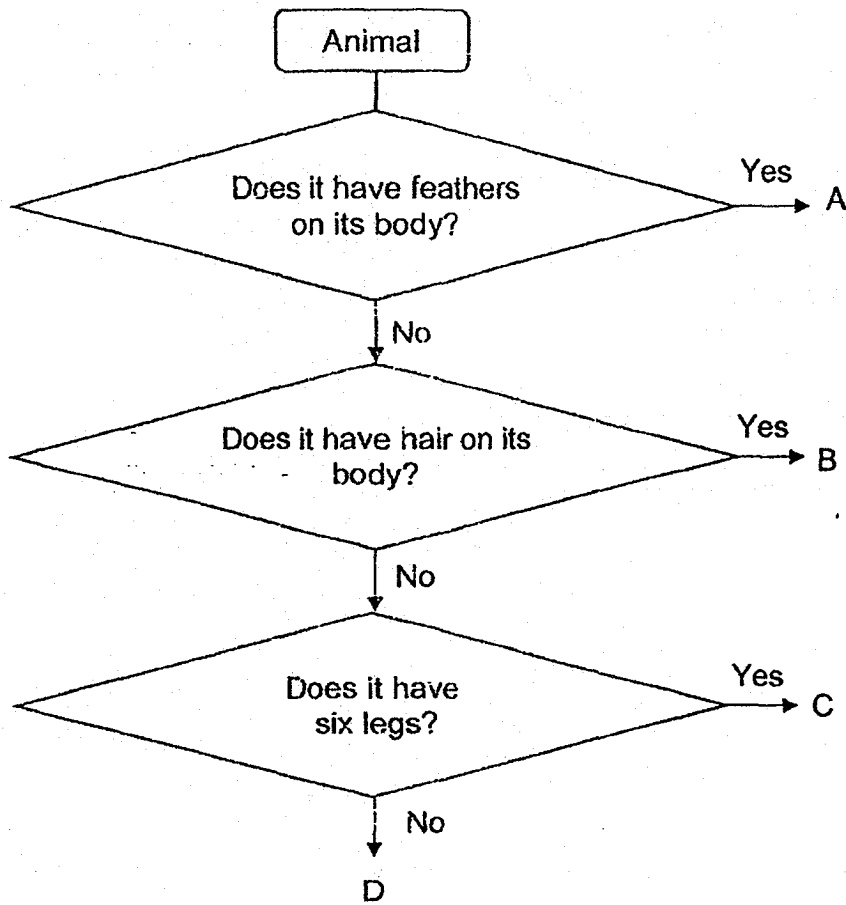
Name stages X and Y.

[2]

Stage X : _____

Stage Y : _____

25. Study the flowchart below carefully.

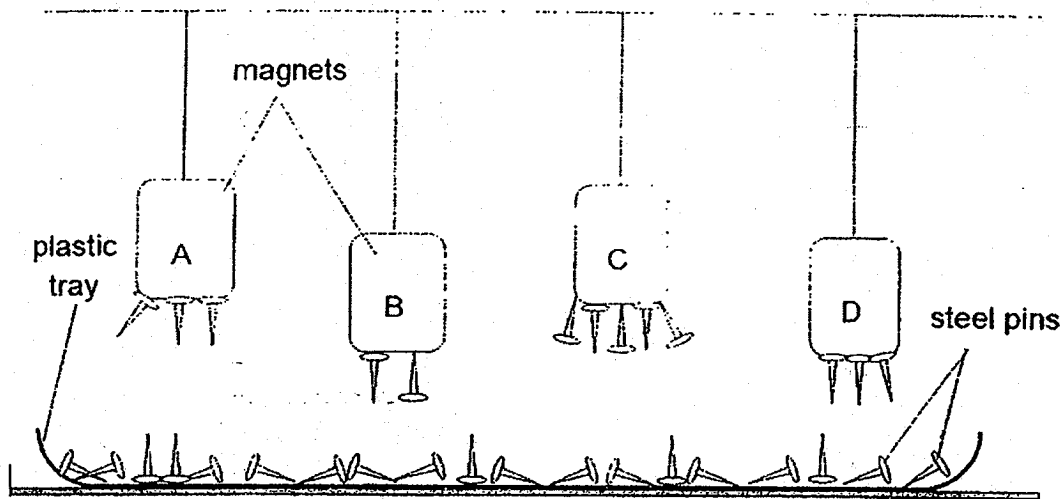


Using the information in the flowchart, group the animals by writing the A, B, C or D in the correct boxes below.

[2]

Animal	Letters
Cockroach	
Chicken	
Giraffe	
Frog	


26. Magnets A, B, C and D are hanging from strings of two different lengths as shown in the diagram below. A plastic tray of steel pins is placed below the magnets. Each magnet attracts different number of steel pins.



Based on the diagram above, arrange the magnets according to their magnetic force, from the magnet with the strongest magnetic force to the magnet with the weakest magnetic force.

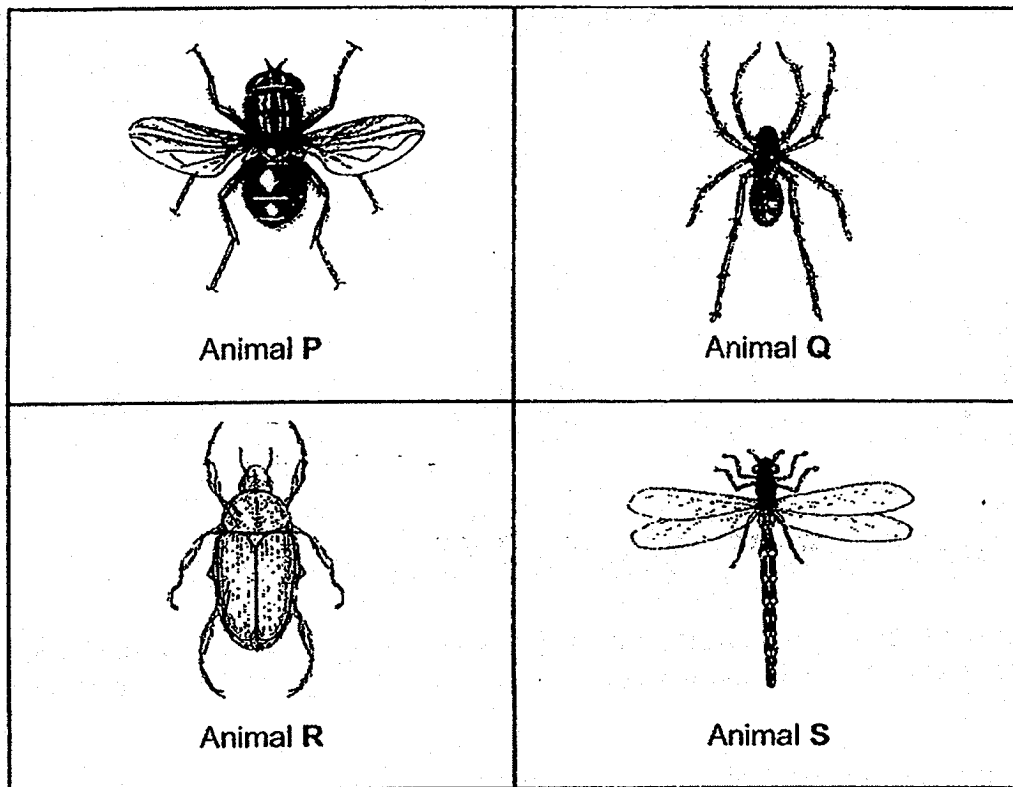
Write A, B, C and D in the correct boxes provided below.

[2]

Strongest Magnetic Force  Weakest Magnetic Force

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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27. Jane and Mary found four small animals (P, Q, R and S) as shown in diagram below.



The girls observed these animals and made a table about their observations.

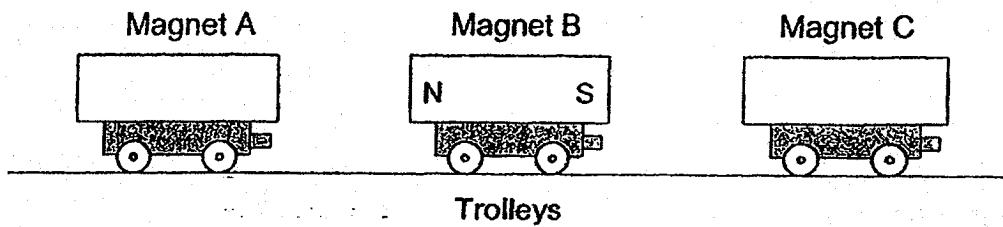
Complete the table below by adding the letters (P, Q, R and S) of the four animals in the correct boxes. [2]

	Animal (Write P, Q, R or S)		Number of wings	Number of legs	Number of feelers
(a)			0	6	2
(b)			4	6	2
(c)			0	8	0
(d)			2	6	2

28. The diagram below shows three trolleys.

Paul put a bar magnet on each trolley. He pushed the trolleys together.

- Magnet B **attracted** magnet A.
- Magnet B **repelled** magnet C.



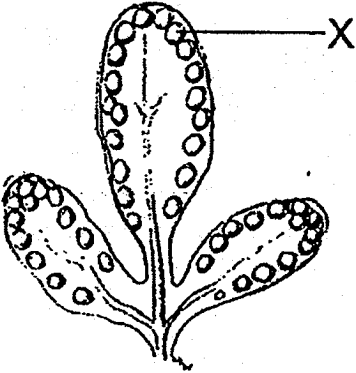
On the diagrams above, write the North and South poles of magnets A and C using the letters N and S. [2]

End of Section B

Section C: (24 marks)

Write your answers to questions 29 to 35 in the spaces given. Each question carries 2 to 4 marks.

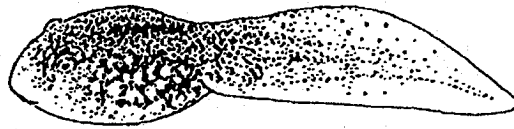
29. Tiffany found plant P in her garden. She observed the plant and recorded the following observations.

Observations of plant P	
<ul style="list-style-type: none">• It is green in colour.• It has part X on the underside of its leaves which contains some brown powder.• It does not bear flowers.	

a) Name part X. _____ [1]

b) Can plant P produce fruit? Explain your answer. [2]

30. Alex observed animals, D and E, over a period of time.



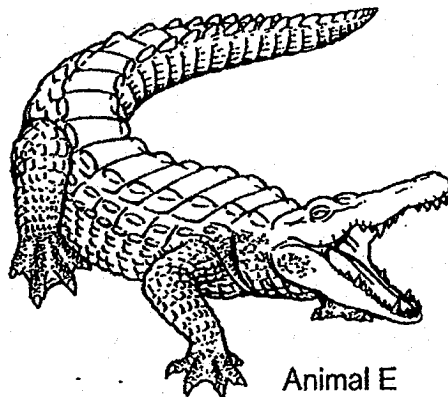
A young of animal D

Animal D has moist skin as outer covering. The adult lives on land and lays eggs on the surface of a pond.

A few weeks later, some of the eggs hatched and its young lived in the pond until they grow into adults.

a) Name the animal group that animal D belongs to.

[1]



Animal E

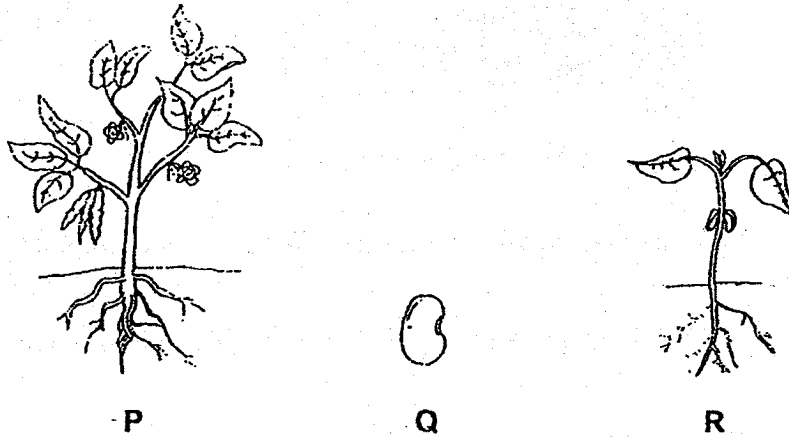
Animal E has scales and dry skin and lives on land. It lays eggs and its young were found near the water after they hatched from the eggs.

Alex concluded that animals D and E have many similar characteristics so they belong to the same animal group.

b) Do you agree with Alex's conclusion? Explain why.

[2]

31. The diagrams below show the stages in the life cycle of a plant. They are not arranged in order.



Use the diagrams shown above to answer the following questions.

Observe the **parts** of the plant at stages P and R.

- a) Based on your observation, state one **similarity** between the plant at stages P and R. [1]

- b) Based on your observation, state one **difference** between the plant at stages P and R. [1]

32. The table below shows the properties of three materials E, F and G.

Material	Property			
	Waterproof	Flexible	Strong	Allow light to pass through
E	✓	✓		
F	✓		✓	✓
G		✓	✓	

a) Based on the information given in the table above, state two properties of material G. [2]

Property 1 : _____

Property 2 : _____

b) The diagram below shows a pair of reading glasses.



Which material, E, F or G, is **most** suitable for making part X?

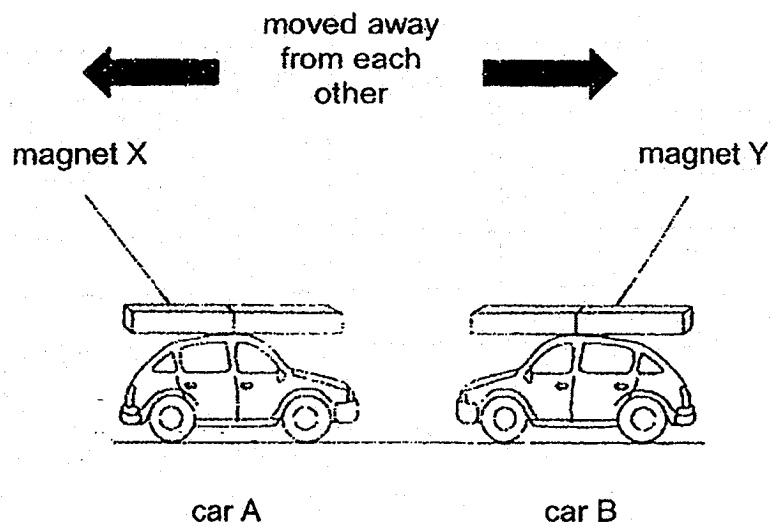
Explain your answer.

[2]

Material: _____

Explain: _____

33. Jett tied two similar magnets X and Y on two plastic toy cars, A and B.



- a) When the two plastic toy cars with the magnets were brought close to each other, they moved away from each other as shown in the diagram above.

Explain why this happened.

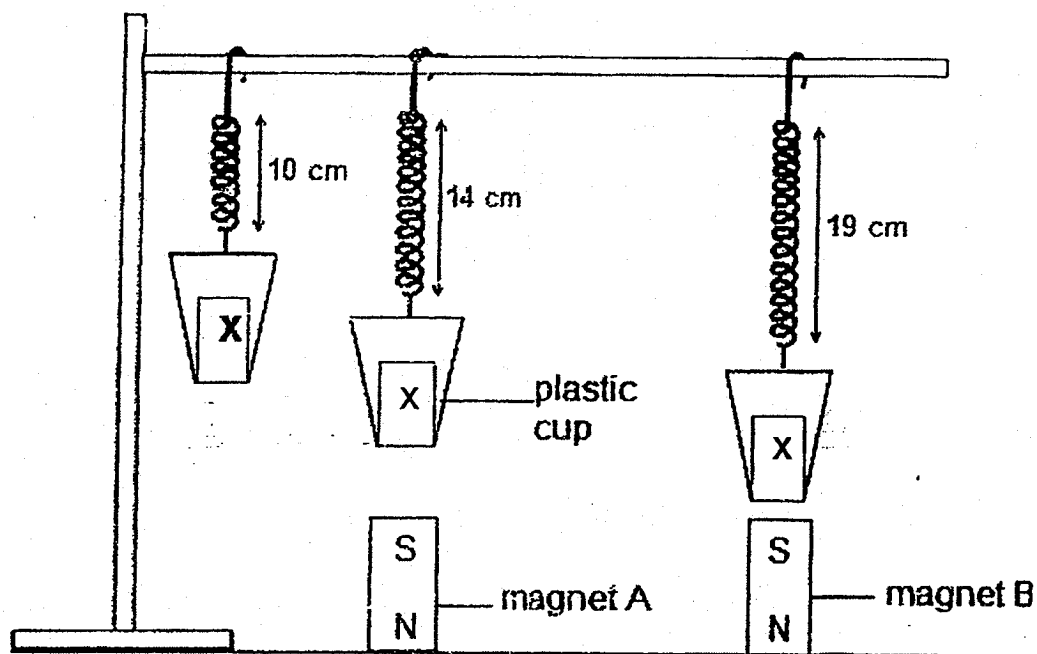
[2]

- b) What can Jett do to **magnet X** to make the two toy cars move towards each other?

[2]

Explain your answer.

34. The diagram below shows three identical plastic cups with object X in each one of them. The cups are attached to three identical springs. Object X is made of iron.



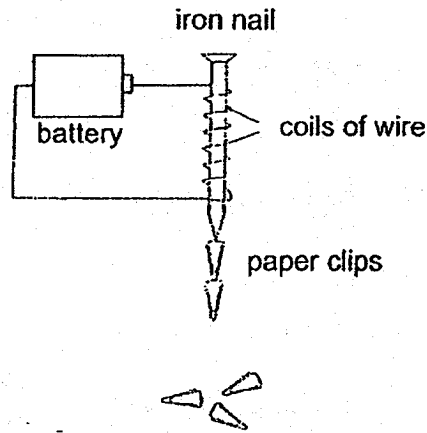
When magnets A and B were placed below the plastic cups, it was observed that the springs stretched longer.

- a) Explain why the springs stretched longer. [2]

- b) i) Which magnet, A or B, is stronger? [1]

- ii) Based on the diagrams shown above, explain your answer in (bi). [1]

35. Mary prepared an experiment as shown in the diagram below.



a) Explain why the iron nail was able to attract the paper clips. [1]

b) Suggest **two** ways Mary can increase number of paper clips attracted by the iron nail above. [2]

i) _____

ii) _____

An iron nail was used in the above experiment.

c) Besides iron, **name** another suitable material the nail can be made of. [1]

End of Section C

EXAM PAPER 2018 (P3)

SCHOOL : HENRY PARK

SUBJECT : SCIENCE

TERM : SA2

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

Q21) a) flower

b) leaf

c) stem

d) root

Q22) A : seed

B : young plant

Q23) a)

	✓

b) insect

Q24) a) Stage X : tadpole

Stage Y : adult frog

Q25) Cockroach – C

Chicken – A

Giraffe – B

Frog – D

Q26) C – A – D – B

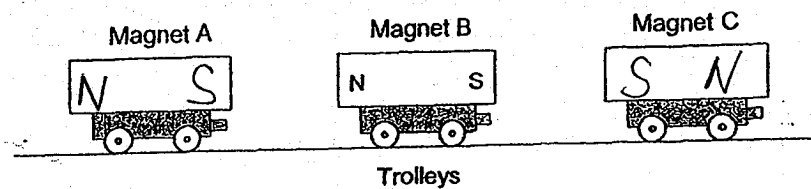
Q27) (a) R

(b) S

(c) Q

(d) P

Q28)



Q29) a) spores.

b) Plant P cannot produce fruit. It does not bear flowers and flowers make fruits, so plant P cannot produce fruits.

Q30) a) Amphibian is the animal group that animal D belongs to. It has moist skin.

b) I do not agree with Alex's conclusion. Animal E has scales and dry skin while animal D has moist skin.

Q31) a) Both stages have leaves.

b) Stage P has flowers and fruits but stage R does not have flowers and fruits.

Q32) a) Property 1 : Material G is flexible.

Property 2 : Material G is strong.

b) Material : F

Explain : Material F is waterproof , strong and allow light to pass through. So that the person wearing the glasses would not get wet for the eyes. The person wearing the glasses can see what is behind the lens.

Q33) a) Two like pole is facing each other and they will repel.

b) He can flip magnet X so that two unlike poles is facing each other and they will attract each other.

Q34) a) Object X is attracted to the magnet so object X is trying to pull the plastic cup towards the magnet and it will stretch longer. Object X is made up of magnetic material.

b) i) Magnet B

ii) The string stretches longer than another spring so it have stronger magnetic force.

Q35) a) The iron nail have became an electromagnet which is formed by coils of wires around the iron nail connected to a battery.

b) i) She could add the number of the batteries.

ii) She could add the number of coils around the iron coils.

c) Steel can be suitable material for the nail because it is also a magnetic material.

