



**NAN HUA PRIMARY SCHOOL  
SEMESTRAL ASSESSMENT 1 – 2017  
PRIMARY 3**

**SCIENCE**

**BOOKLET A**

**24 Multiple Choice Questions (48 marks)**

**Total Time for Booklets A and B : 1 hour 30 minutes**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.

**Marks Obtained**

Booklet A		/48
Booklet B		/32
Total		/80

Name: \_\_\_\_\_ (     ) Class: P 3 \_\_\_\_\_

Date : 8 May 2017

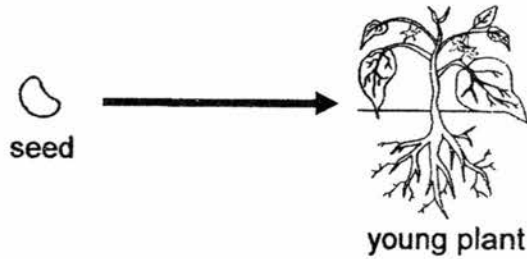
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**Section A: (24 x 2 marks = 48 marks)**

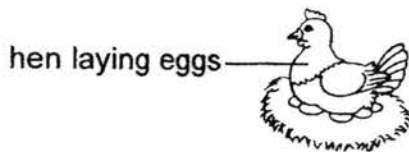
For each question from 1 to 24, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Which one of the following shows that living things need air, food and water to survive?

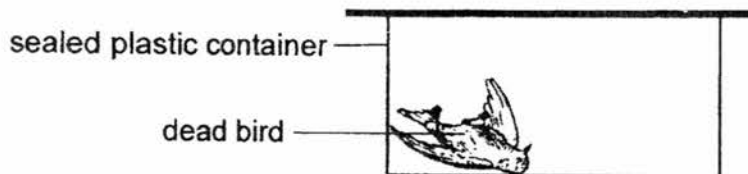
(1)



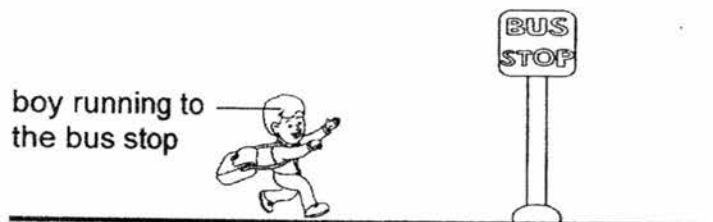
(2)



(3)



(4)



2. Lion is an animal-eater. The picture below shows a lion chasing a deer.









What characteristic(s) of living things does the above action show?

- A Living things can grow.
- B Living things can move.
- C Living things can reproduce.
- D Living things respond to changes.

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

3. Study the classification table below.

Group X	Group Y	Group Z
 Fish	 Book	 Plant
 Dog	 Computer	 Toadstool

Which one of the following statements is correct?

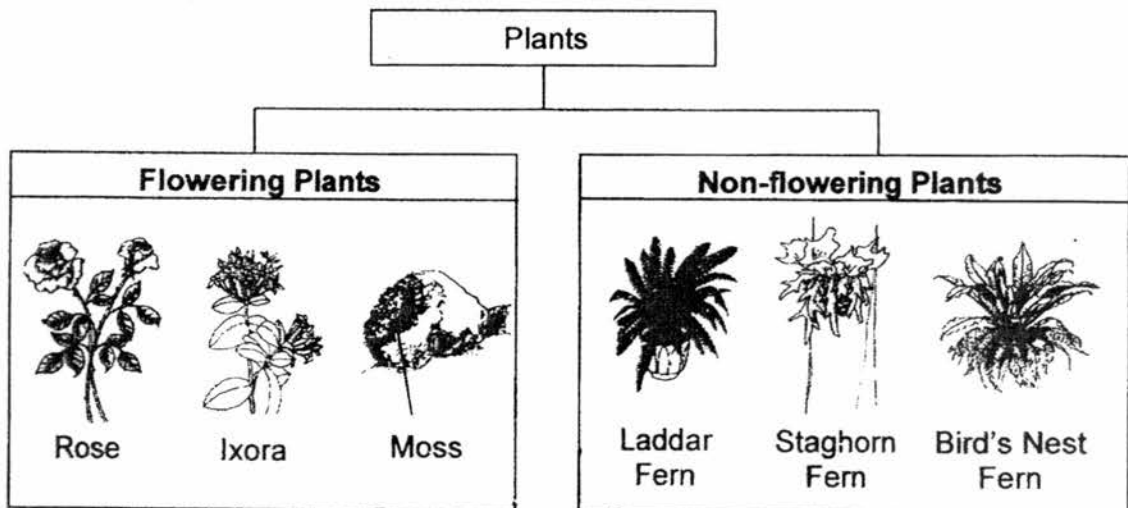
- (1) The things in Group Y and Group Z cannot grow.
- (2) The things in Group X and Group Z need air, food and water.
- (3) The things in Group X and Group Y can move by themselves.
- (4) The things in Group Y and Group Z respond slowly to changes.

4. Wilson observed an animal at the zoo and took down some notes about the animal as follows.

It has four legs.  
It reproduces by laying eggs.  
It has scales as its outer covering.

The animal above belongs to the \_\_\_\_\_ group.

- (1) Fish
  - (2) Reptile
  - (3) Mammal
  - (4) Amphibian
5. Study the classification chart below carefully.



Which of the plant(s) above has been classified **wrongly**?

- (1) Moss
- (2) Ixora
- (3) Laddar Fern
- (4) Staghorn Fern

6. The pictures below show the bread mould and grass.

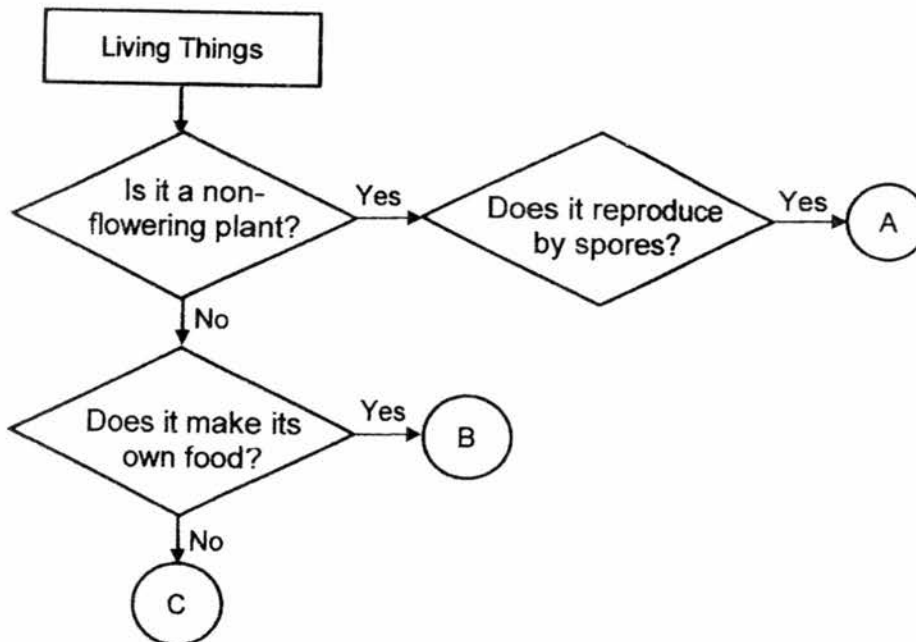


How are the bread mould and grass similar?

- A. They can grow.
- B. They reproduce by spores.
- C. They can make their own food.
- D. They need air, food and water to survive.

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

7. The flow chart below shows the characteristics of living things A, B and C.



What could A, B and C be?

	A	B	C
(1)	Sunflower	Mushroom	Fern
(2)	Fern	Mushroom	Horse
(3)	Mushroom	Sunflower	Fern
(4)	Fern	Sunflower	Horse

8. Which one of the following objects is made of a material that is flexible and absorbs water?

(1)



Rubber ball

(2)



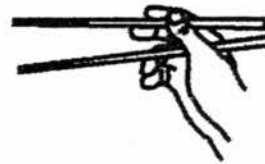
Wooden ruler

(3)







Cotton socks

(4)



Plastic chopsticks

9. Study the table below.

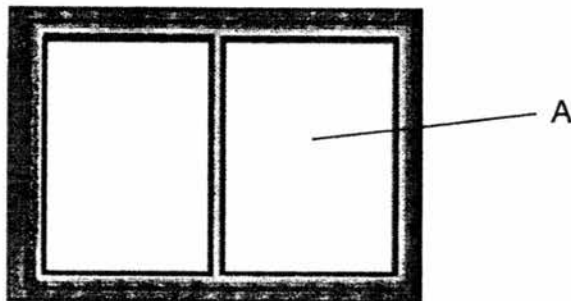
Group P		Group Q	
			
Glass cup	Ceramic pot	Plastic spoon	Metal needle

Which of the following is the most suitable headings for Group P and Group Q?

	Group P	Group Q
(1)	Stiff	Flexible
(2)	Waterproof	Not waterproof
(3)	Sink in water	Float in water
(4)	Breaks easily	Does not break easily

10. Study the table below.

Material	W	X	Y	Z
Flexible	No	No	Yes	Yes
Waterproof	No	Yes	Yes	No
Transparent	No	Yes	No	No



Which one of the materials is most suitable for making part A of the window to prevent the rain from entering the house?

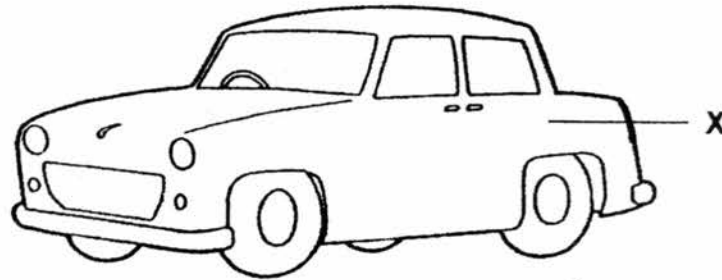
- (1) Material W
- (2) Material X
- (3) Material Y
- (4) Material Z

11. Spectacle lens are mostly made of clear plastic because plastic \_\_\_\_\_.

- A is light
- B does not break easily
- C allows most light to pass through

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

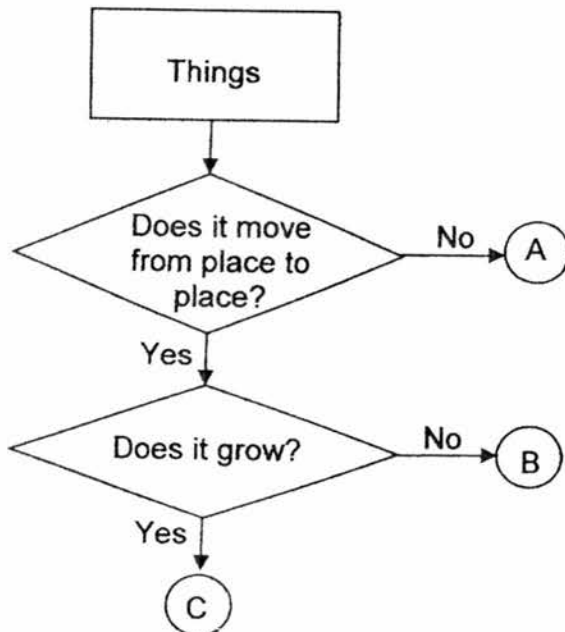
12. Study the picture of the car below.



Which material is best used for making part X of the car?

- (1) Metal
- (2) Glass
- (3) Rubber
- (4) Ceramic

13. Study the flow chart below.



Which of the following correctly represent A, B and C?

	A	B	C
(1)	tree	train	cow
(2)	building	tree	monkey
(3)	cow	building	monkey
(4)	train	cow	building

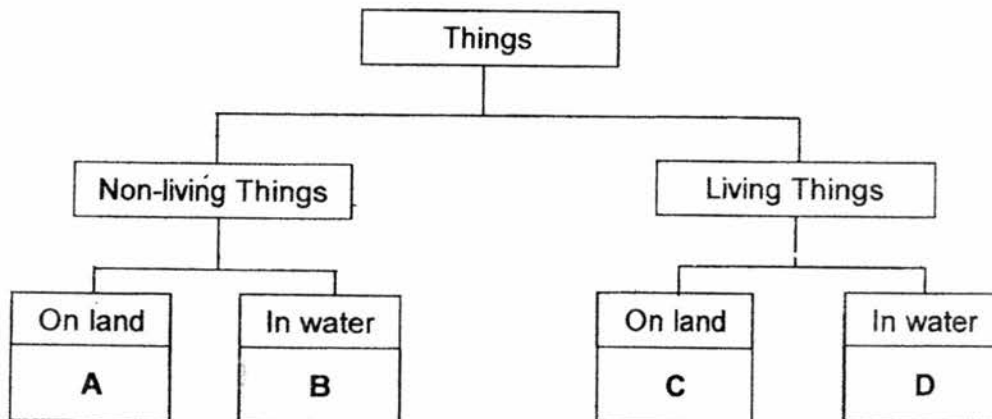


14. Kelly put three things, W, X and Y, into three containers. She put 30 g of food and some water into each container. She recorded the mass of the food at the end of 2 days in the table below.

Things	Mass of food at the start of the experiment (g)	Mass of food at the end of the experiment (g)
W	30	10
X	30	30
Y	30	30

Based on the results above, which one of the following statements is most likely true?

- (1) W is a living thing.
  - (2) W, X and Y are living things.
  - (3) W and X are non-living things.
  - (4) W, X and Y are non-living things.
15. Study the classification table below.



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


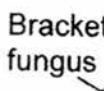





	A	B	C	D
(1)	bicycle	whale	tiger	ship
(2)	tiger	ship	bicycle	whale
(3)	whale	bicycle	ship	tiger
(4)	bicycle	ship	tiger	whale

16. The table below shows characteristics of four animals, W, X, Y and Z. A tick (✓) shows that the animal has that characteristic.

Characteristic	W	X	Y	Z
Has 6 legs.		✓		
Feed their young with milk.	✓			
Reproduce by laying eggs.		✓	✓	✓
Has scales as an outer covering.			✓	

Which animal is most likely a mammal?

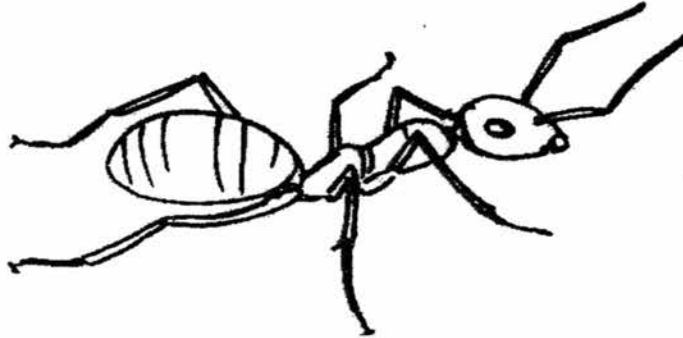
- (1) W
  - (2) X
  - (3) Y
  - (4) Z
17. Study the table below carefully.

Group G	Group H
 Mushroom  Bracket fungus  Bread mould 	 Bird's Nest Fern  Hibiscus  Coconut Tree

Which of the following are suitable headings for Group G and Group H?

	G	H
(1)	Reproduce by spores	Reproduce by seeds
(2)	Non-flowering plants	Flowering plants
(3)	Micro-organisms	Not micro-organisms
(4)	Fungi	Plants

18. Limin, Nathan and Oscar observed the animal below.



After their observations, they made the following statements.

Limin : The animal is not an insect because it has more than six legs.

Nathan : The animal is an insect because it has three body parts.

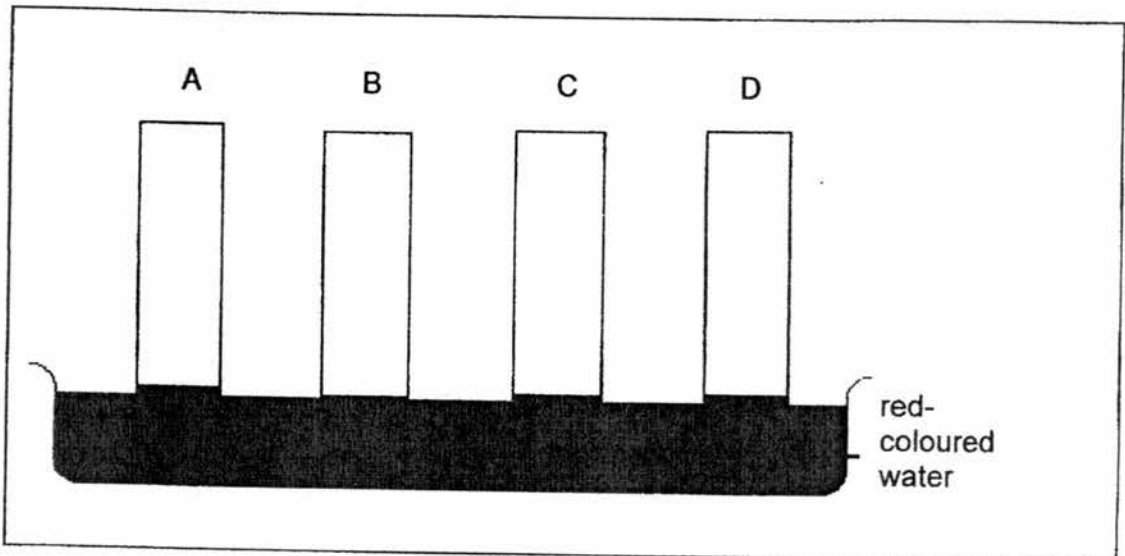
Oscar : The animal is a micro-organism because it is very small.

Whose statement is correct?

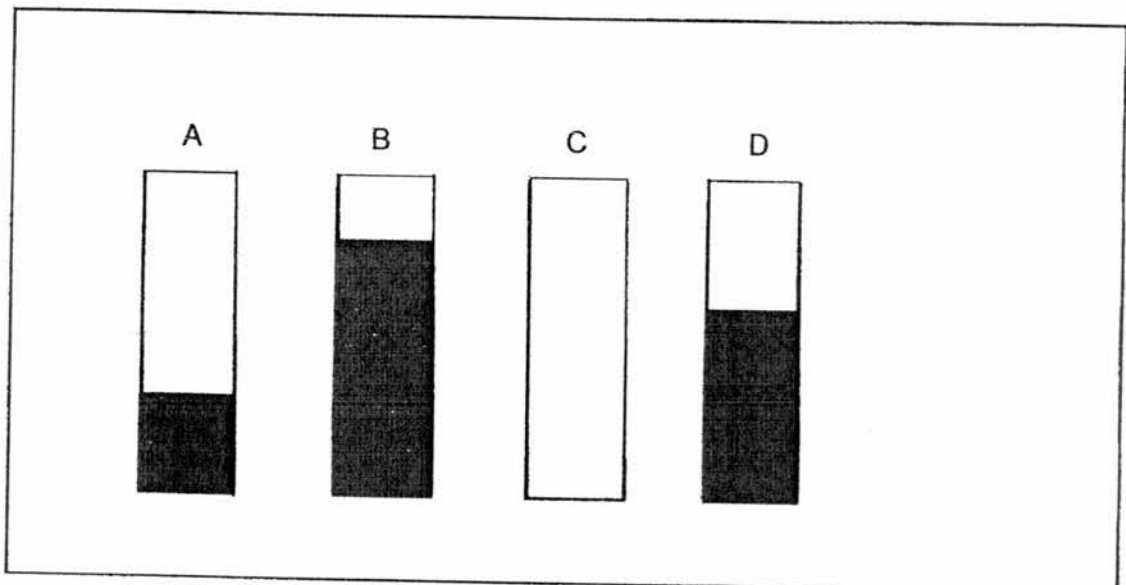
- (1) Limin only
- (2) Nathan only
- (3) Limin and Oscar only
- (4) Nathan and Oscar only

19. David sets up an experiment to find out which material could absorb the most amount of water.

Four materials, A, B, C and D, were dipped into a basin of red-coloured water as shown below.



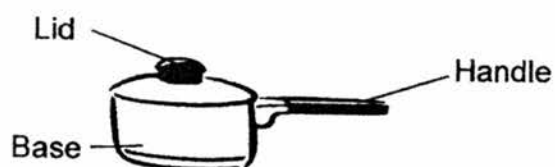
After half an hour, David removed the strips from the basin of red-coloured water and the results were shown below.



Based on his results, which one of the materials is most suitable for making a raincoat to prevent people from getting wet?

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

20. The handle, lid and base of the pot in the diagram below are made of three different materials.



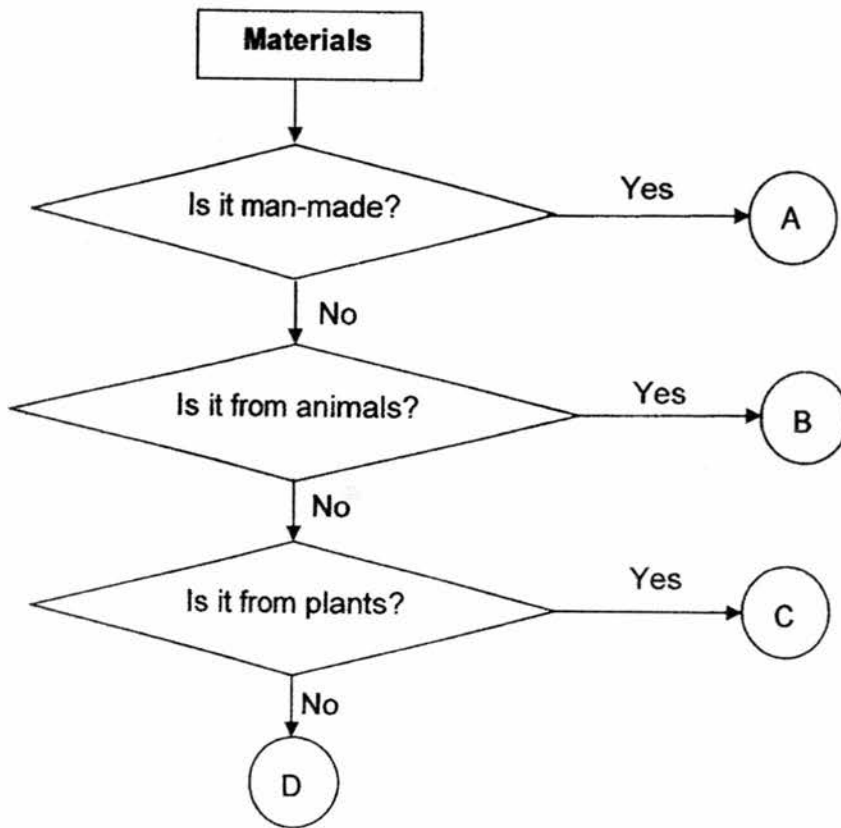
The table below shows the characteristics of materials P, Q, R and S. A tick (✓) shows the characteristic that the material has.

Characteristics	P	Q	R	S
Strong		✓		✓
Flexible	✓		✓	✓
Waterproof	✓	✓		✓

Which one of the materials is the most suitable for making the handle of the pot?

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

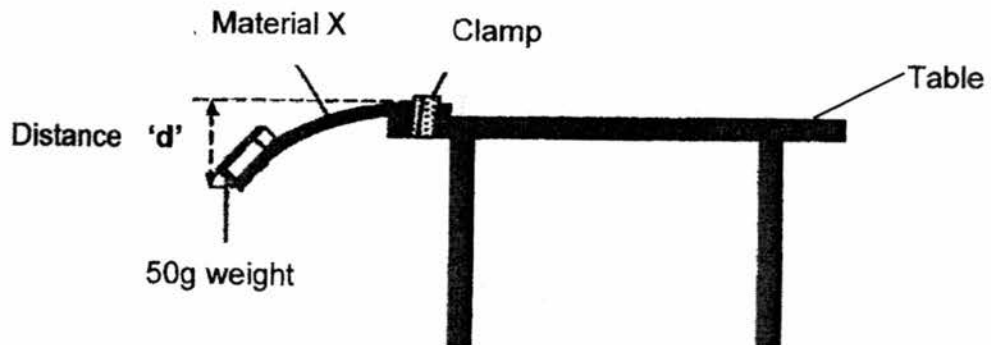
21. Study the flow chart below.



Which one of the letters best represents iron?

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

22. Hannah conducted an investigation as shown in the diagram below.

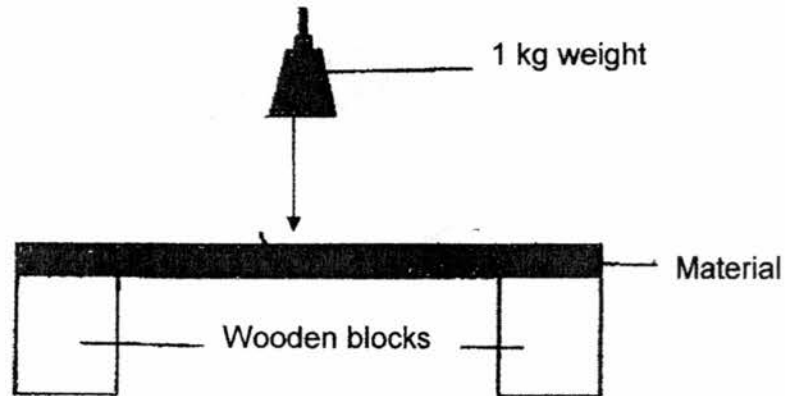


She clamped a strip of material X to the edge of the table and taped a 50 g weight to the end of the strip. As a result, material X bent as shown above. She measured the distance 'd', which was how far the material bent. Using the same 50 g weight, she repeated her investigation with materials Y and Z.

What property of materials X, Y and Z was she trying to test?

- (1) Strength
- (2) Flexibility
- (3) Transparency
- (4) Ability to sink in water

23. John wanted to test the strength of four materials, A, B, C and D, of the same thickness. He placed a 1 kg weight onto each of them and kept increasing the weight by 1 kg each time until each material breaks.



He recorded the number of 1 kg weight placed on each material before it broke in the table below.

Material	Number of 1 kg weight
A	31
B	18
C	20
D	26

From the results above, which material is the strongest?

- (1) A  
 (2) B  
 (3) C  
 (4) D
24. Samuel put the following objects into a basin of water to find out if each of them will float or sink.

- A A nail  
 B A marble  
 C A styrofoam cup  
 D A ping pong ball

Which one of the following is the likely results?

	Float	Sink
(1)	D	A, B and C
(2)	A	B, C and D
(3)	C and D	A and B
(4)	B and D	A and C





**NAN HUA PRIMARY SCHOOL  
SEMESTRAL ASSESSMENT 1 – 2017  
PRIMARY 3**

**SCIENCE**

**BOOKLET B**

**10 Open-ended questions (32 marks)**

**Total Time for Booklets A and B : 1 hour 30 minutes**

**INSTRUCTIONS TO CANDIDATES**

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

**Marks Obtained**

**Section B**

	/ 32
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**Name:** \_\_\_\_\_ (     )     **Class: P 3** \_\_\_\_\_

**Date : 8 May 2017**

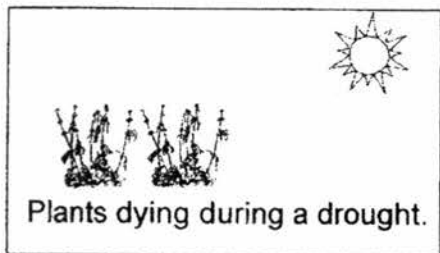
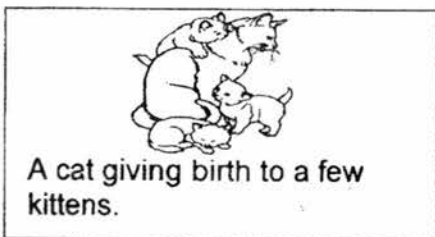
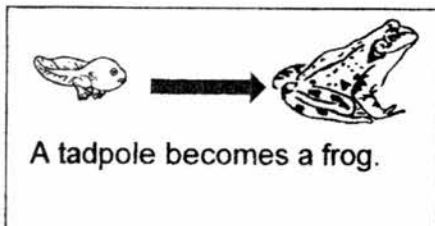
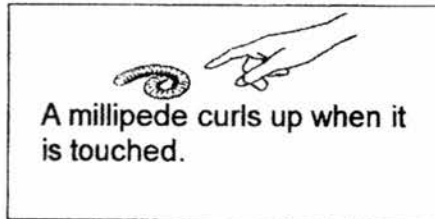
**Parent's Signature:** \_\_\_\_\_

**Section B: (32 marks)**

Write your answers to questions 25 to 34 in the space provided.

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

25. Match the pictures to the correct characteristics of living things. [2]



• Living things can reproduce.

• Living things respond to changes.

• Living things need water to survive.

• Living things can grow.

Score	2
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26. Study the pictures below.



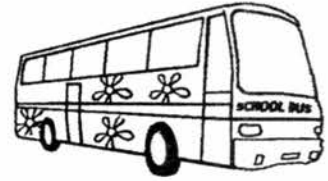
Robot



Tree

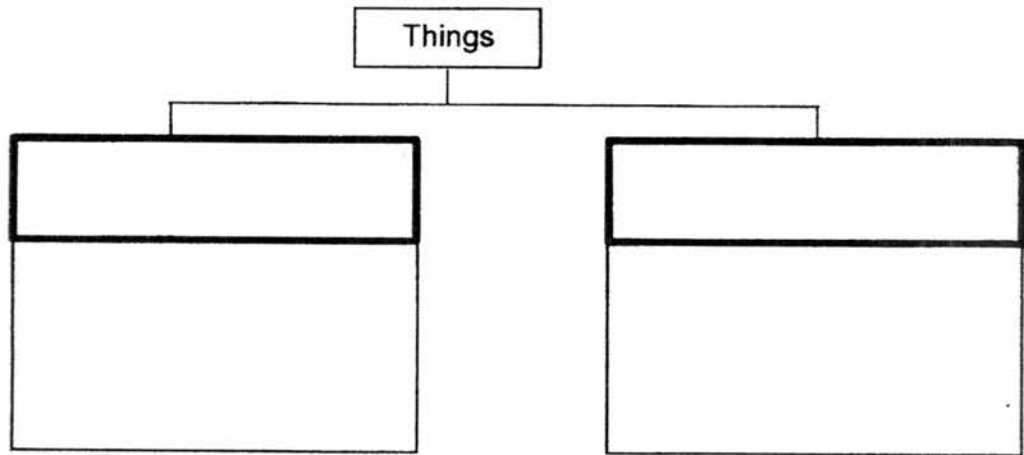


Cockroach



School bus

(a) Classify the things above into two groups and give a suitable heading for each group. [2]



(b) Describe how plants and fungi obtain food. [2]

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Score	4
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27. Study the pictures of the three animals below.



X



Y



Z

- (a) Based on what you can observe from the pictures, which one of the above animals, X, Y or Z, does not belong to the same group? Give a reason for your answer. (Do not mention the animal group.) [1]

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- (b) What animal group does animal Z belong to? [1]

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- (c) State two common characteristics of the animal group mentioned in (b). [2]

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Score	4
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28. Some objects are put into four groups according to the material that they are made of.

Objects			
Group W	Group X	Group Y	Group Z
Dress	Eraser	Key	Book
Face towel	Car tyre	Nail	Cupboard

- (a) Identify the types of materials that are used to make the following objects. [2]

Group	Materials
W	
X	
Y	
Z	

- (b) State **two** important properties of the material that made it suitable for making the objects in Group Y. [2]

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Score	4
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29. Dave carried out an experiment to test the properties of three different materials, P, Q and R.

After carrying out the tests on the materials, Dave recorded his observations in the table below.

Material	Is it strong?	Is it flexible?	Can it float?	Is it waterproof?
P	Yes	No	No	Yes
Q	No	Yes	Yes	Yes
R	No	Yes	No	No

- (a) Based on the table above, state one difference between Material Q and R. [1]


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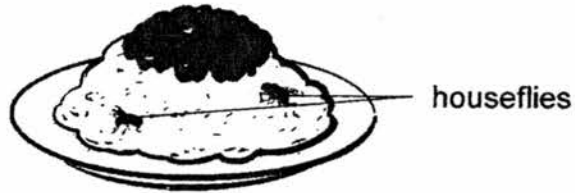
- (b) Match the following objects to the most suitable materials, P, Q or R from the table above. Each letter can only be used once. [1]

(i) Iron nail : \_\_\_\_\_

(ii) Tissue paper : \_\_\_\_\_

Score	
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30. Peter observed that some houseflies had landed on his plate of food.



(a) When he swing his hand over the food, the houseflies flew away.  
List two characteristics of living things shown by the houseflies when it flew away. [2]

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

Jun Jie caught a snail and keep it in a container as shown below.



(b) When he came home from school the next day, he realized that the snail in the container had died. Explain why the snail died. [1]

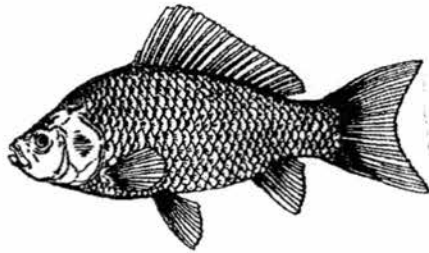
\_\_\_\_\_  
\_\_\_\_\_

(c) Without changing the container, what should Jun Jie do to keep his snail alive? [1]

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

Score	
	4

31. Study the two animals below.



Animal A



Animal B

- (a) Based on what you can observe from the pictures, state one similarity between the **two** animals. (Do not mention their shape, size or colour.) [1]

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- (b) Based on what you can observe from the pictures, state one difference between the **two** animals. (Do not mention their shape, size or colour.) [1]

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- (c) How do Animal A and Animal B reproduce? [1]

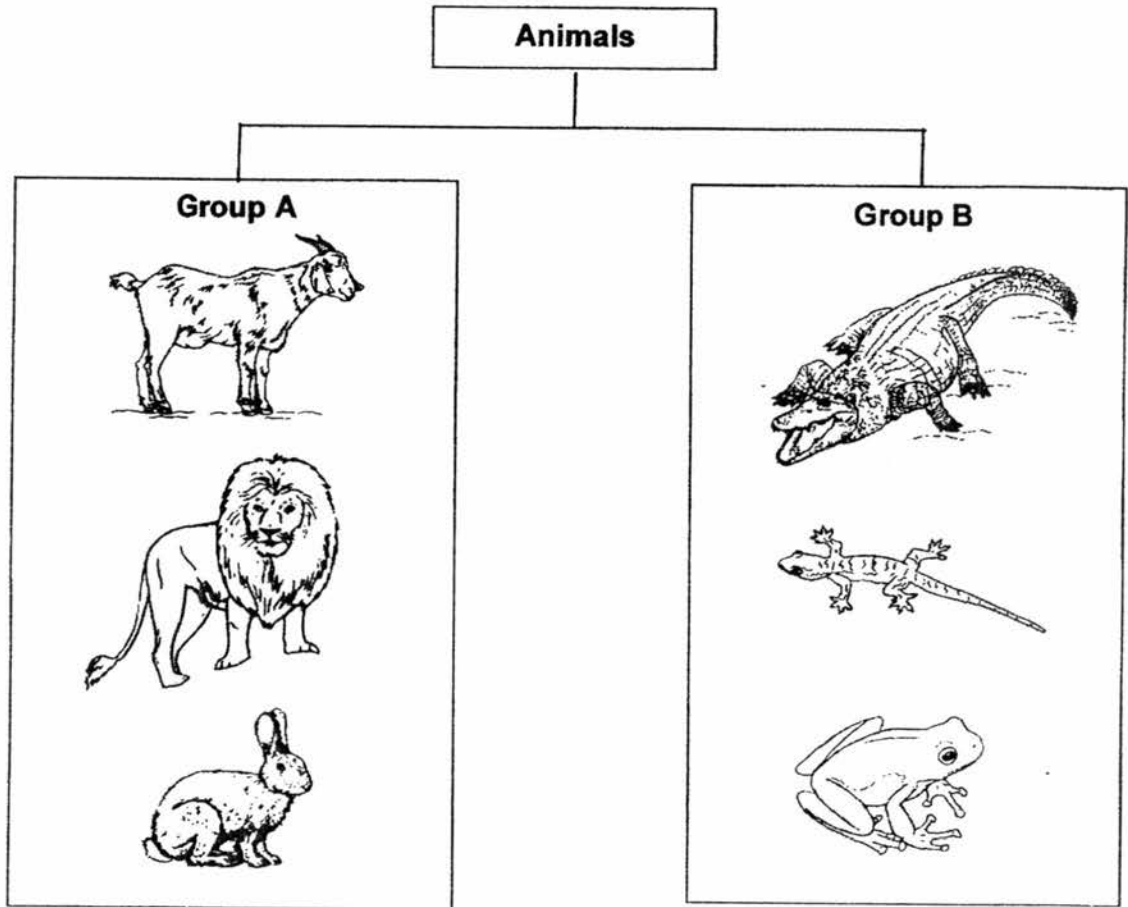
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Score	
	3



32. The classification chart below shows how some animals are grouped.



(a) Based on what you can observe from the pictures above, state one physical characteristic that the animals in Group A and Group B have in common. [1]

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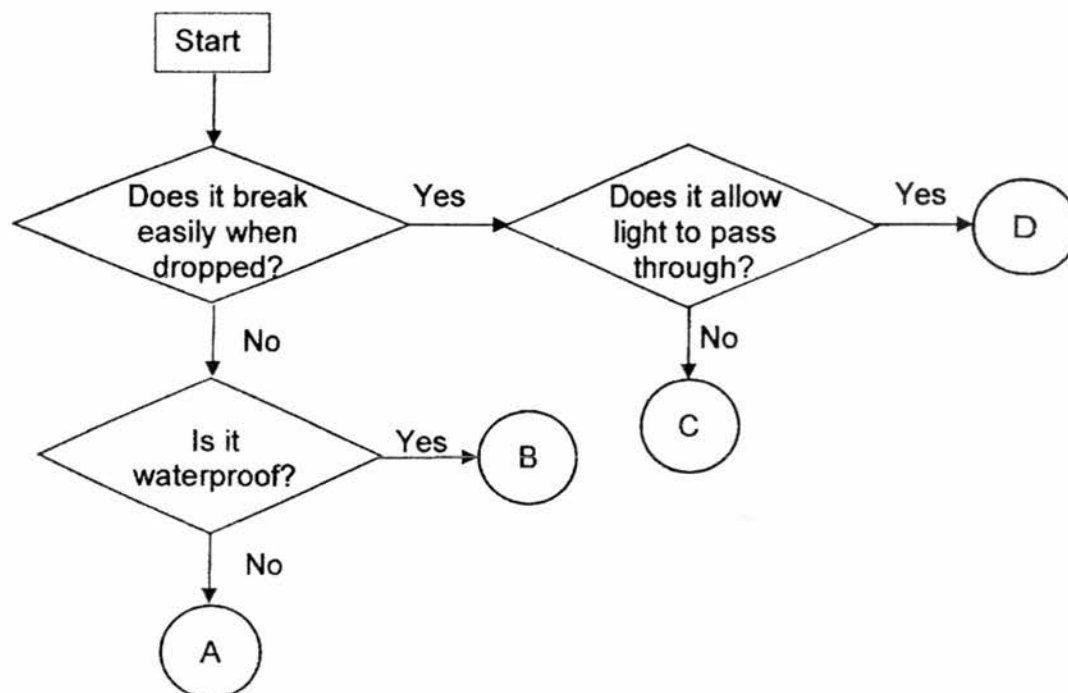
(b) State one difference between the animals in Group A and the animals in Group B. [1]

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Score	2
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33. Study the flow chart below carefully.



(a) Based on the flow chart above, state two properties of object B. [2]

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(b) Based on the flow chart above, state one difference between object A and object D. [1]

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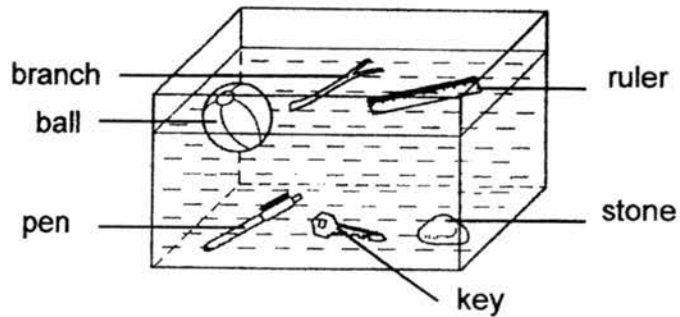
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(c) What material can object C be made of? [1]

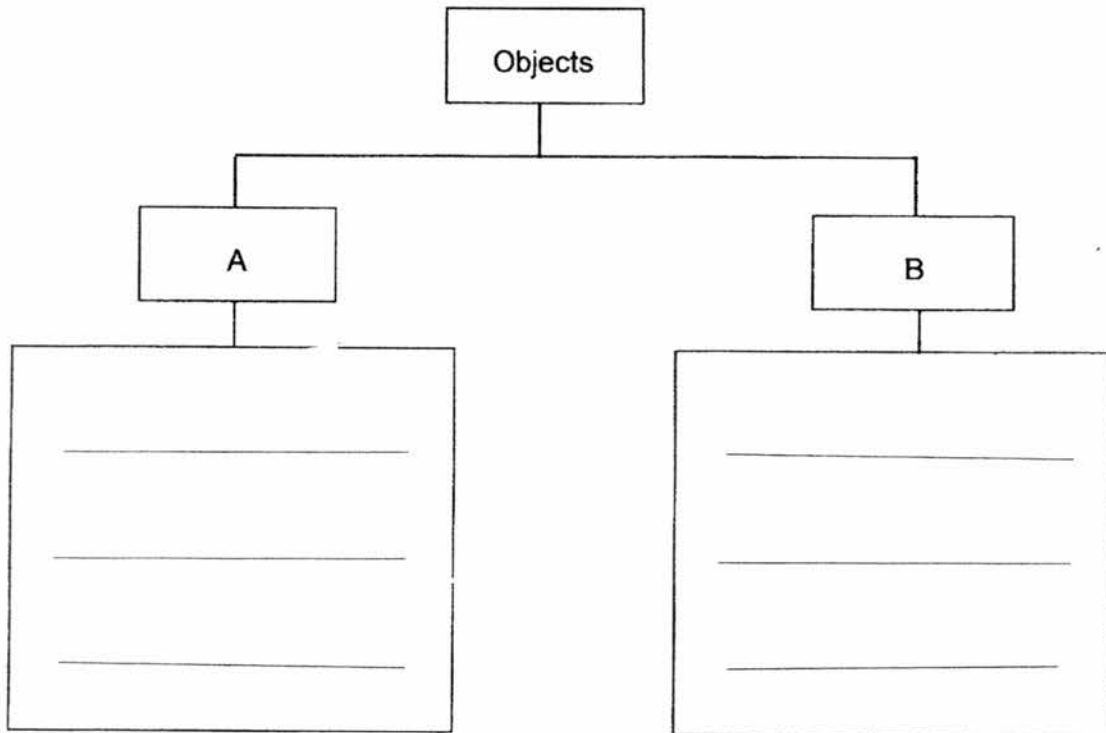
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Score	4
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34. Six objects were placed at the bottom of a tank of water at the start of an experiment. The diagram below shows the positions of the objects after some time.



- (a) Based on the above experiment, classify the six objects into two groups in the table provided below. [2]



- (b) Give a suitable heading for A and B. [1]

Heading for A: \_\_\_\_\_

Heading for B: \_\_\_\_\_

~ End of Paper ~

Score	3
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## ANSWER KEY

**YEAR : 2017**  
**LEVEL : PRIMARY 3**  
**SCHOOL : NAN HUA PRIMARY SCHOOL**  
**SUBJECT : SCIENCE**  
**TERM : SA1**

### SECTION A (24 x2marks)

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

### SECTION B (32 marks)

Q25.

A millipede curls up when it is touched.  
 A tadpole becomes a frog.  
 A cat giving birth to a few kittens.  
 Plants dying during a drought.

- Living things can reproduce.
- Living things respond to changes.
- Living things need water to survive.
- Living things can grow.

Q26.a) Living things: Cockroach , Tree  
 Non-living things: Robot , School bus

b) Plants obtain food through photosynthesis while fungi obtain food from the thing it grows on.

Q27.a) Animal Y. It has feathers as a outer covering while Animal X and Z have hair as a outer covering.

b) Mammals

c) It has hair on its body and feeds its young with milk from their suckles.

Q28.a) W: Fabric X: Rubber Y: Metal Z: Wood

b) It is stiff and strong.

Q29.a) Material Q is waterproof but Material R is not.

b) i) P      ii) R

Q30.a) i) Living things can move by themselves.

ii) Living things respond to changes.

b) The lid is sealed, no air can enter the plastic container. Without air, living things will die, thus the snail would suffocate and die.

c) He should drill holes into the sealed lid for air to go in.

Q31.a) They both have scales as outer covering.

b) Animal A has fins but Animal B does not have fins.

c) They reproduce by laying eggs.

Q32.a) The animals in Group A and B both have four legs.

b) The animal in Group A gives birth to their young alive while the animals in Group B lay eggs.

Q33.a) It does not break easily when dropped and it is waterproof.

b) Object B breaks easily when dropped but Object A does not break easily when dropped.

c) Ceramic

Q34.a) A: Pen, Key, Stone

B: Ball, Branch, Ruler

b) Heading for A: Sink in water

Heading for B: Float in water

THE END