MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

31 OCTOBER 2017

BOOKLET A

NAME: _____ ( )

CLASS: Primary 3 ( )

24 Questions

48 Marks

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

DO NOT ÒPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

www.testpapersfree.com

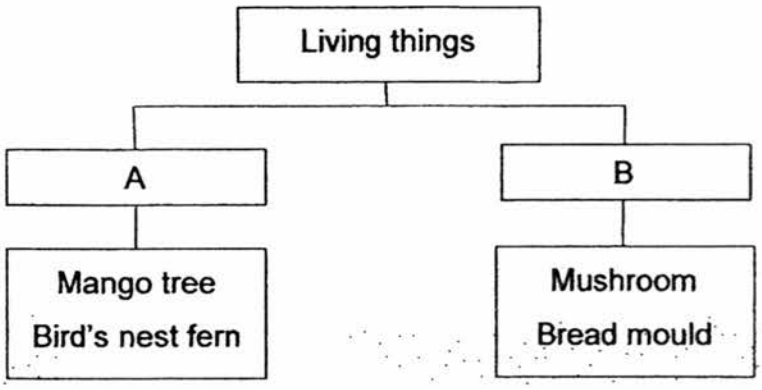
Downloaded from SingaKids.com

www.testpapersfree.com Downloaded from SingaKids.com

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). **(48 marks)**

---

1 Study the classification chart below.



Which of the following shows the correct headings for groups A and B?

	A	B
(1)	Flowering plants	Non-flowering plants
(2)	Plants	Fungi
(3)	Non-flowering plants	Flowering plants
(4)	Fungi	Plants

2 An animal has the following characteristics.

- Gives birth
- Has hair as outer-covering

What could this animal be?

(1) bird

(2) insect

(3) mammal

(4) amphibian

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

3 Sarah made some observations of an adult animal and listed them down.

- It lays eggs.
- It has two legs.
- It does not have fins and gills.
- It does not produce milk to feed its young.

Which of the following statements are definitely true?

A The animal is a reptile.
B The animal is not a fish.
C The animal is a mammal.
D The animal is not an insect.

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

4 Sean wants to find out if animals P and Q are insects.



Animal P



Animal Q

What should he do to find out?

A Measure the body length.
B Count the number of legs.
C Check if the animal has wings.
D Count the number of body parts.

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

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

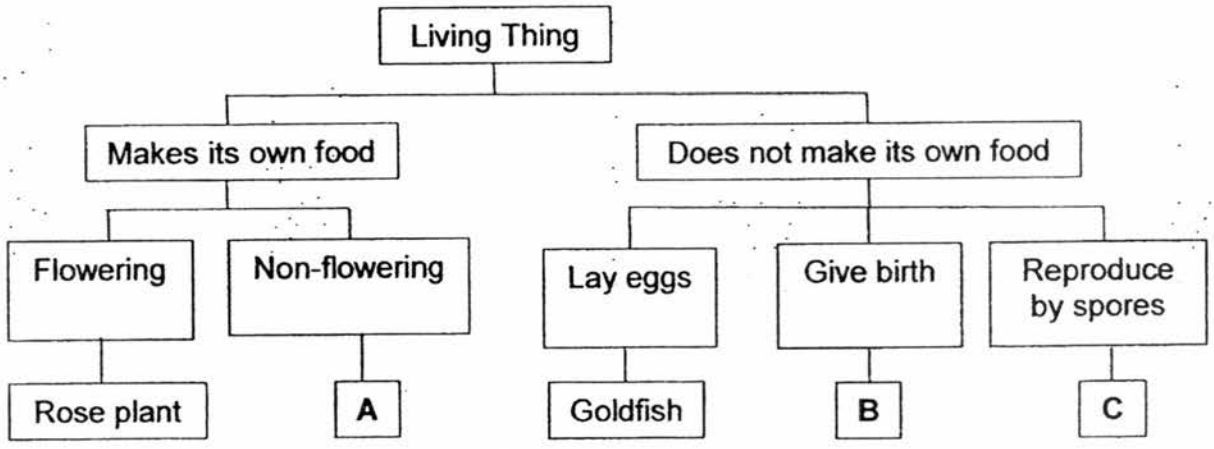
5 Study the classification table below.

Group X	Group Y
duck	cup
yeast	pencil
water	book
crocodile	toy car

Which of the following has been grouped **wrongly**?

(1) Cup
(2) Book
(3) Water
(4) Yeast

6 Study the classification chart below.



Which one of the following correctly shows what A, B and C could be?

	A	B	C
(1)	cat	fern	mushroom
(2)	fern	cat	mushroom
(3)	mushroom	fern	cat
(4)	fern	mushroom	cat

(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

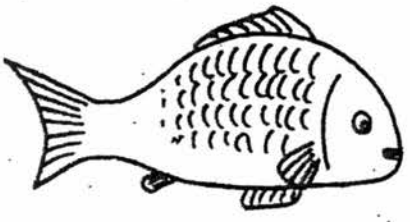
7 Four students made some comments about bacteria.

Alan: Bacteria are all harmful to human beings.
Bala: Bacteria need air, food and water to survive.
Carl: Bacteria cannot be seen with our naked eyes.
Dave: Bacteria do not respond to changes around them.

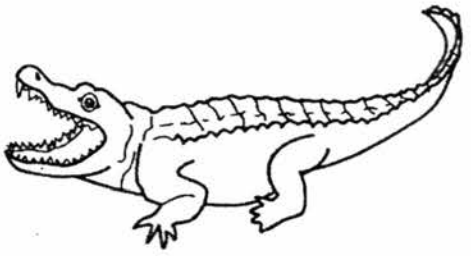
Who made correct statements about bacteria?

(1) Alan and Bala only
(2) Alan and Dave only
(3) Bala and Carl only
(4) Bala and Dave only

8 What is the similarity between a fish and a reptile?



Fish



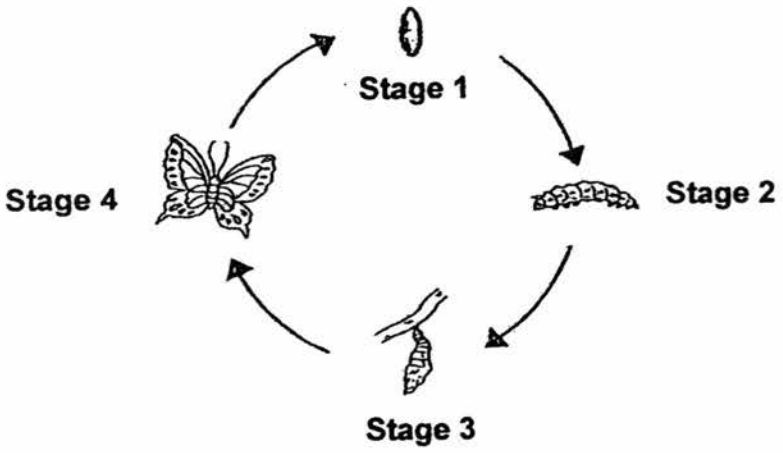
Reptile

(1) Both have fins.
(2) Both breathe using gills.
(3) Both give birth to their young alive.
(4) Both have scales as their outer-covering.

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

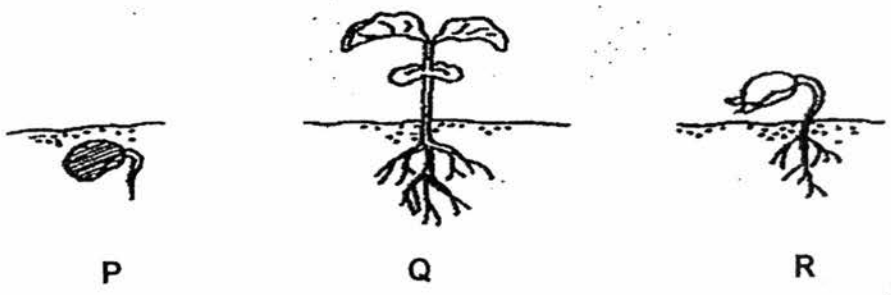
9 The diagram below shows the life cycle of a butterfly.



At which stage(s) of the life cycle of the butterfly is there little or no movement?

(1) Stage 3 only
(2) Stages 1 and 2 only
(3) Stages 1 and 3 only
(4) Stages 2 and 4 only

10 The pictures below shows the different stages of the growth of a flowering plant.



Which one of the following shows the correct order of a seed germinating and growing into a young plant.

(1) P → Q → R
(2) P → R → Q
(3) Q → P → R
(4) Q → R → P

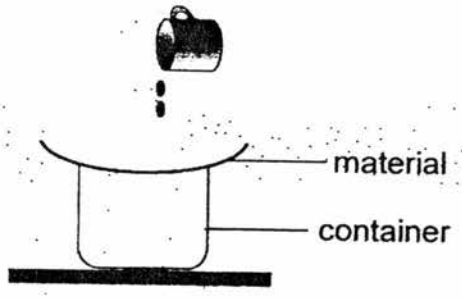
(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

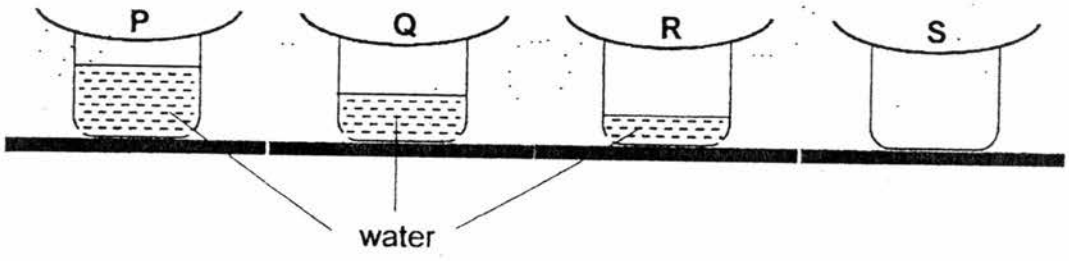
11 Johnny conducted an experiment to find out which materials, P, Q, R or S, is the most suitable for making Part X of an umbrella.



He poured 60 ml of water over each of the materials as shown below.



The diagrams below show the amount of water collected in each of the set-ups after 1 minute.



Based on his results, which material is most suitable for making part X of the umbrella?

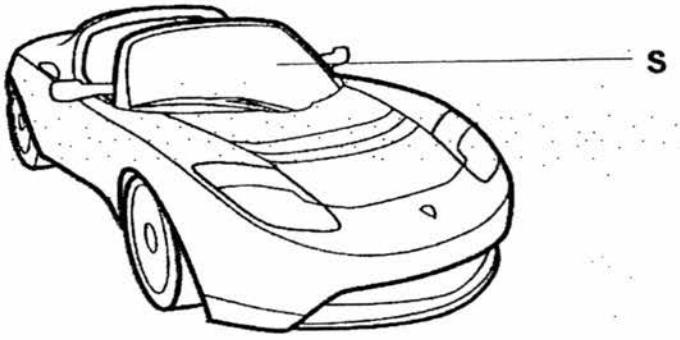
(1) Material P
(2) Material Q
(3) Material R
(4) Material S

(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

12 The table below shows the properties of 4 materials, A, B, C and D.

Material	Is it flexible?	Does it allow light to pass through?	Is it waterproof?
A	No	Yes	Yes
B	Yes	No	Yes
C	No	Yes	No
D	Yes	No	No



Based on the information given in the table above, which material is most suitable for making Part S of the car?

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

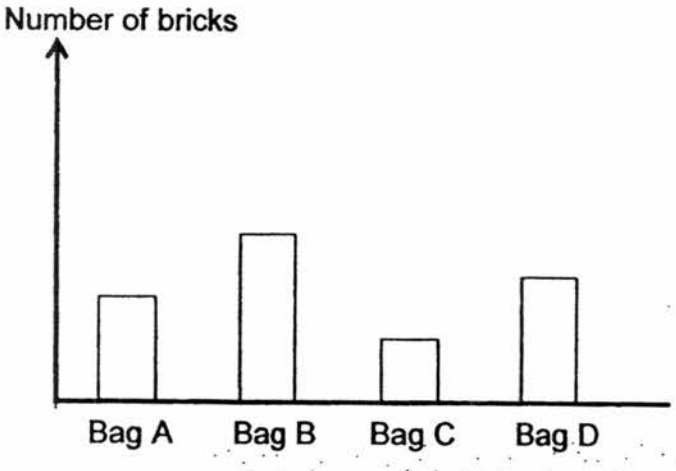
13 Which of the following shows the correct order when food moves through the human digestive system?

(1) Stomach → Small intestine → Large intestine
(2) Stomach → Large intestine → Small intestine
(3) Large intestine → Small intestine → Stomach
(4) Small intestine → Stomach → Large intestine

(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

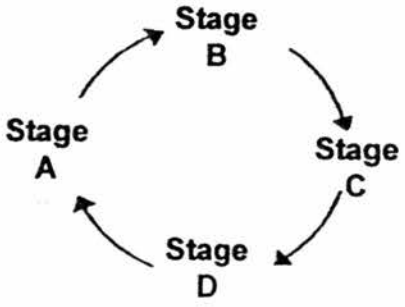
14 The graph below shows the most number of bricks that four different bags, A, B, C and D, could hold before breaking.



Which one of the following conclusions can be drawn from the graph?

(1) Bag B is weaker than Bag D.
(2) Bag A is stronger than Bag C.
(3) Bag A is more flexible than Bag D.
(4) Bag B will sink but Bag C will float.

15 The life cycle of mosquito is shown below.



If stage C represents the adult mosquito, what would stage A represent?

(1) Egg
(2) Pupa
(3) Larva
(4) Nymph

(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

16 Study the picture of the plant below.



Plant

Which of the following correctly identifies the functions of X and Y?

	X	Y
(1)	Makes food for the plant	Supports the branches and leaves
(2)	Makes food for the plant	Absorbs water from the soil
(3)	Supports the branches and leaves	Absorbs water from the soil
(4)	Absorbs water from the soil	Makes food for the plant

17 The table below provides information on the life cycle of four animals, E, F, G and H. A tick (✔) shows that it has the characteristics.

	E	F	G	H
Moults during one of the stages	✔	✔		✔
Young looks like its adult		✔	✔	
Has a four stage life cycle	✔		✔	

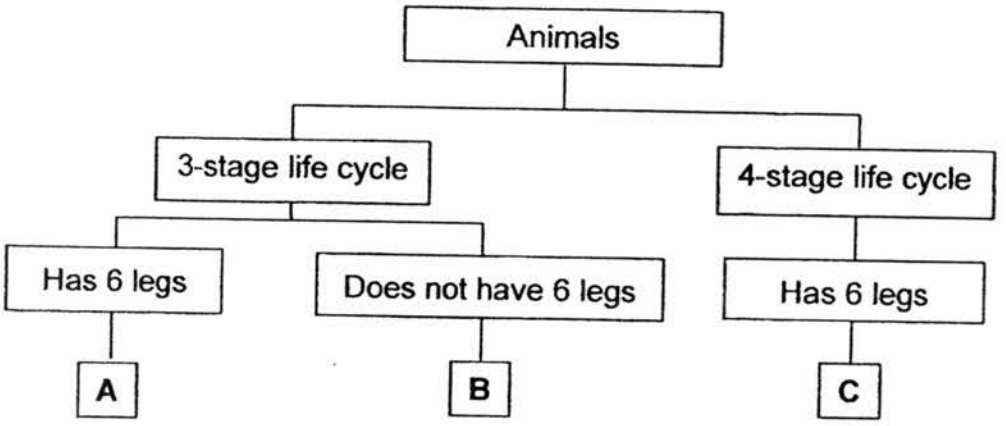
Which one of the following animals is most likely a butterfly?

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

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

18 Study the classification chart below.



Which of the following best represents A, B and C?

	A	B	C
(1)	grasshopper	frog	mosquito
(2)	human	beetle	butterfly
(3)	frog	butterfly	mosquito
(4)	beetle	human	grasshopper

19 Sandy spotted a slug in the Science garden and noticed that it does not have a fixed body shape.



slug

Based on her observation, which of the following body system does the slug not have?

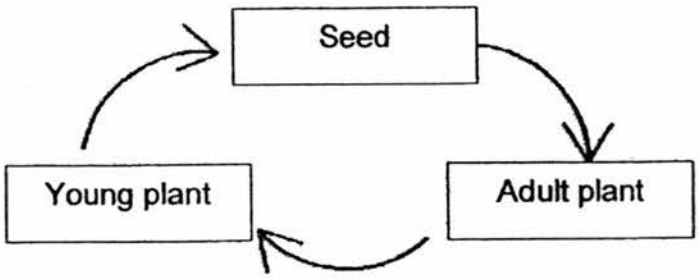
(1) Skeletal system
(2) Muscular system
(3) Digestive system
(4) Circulatory system

(Go on to the next page)

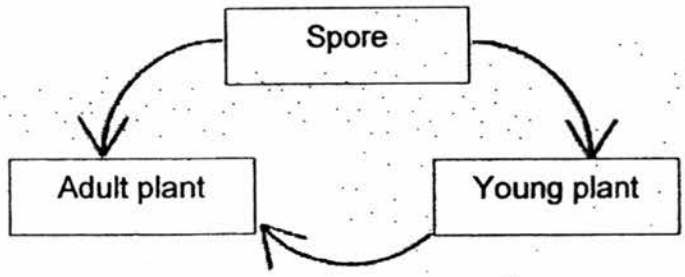
www.testpapersfree.com
Downloaded from SingaKids.com

20 Which one of the following correctly shows the life cycle of a flowering plant?

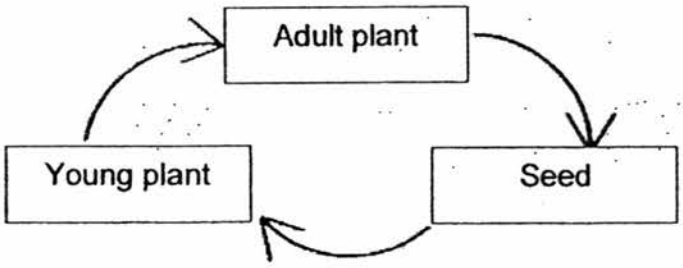
(1)



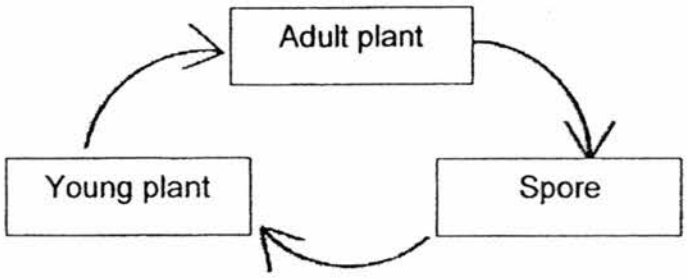
(2)



(3)



(4)



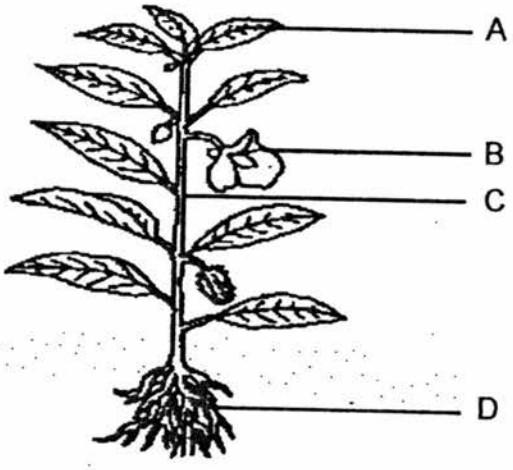
(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

21 Ali and Peter commented on the plant shown below.

Ali : It provides support for the plant.

Peter : It holds the leaves up so that they can get sunlight.



Which part, A, B, C or D, of the plant are they referring to?

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

22 Which of the following statements about the stomach are true?

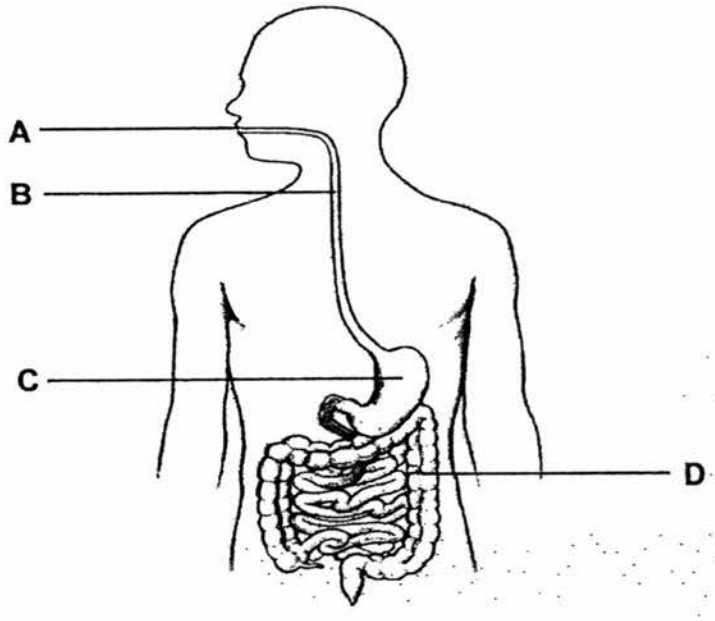
A The stomach produces digestive juices.
B Food is completely digested in the stomach.
C The stomach churns and breaks down food.
D Digested food moves from the stomach to the small intestine.

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

(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

23 The diagram below shows the human digestive system.



Part _____ is where digestion begins.

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

24 Which one of the following parts of the digestive system does **NOT** match its function?

	Parts	Function
(1)	Gullet	Moves food down into the stomach
(2)	Mouth	Breaks down food into smaller pieces
(3)	Stomach	Mixes food with digestive juices
(4)	Large intestine	Absorbs digested food into the blood

- End of Booklet A-

(Go on to booklet B)

www.testpapersfree.com
Downloaded from SingaKids.com

www.testpapersfree.com Downloaded from SingaKids.com

MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

31 OCTOBER 2017

BOOKLET B

NAME: _____ ( )

CLASS: Primary 3 ( )

10 Questions

32 Marks

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

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

BOOKLET A:	**/ 48**
BOOKLET B:	**/ 32**
TOTAL:	**/ 80**

PARENT'S SIGNATURE: _____

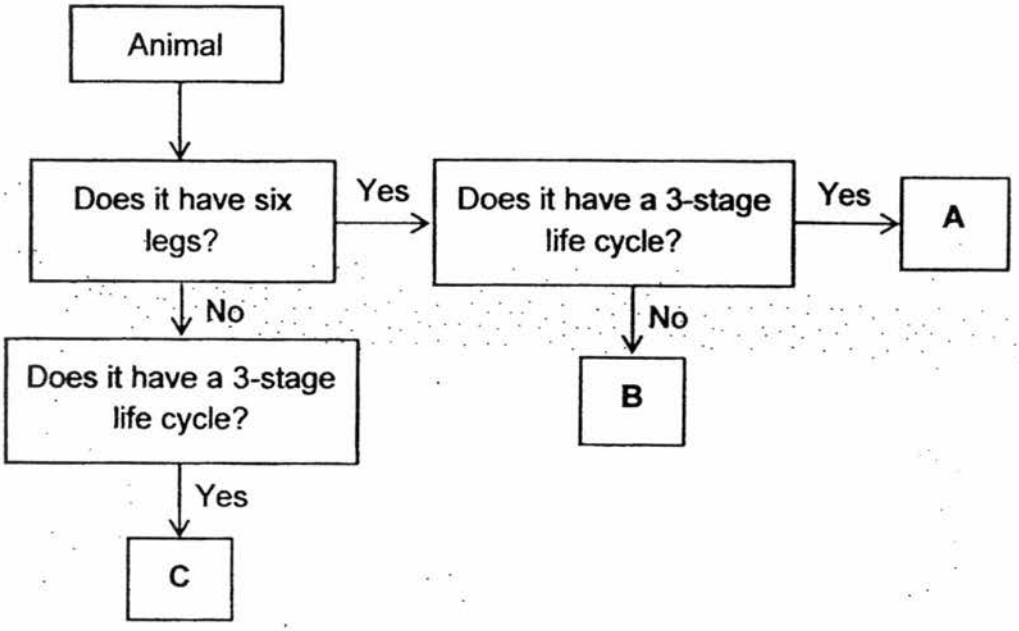
www.testpapersfree.com Downloaded from SingaKids.com

For questions 25 to 34, write your answers in this booklet. The number of marks available is shown in brackets [ ] at the end of each question or part question.

(32 marks)

---

25 The flowchart below describes three different animals, A, B and C.



(a) State the characteristics of animal B. [1]

_____

_____

(b) Based on the flowchart, state one similarity and one difference between animals A and C. [2]

Similarity: _____

_____

Difference: _____

_____

	3

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

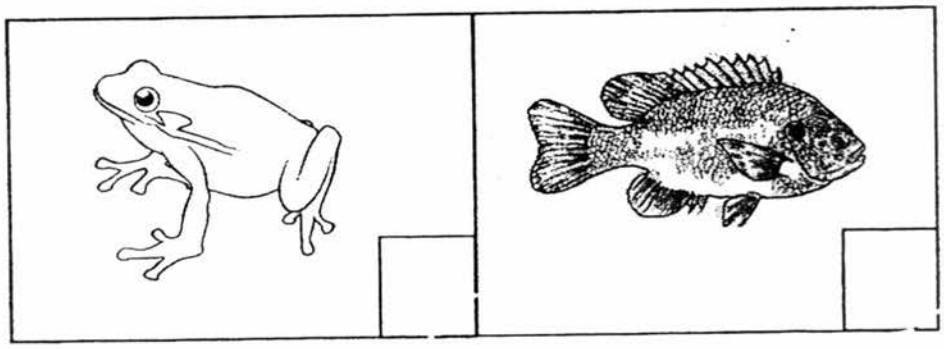
26 Study the table below and use the information to answer the questions below.

	Has scales	Has legs	Can swim	Breathe through gills	Lays Eggs
Animal X	✓		✓	✓	✓
Animal Y		✓	✓		✓

(a) State the similarities between animals X and Y. [1]

(b) In terms of breathing method, how are animals X and Y different? [1]

(c) Match animals X and Y to the animals below by writing 'X' or 'Y' in each box. [1]



	3

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

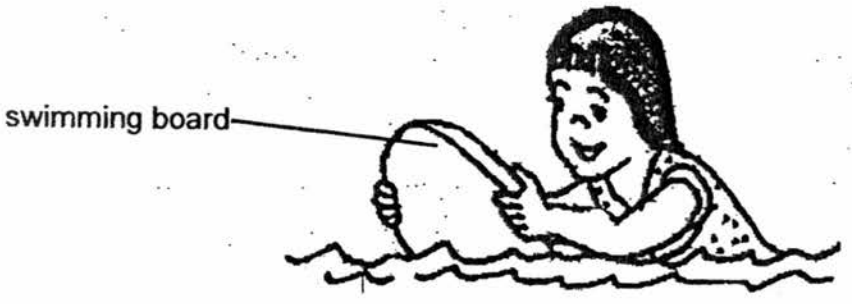
27 Billy conducted some tests to find out the properties of materials P, Q, R and S. The results of the tests are shown in the table below.

Description	Material			
	P	Q	R	S
Bends easily without breaking	No	Yes	No	Yes
Allows water to pass through	No	No	No	No
Floats on water	Yes	No	No	No

(a) State a property that is the same among materials P, Q, R and S. [1]

_____

(b) A swimming board is used to help beginners to stay afloat.



(i) Which material, P, Q, R or S, is the most suitable for making the swimming board? [1]

_____

(ii) Explain your choice in (i). [2]

_____

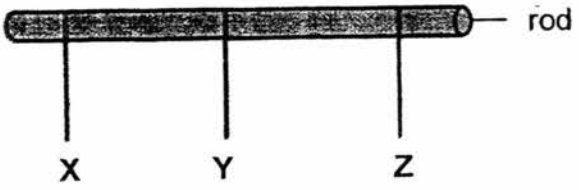
_____

	4

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

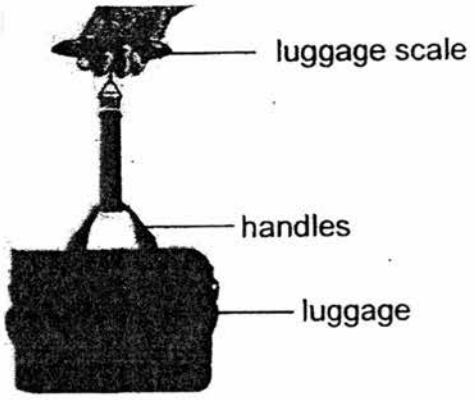
28 Doreen tied 3 different strings, X, Y and Z, onto a rod as shown below. She hung 100 g cubes onto each string, one at a time, until the strings broke.



The table below shows the results of her experiment.

String	Number of cubes added till the string broke
X	4
Y	7
Z	3

The picture shows a luggage scale being used. It measures the weight of the luggage. Part B is a strap that loops around the handles of the luggage.





enlarged picture of the luggage scale

(a) Which string, X, Y or Z, is most suitable to make part B of the luggage scale? [1]

_____

(b) Give a reason for your answer in (a). [1]

_____

(c) Other than the property tested by Doreen, state another important property of the string that makes it suitable to make part B of the luggage scale. [1]

_____

	3

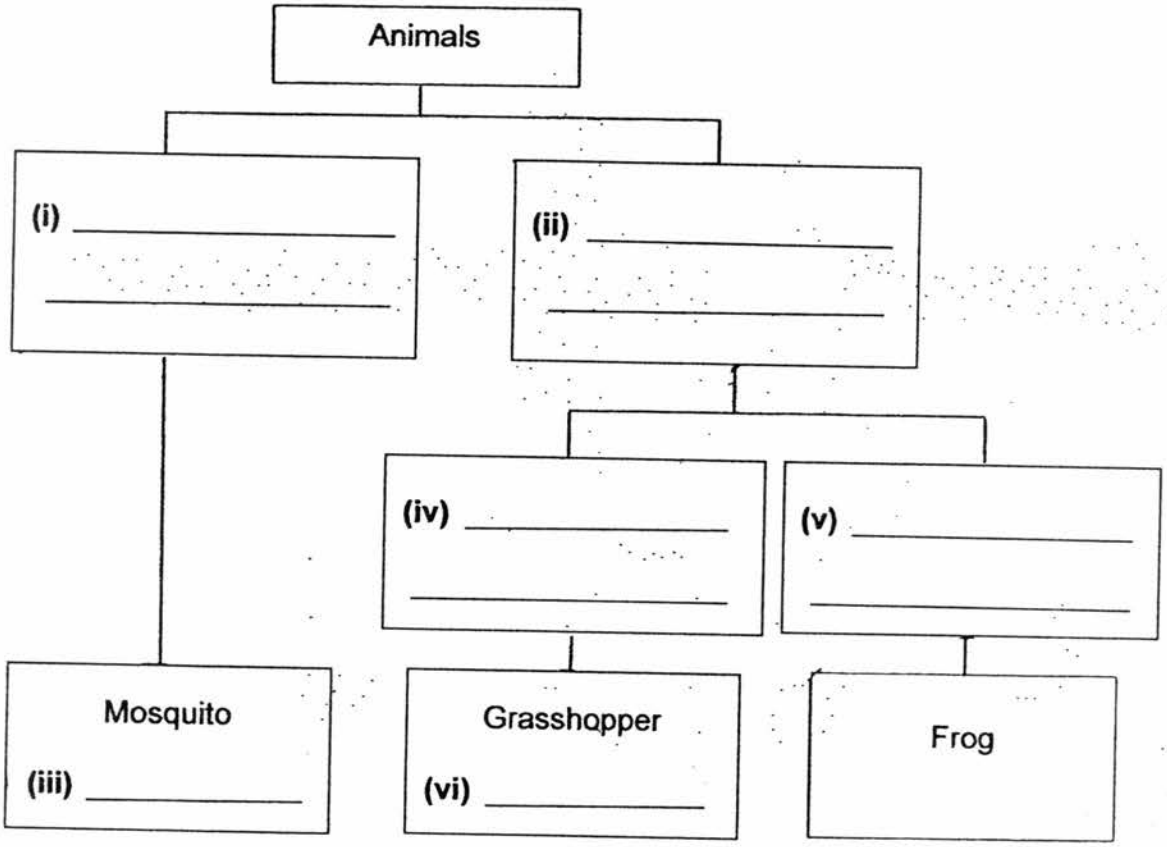
(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

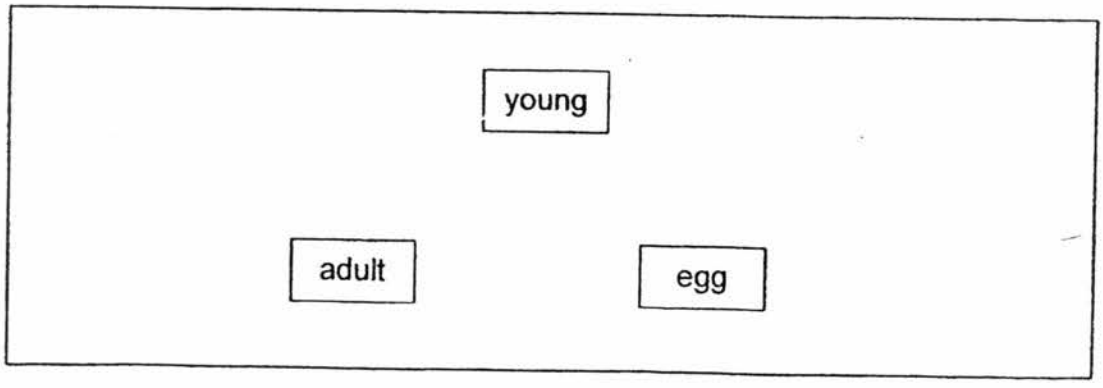
29 June classified some animals based on their life cycles.

(a) Complete the classification chart below using the helping words provided. [3]

3-stage life cycle	young looks like its adult	cockroach
4-stage life cycle	young does not look like its adult	beetle



(b) Draw arrows (→) in the diagram below to complete the life cycle of an animal with a 3-stage life cycle. [1]

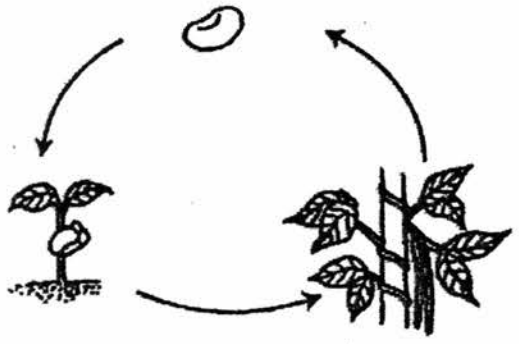


4

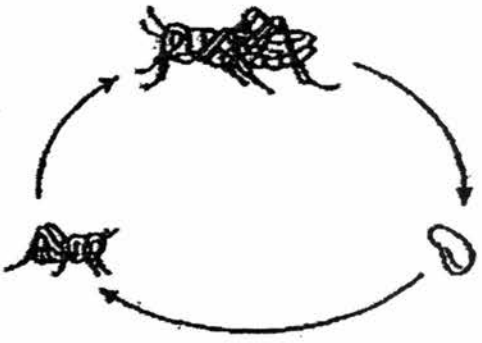
(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

30 Study the life cycles shown below carefully.



Life cycle of plant X



Life cycle of animal Z

(a) State one similarity between the life cycles of plant X and animal Z. [1]

_____

_____

(b) State two characteristics of living things that can be observed from both the life cycles shown above. [2]

Characteristic 1:

_____

_____

Characteristic 2:

_____

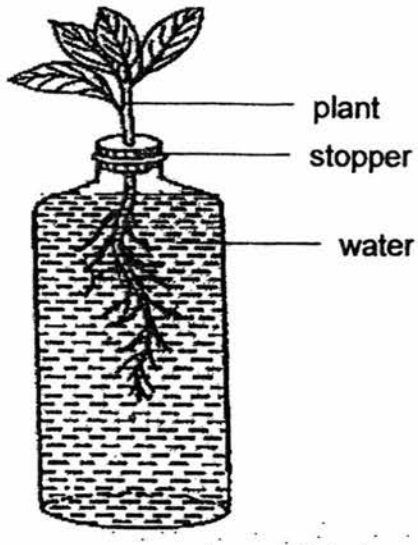
_____

	3

(Go on to the next page)

www.testpapersfree.com Downloaded from SingaKids.com

31 John conducted an experiment as shown below.



He observed the set-up 4 days later.

(a) Will the the amount of water increase, decrease or remain the same after 4 days? [1]

_____

(b) Give a reason for your answer in (a). [1]

_____

_____

	2

(Go on to the next page)

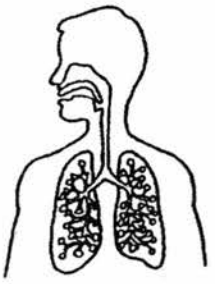
www.testpapersfree.com

Downloaded from SingaKids.com

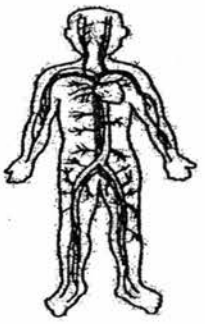
32 The following diagram shows 4 different human systems, A, B, C and D.



System A



System B



System C



System D

(a) Put a tick (✔) in the appropriate boxes [2]

	Statements	True	False
(i)	System A keeps the body upright.		
(ii)	System B breaks down food into simpler substances.		
(iii)	Systems A and D work together to help us to move around.		
(iv)	System C transports digested food and other substances around our body.		

(b) Identify systems B and D. [2]

System B: _____

System D: _____

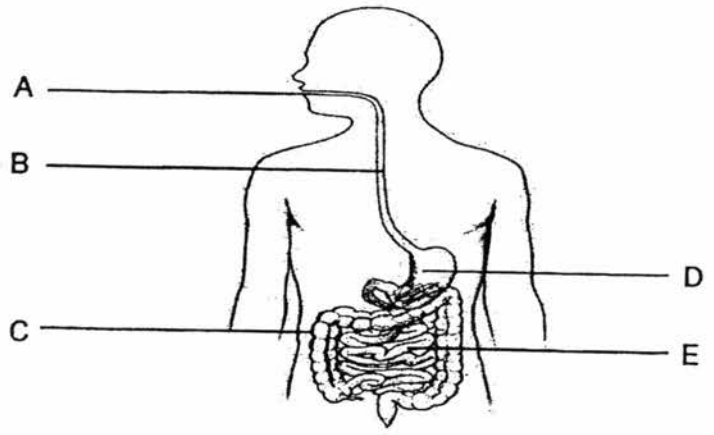
	4

(Go on to the next page)

www.testpapersfree.com

Downloaded from SingaKids.com

33 The diagram below shows the human digestive system.



(a) Which part(s), A, B, C, D, and E, do(es) **not** produce digestive juices? [1]

_____

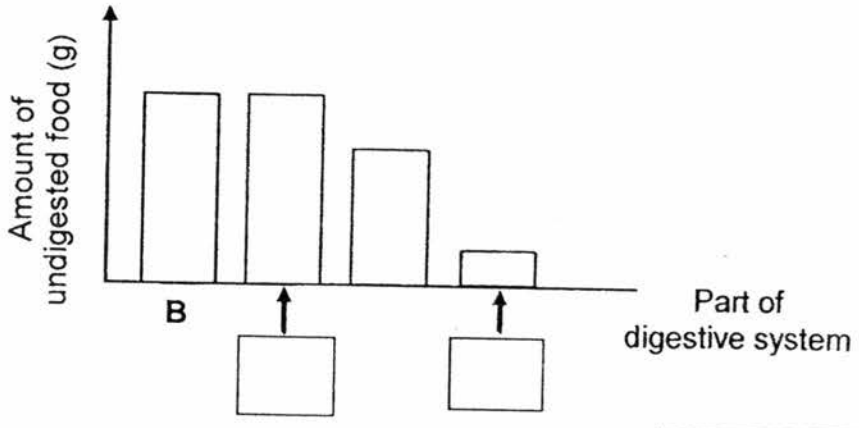
(b) State the substances that are absorbed at C and E. [1]

Substance absorbed at C: _____

Substance absorbed at E: _____

(c) The bar graph below shows the amount of undigested food entering different parts of the digestive system.

Write A, C, D or E in the boxes to show which parts of the digestive system the graph represents. [1]



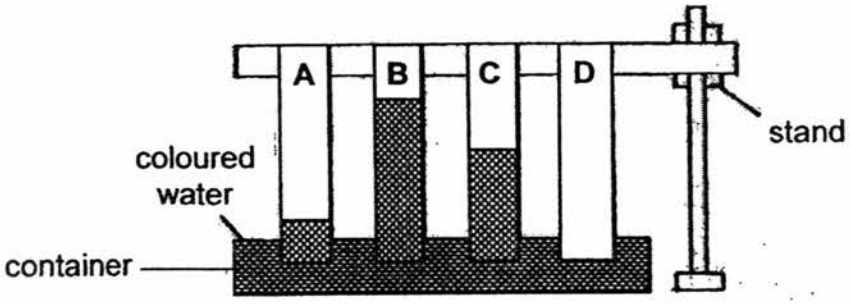
3

(Go on to the next page)

www.testpapersfree.com
Downloaded from SingaKids.com

34 Josh placed 4 different materials of equal size, length and thickness into a container of coloured water.

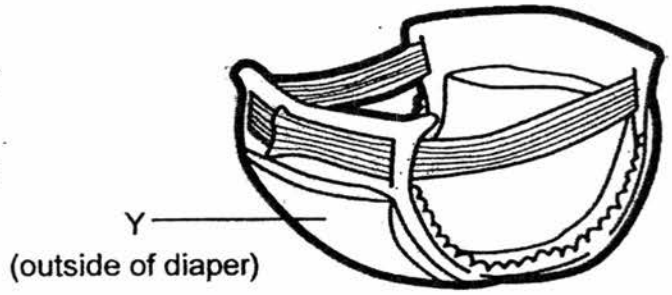
The diagram below shows what he observed 1 minute after the materials were placed in the container.



(a) Arrange materials A, B, C and D, starting from the most absorbent. [1]



The picture below shows a diaper. Part Y is the outside of the diaper which prevents urine from leaking out.



(b) Which material, A, B, C or D, is the most suitable for making part Y? [1]

_____

(c) Give a reason for your answer in (b). [1]

_____

-End of Booklet B-

	3

www.testpapersfree.com
Downloaded from SingaKids.com

www.testpapersfree.com

Downloaded from SingaKids.com

EXAM PAPER 2017
LEVEL : PRIMARY 3
SCHOOL : Maris Stella High School (Primary)
SUBJECT : SCIENCE
TERM : SA2

Booklet A

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

Booklet B

Q25 (a) Animal B has six legs and does not have a three-stage life cycle.
(b) Similarity: Both Animal A and C have a three-stage life cycle.
Difference: Animal A has six legs but Animal C does not.

Q26 (a) Both X and Y can swim and lay eggs.
(b) Animal X breathe through gills but Animal Y does not.
(c) Y, X

Q27 (a) All P, Q, R and S are absorbent.
(b)(i) Material P
(ii) P is the only that can float.

Q28 (a) String Y.
(b) String Y is the strongest of the three strings.
(c) The string also needs to be flexible.

Q29 (a)(i) 4 stage life cycle.
(ii) 3 stage life cycle.
(iii) Beetle
(iv) Young look like it's adult.
(v) Young does not look like it's adult.
(vi) Cockroach
(b) scan

Q30 (a) Both has a three-stage life cycle.
(b) Characteristic 1: Living things grow.
Characteristic 2: Living things reproduce.

Q31 (a) The amount of water will decrease.
(b) The roots take in the water to make food.

Q32 (a) (i) True
(ii) False
(iii) True
(iv) True
(b) System B: Respiratory system
System D: Muscular system

Delivery: 98518226, 81612644, 93...

www.testpapersfree.com
Downloaded from SingaKids.com

Q33 (a) B and C.
(b) Substance absorbed at C: Water.
Substance absorbed at E: Digested food.
(c) D, C

Q34 (a) B, C, A, D
(b) Material D
(c) Material B absorbs the most water.

2 2ND ,

www.testpapersfree.com
Downloaded from SingaKids.com