METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887

CONTINUAL ASSESSMENT 2013
PRIMARY 4
SCIENCE

BOOKLET A

Total Time : 1 h

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Name: _____ ( )

Class: Primary 4 _____

Date: 7 March 2013

This booklet consists of 11 printed pages including this page.

For each question from 1 – 15, 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.

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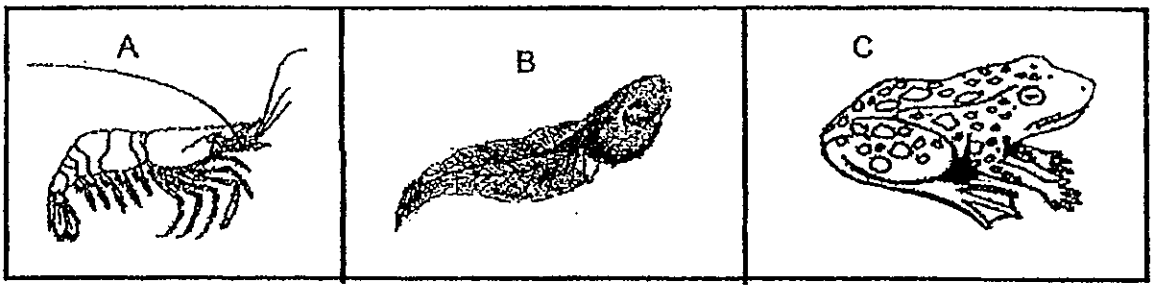
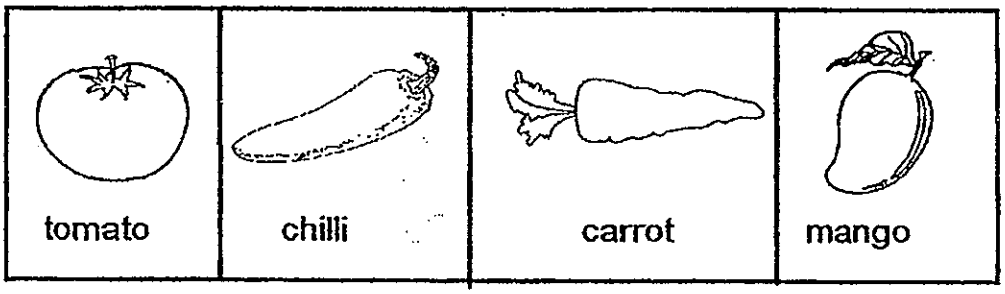
1. Which of these animals have similar breathing parts?



(1) A and B only
(2) A and C only
(3) B and C only
(4) All of the above

2. Look at the pictures below. Which of the following is not a fruit?



(1) Chilli
(2) Carrot
(3) Mango
(4) Tomato

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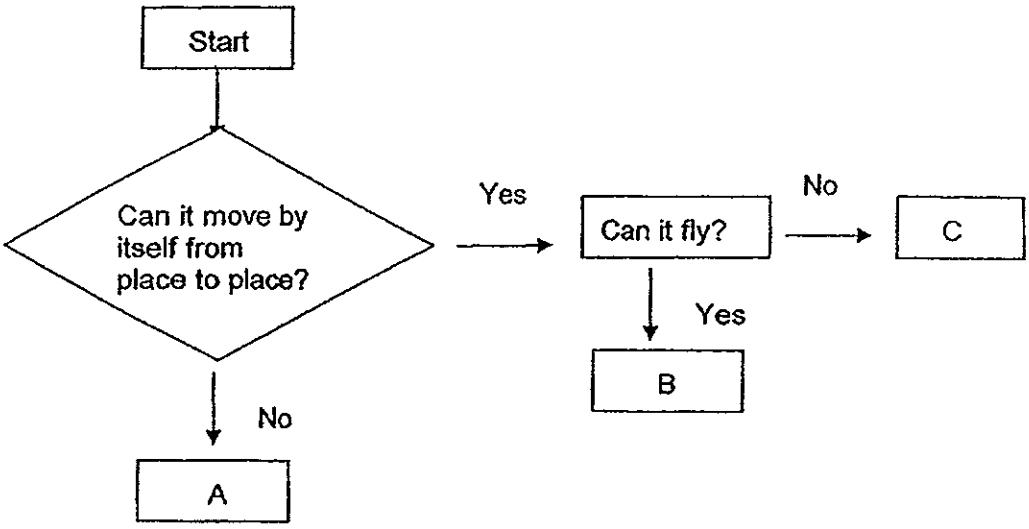
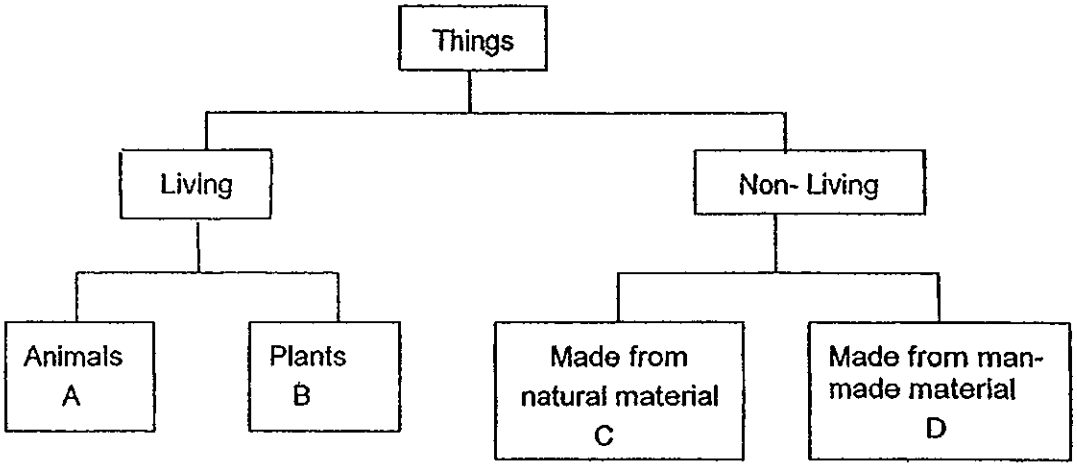
5. Study the flow chart below.



Which of the following correctly describes organisms A, B and C?

	A	B	C
(1)	moss	bat	lizard
(2)	maggot	mosquito	beetle
(3)	hibiscus	sparrow	bee
(4)	mushroom	angsana	balsam

3. Study the classification table below carefully.



Which of the following would best be represented in the above classification.

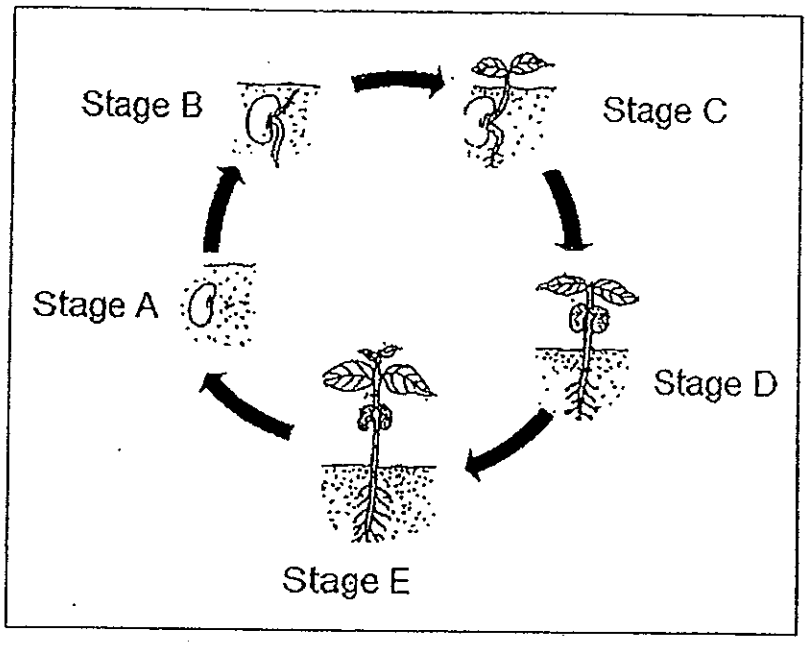
	A	B	C	D
(1)	fly	moss	eraser	porcelain bowl
(2)	butterfly	mushroom	feather duster	metal spoon
(3)	squirrel	fern	nylon string	cotton dress
(4)	penguin	rose	wooden ruler	plastic cup

4. Fungi and bacteria are similar in that they both _____.

A : are microganisms
B : reproduce from spores
C : are neither animals nor plants
D : can be harmful and useful to human

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

6. The diagram below shows the life cycle of a plant.



Which of the following statements are <u>true</u>?

A : Sunlight is not needed at Stage B.
B : Photosynthesis takes place at **only** at Stages C and D.
C : Stage A is not affected by what happens at Stage E.
D : The seed at Stage A needs air, water and warmth to reach Stage B.

(1) A and D only
(2) B and C only
(3) A, C and D only
(4) All of the above

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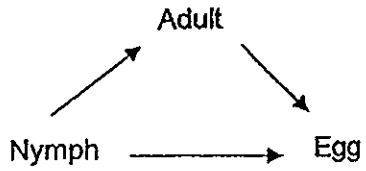
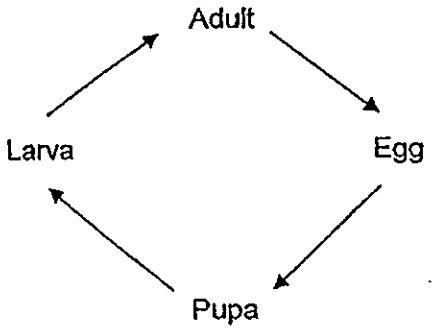
7. Which of the following shows the correct order of stages in the life cycle of an insect?

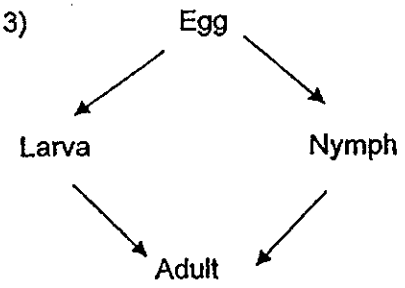
1)



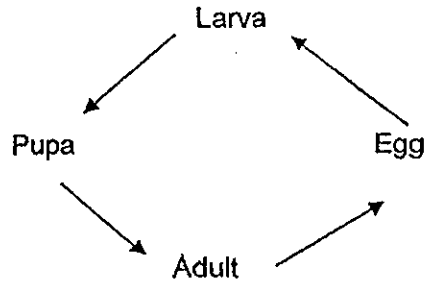
2)



3)



4)



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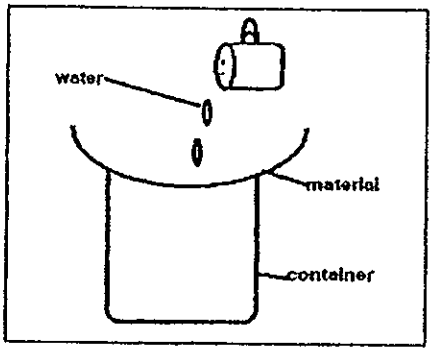
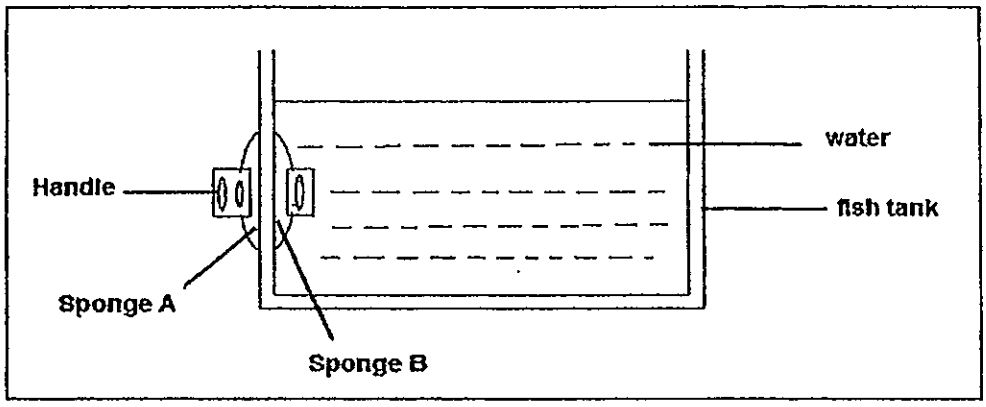
8. Jeremy wanted to choose a material to make an umbrella. He conducted an experiment to find out which material A, B, C or D is best suited for the making of the umbrella. He poured 60 ml of water over each of the materials as shown in the diagram and then measured the amount of water collected in the container after 1 minute.



Which material is best suited to make the umbrella?

	Material	Amount of water collected (ml)
(1)	A	30
(2)	B	0
(3)	C	10
(4)	D	40

9. Sam invented a device to clean both sides of the fish tank. As Sponge A is moved across the plastic fish tank, Sponge B also moved along too.



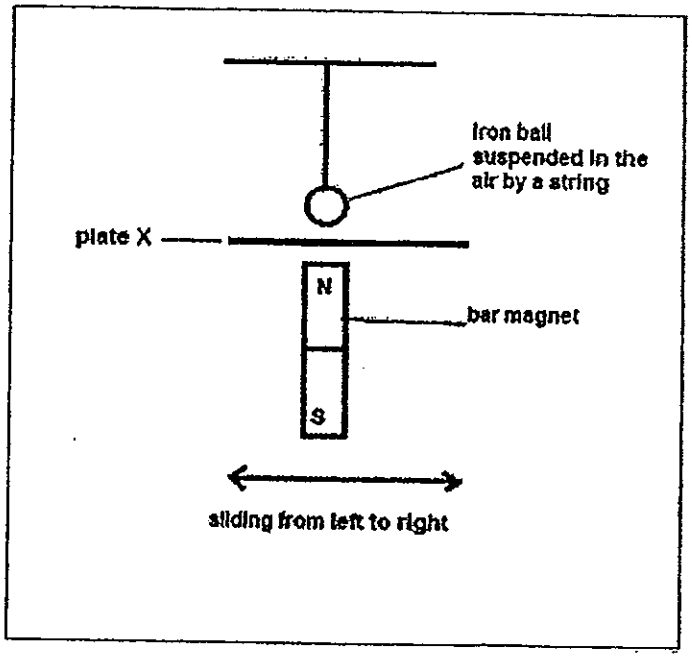
What characteristics of a magnet are applied here?

A : Like poles of a magnet repel each other.
B : Unlike poles of a magnet attract each other.
C : The poles of the magnet produce the maximum pull.
D : Plastics allow magnetism to pass through.

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

Go on to the next page

10. Study the set-up below. Plate X represents different types of materials. It was used to test the effects of sliding a strong bar magnet on the suspended iron ball as shown in the diagram below.



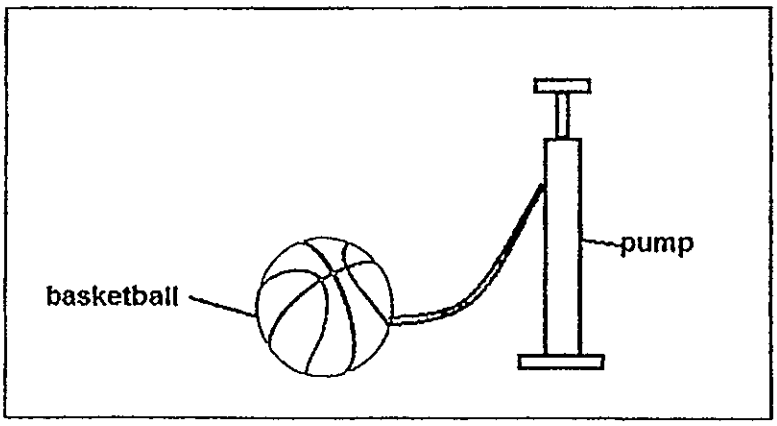
Which of the following observations are **true**?

Observation	Plate X	Effect of magnet on suspended iron ball
A	iron	did not move
B	steel	moved
C	glass	moved
D	cardboard	did not move

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

Go on to the next page

11. A basketball has a volume of 500cm³. An air pump is used to pump in 480 cm³ of air at the start of the day. Another 40 cm³ of air is pumped into the basketball at the end of the day.



What is the new volume of air inside the basketball?

(1) 480cm³
(2) 500 cm³
(3) 520 cm³
(4) 540 cm³

12. Zoe and Faye investigated the properties of P and Q and recorded their results in the table below. (Note: '√' means 'Yes' and 'x' means 'No'.)

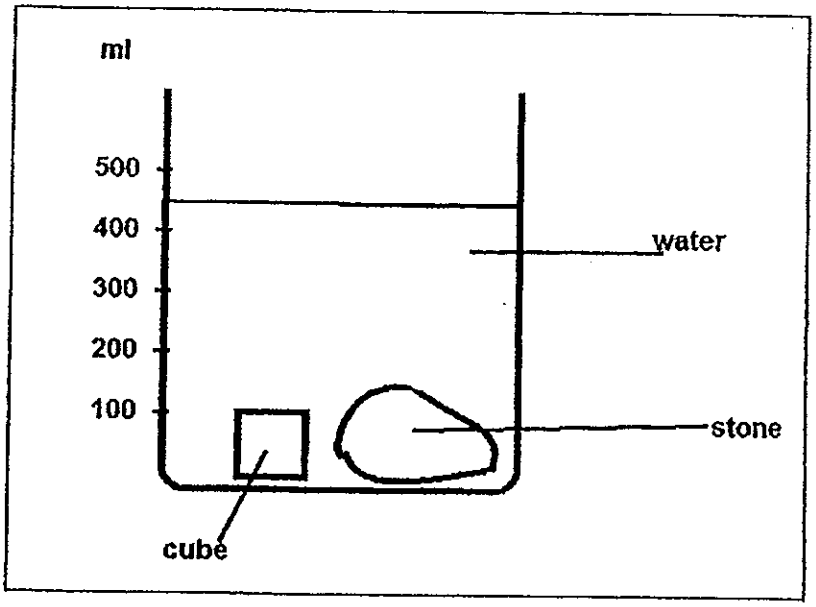
Property	P	Q
Definite volume	√	√
Definite shape	x	√
Transparent	√	x

What could P and Q be?

	P	Q
(1)	oxygen	water
(2)	water	eraser
(3)	oil	oxygen
(4)	air	milk

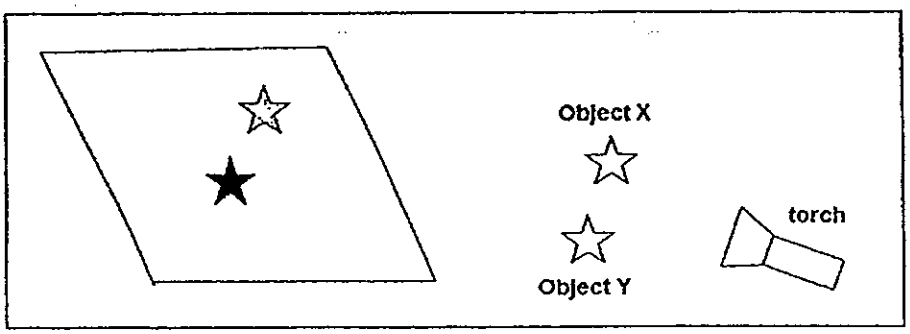
Go on to the next page

13. A cube of 50 cm^3 and a stone are placed into a beaker containing 300 ml of water. Which one of the following statements is <u>NOT</u> true?



(1) The water level is now more than 400 ml.
(2) The stone has a volume of 150 ml.
(3) The stone has a greater volume that the cube.
(4) The stone and the cube cause the water level to rise.

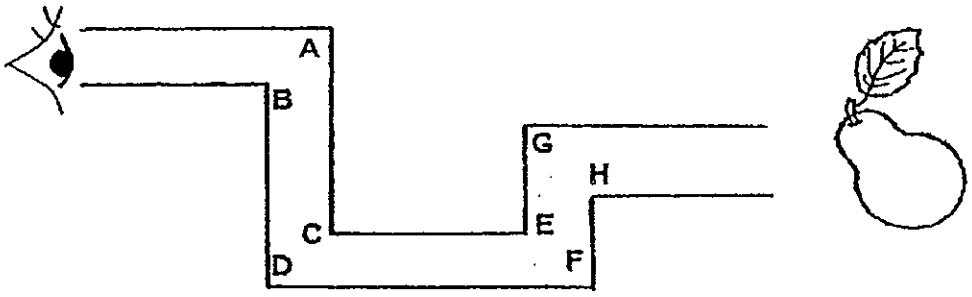
14. A torch was shone onto two objects, X and Y, as shown in the diagram below.



The shadow formed by Object X is much lighter than the one formed by Object Y. What are the likely materials that Object X and Object Y are made of?

	Object X	Object Y
(1)	styrofoam	frosted glass
(2)	frosted glass	copper
(3)	clear plastic	wood
(4)	aluminum	iron

15. Look at the diagram below.



In order for May to see the pear through the bent tube, she needs to place mirrors in it. At which point(s) should she place the mirrors?

(1) A, C, E, G
(2) A, D, F, G
(3) B, D, E, H
(4) A , D, F, H

END OF BOOKLET A

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887

CONTINUAL ASSESSMENT 2013
PRIMARY 4
SCIENCE

BOOKLET B

Total Time: 1 h

INSTRUCTIONS TO CANDIDATES

Answer all questions.
Write your answers in this booklet.

Name:_____( )

Class: Primary 4._____

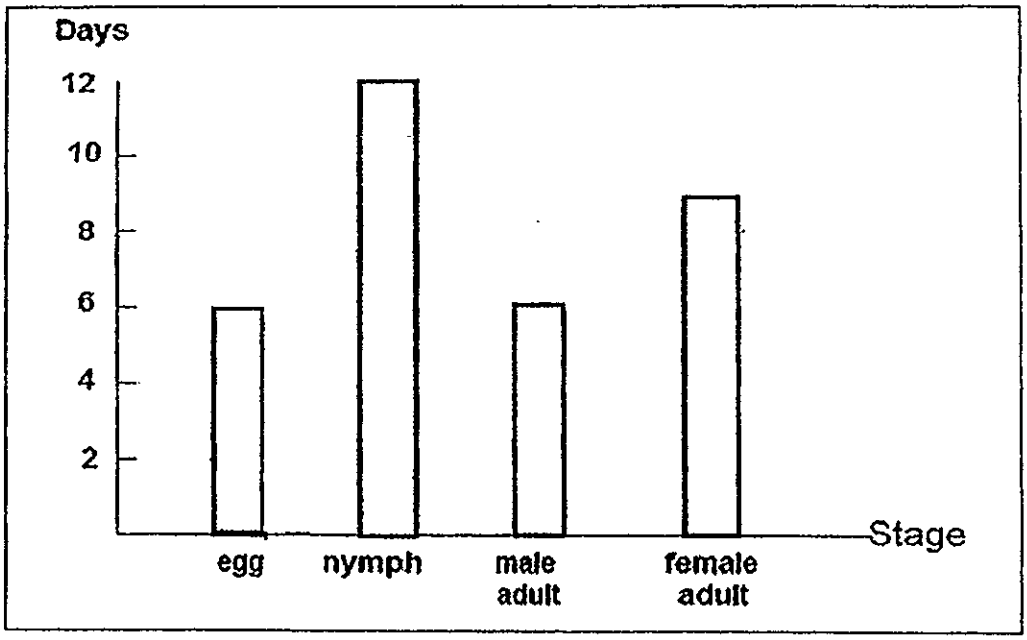
Date: 7 March 2013

Booklet A	**/ 30**
Booklet B	**/ 20**
TOTAL	**/ 50**

This booklet consists of 9 printed pages including this page.

For questions 16 – 24, write your answers in the blanks provided.

16. The graph below shows the number of days at each stage in the life cycle of an insect.



a) How many stages are there in the life cycle of this insect? (1m)

_____

b) Suggest a reason why the female lives longer than the male adult. (1 m)

_____

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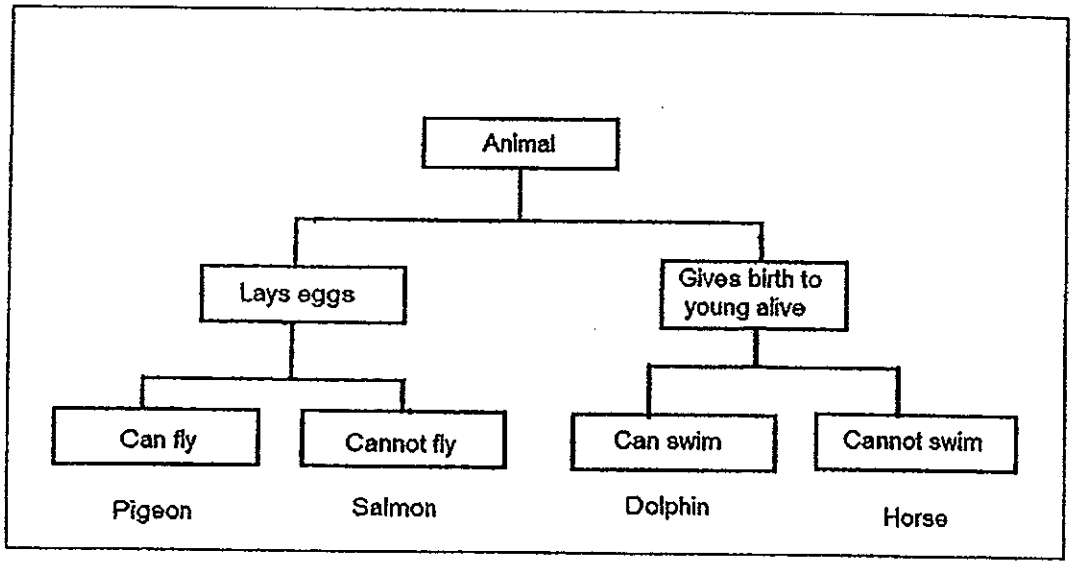
17. The table below shows how four animals are classified. Use the information provided to answer the questions.



a) State one difference between the salmon and horse. (1m)

_____

_____

b) A platypus is a mammal that lays eggs. It can swim but cannot fly. With which animal in the table would you classify a platypus? (½m)

_____

c) Which characteristic in the table describes a mammal? (½m)

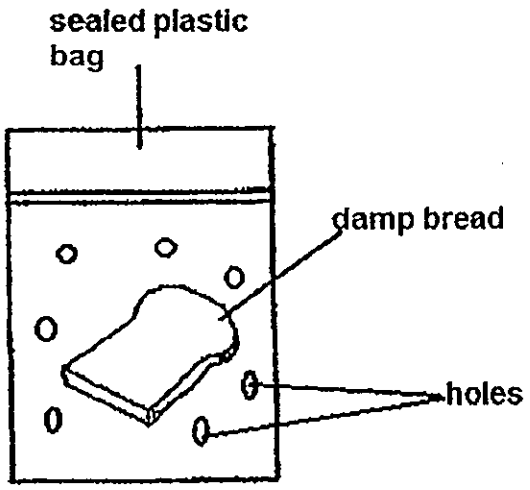
_____

d) In the table below, fill in the blanks (i) and (ii) with different words to show **another way** of classifying the four animals. (1m)

(i)		(ii)	
Feathers	**Scales**	**Live in water**	**Live on land**
Pigeon	Salmon	Dolphin	Horse

Go on to the next page

18. Benny placed a slice of damp bread into a plastic bag as shown below. He poked some holes on the plastic bag and left it inside a cupboard.



a) Why did he poke holes in the plastic bag? (1m)

_____

_____

b) What would likely happen to the bread after five days? (1m)

_____

_____

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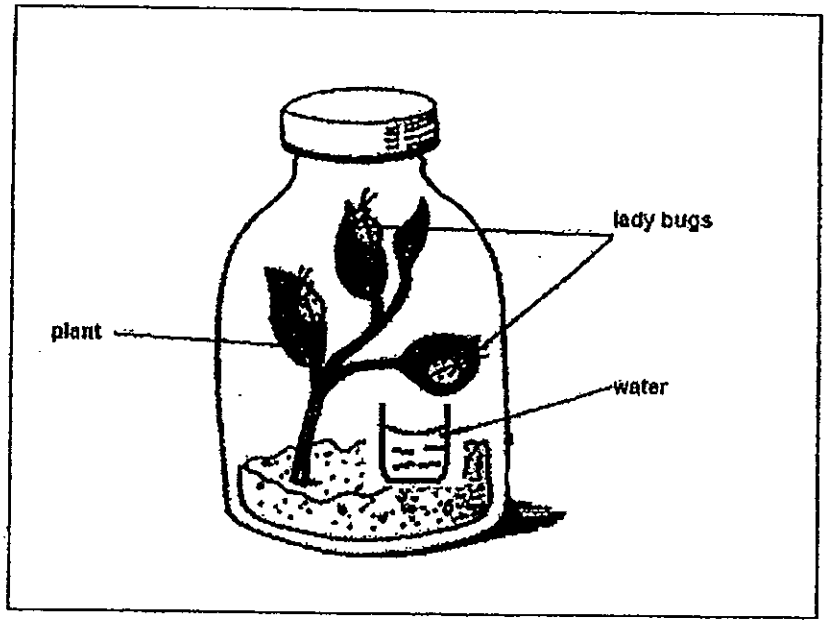
19. A few ladybirds were placed in a large enclosed glass jar with a potted plant. The plant had a few green leaves. A dish of water was placed inside the jar as shown in the diagram below.



a) What would likely happen to the ladybirds after a fortnight? (1m)

_____

_____

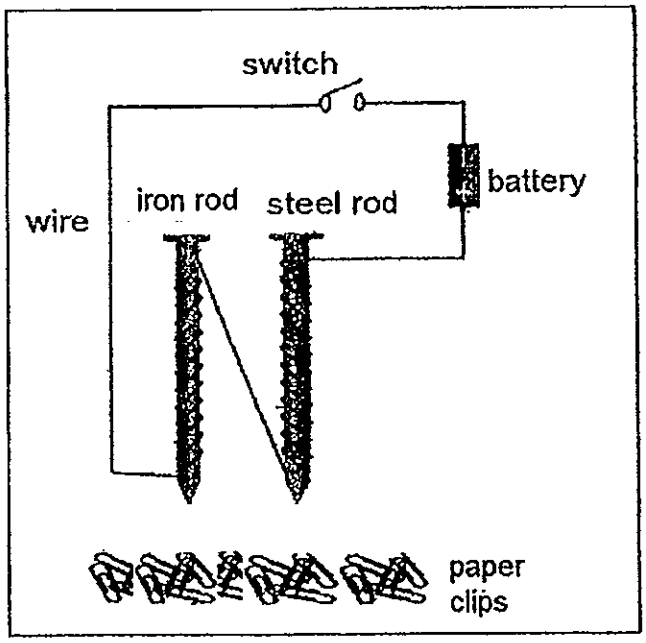
b) Suggest a reason for your answer in (a). (1m)

_____

_____

Go on to the next page

20. A similar length of wire was coiled around a similar sized iron rod and a steel rod. The ends of the wires were connected to an electrical circuit.



The two rods were placed 5cm above a pile of paper clips which were evenly spread on the table and when the circuit was closed, the number of paper clips attracted to each rod was shown below.

Number of tries	Iron rod	Steel rod
1st try	16	9
2nd try	14	10
3rd try	15	8

a) Based on the table above, what conclusion can be drawn about the iron rod and the steel rod? (1m)

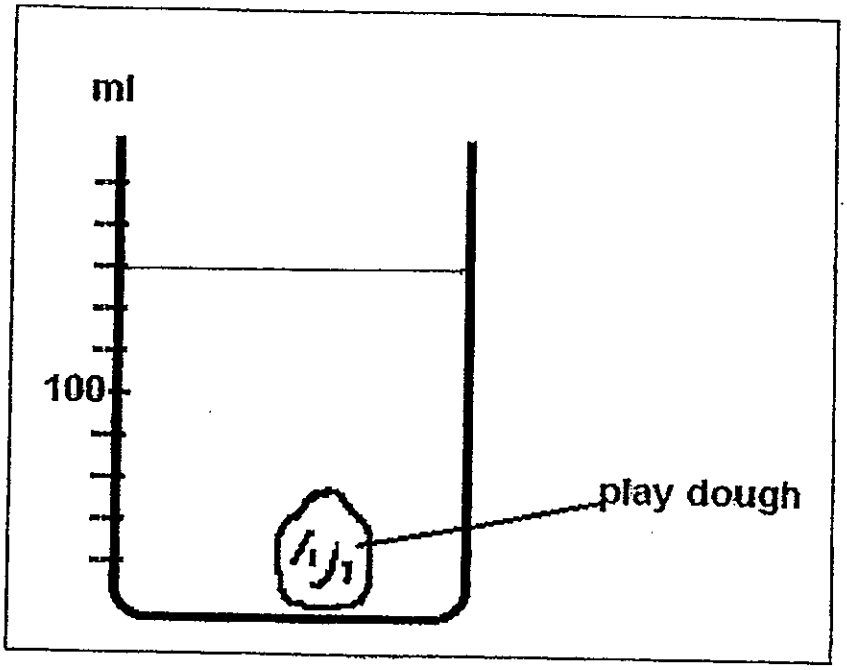
_____

b) Why was the experiment repeated three times? (1m)

_____

Go on to the next page

21. Elsie dropped a lump of play dough into a beaker containing 100ml of water. The volume of the play dough was 60cm³.



a) Draw the water level with the play dough in the diagram above. (1m)

b) She then took out the lump of play dough and made it into a shape of a cylinder. What will the water level be when she dropped it back into the beaker? (1m)

_____

_____

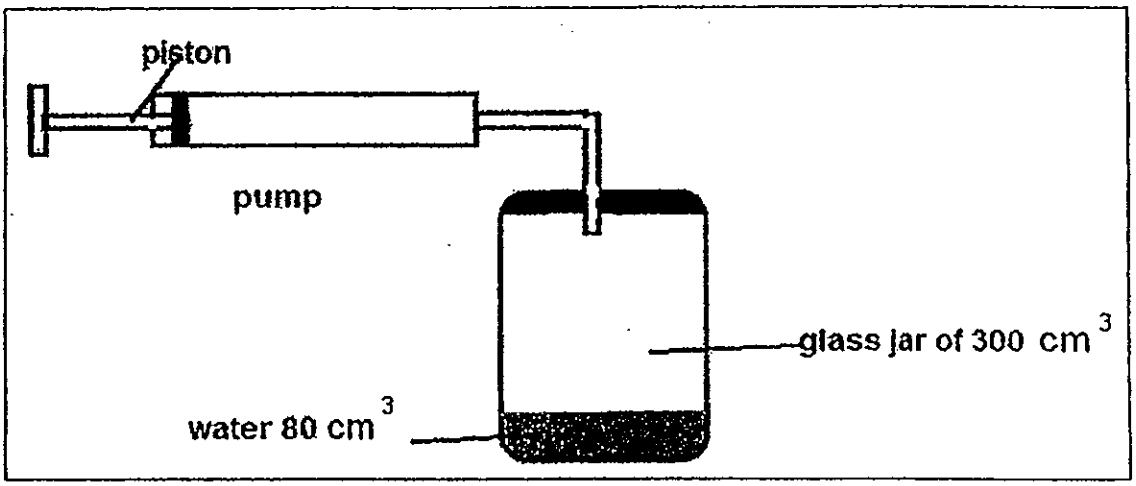
c) What can Elsie conclude about the play dough from this experiment? (1m)

_____

_____

Go on to the next page

22. Look at the diagram below. The pump is connected to a glass jar that has a capacity of 300 cm^3. The glass jar contains 80 cm^3 of water.



a) When the piston is pushed completely into the pump, 40cm^3 of air is forced into the jar. What is the volume of air in the jar now? (1m)

_____

_____

b) Explain your answer for part (a). (1m)

_____

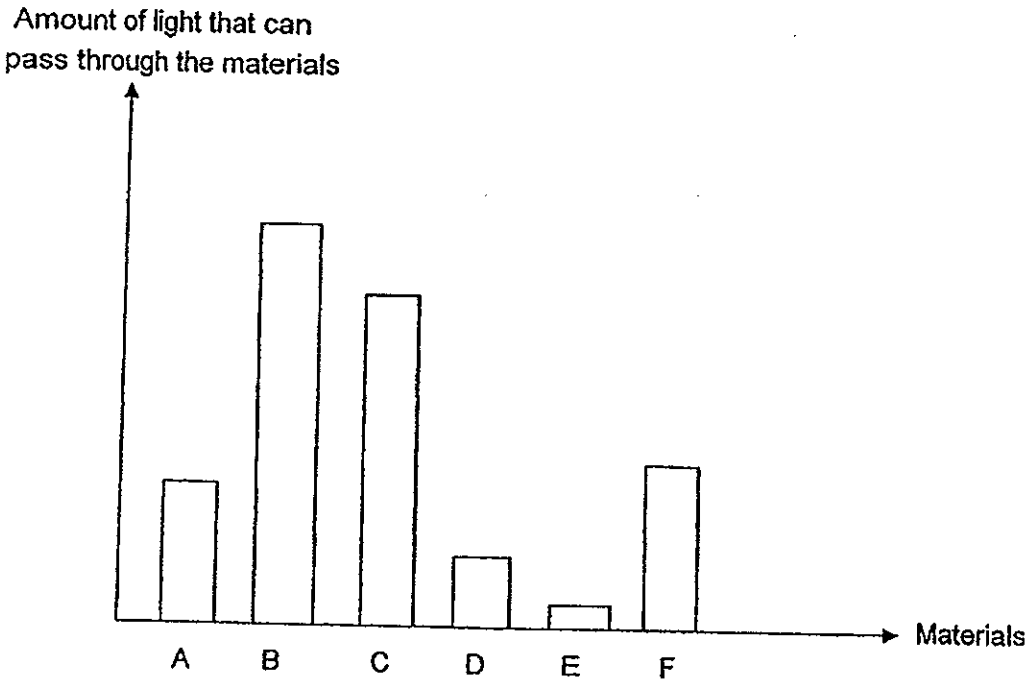
_____

_____

_____

Go on to the next page

23. Kelly conducted an experiment to measure the amount of light that can pass through six materials. She used a datalogger to do so and recorded her results in the chart below.

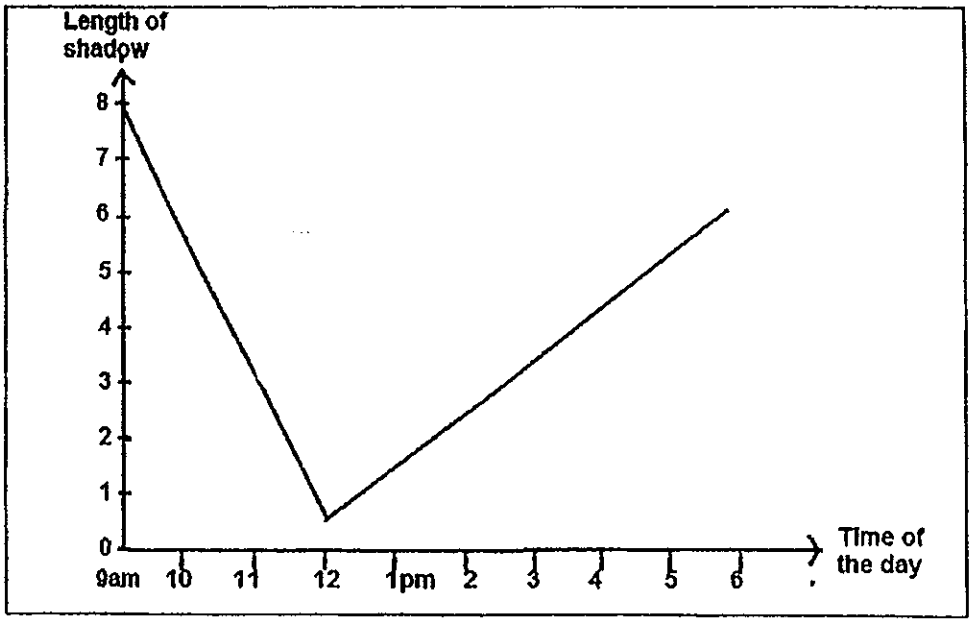


Based on her results given in the bar graph above, answer the following questions. Read the statements and put a tick (√) in the appropriate boxes below. (2m)

Statements	True	False	Not possible to tell
Material B is opaque.			
Material A is able to partially block the light.			
Material E is darker in colour than Material D.			
Material C allows more light to pass through than Material F.			

Go on to the next page

24. The graph below shows the changes in the length of a shadow of a tree throughout a sunny day.



a) Why does the length of shadow change throughout the day? (1m)

_____

_____

b) At what time of the day is the shadow the shortest and why? (1m)

_____

_____

END OF PAPER

ANSWER SHEET

EXAM PAPER 2013
SCHOOL : METHODIST GIRLS' SCHOOL
SUBJECT : PRIMARY 4 SCIENCE

TERM : CA1

BOOKLET A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	2	4	2	1	3	4	2	4	2	2	2	2	2	2

Q16. a) There are 3 stages in the life cycle of this insect.
b) The female adult needs to lay the eggs in order for the life cycle to be complete.

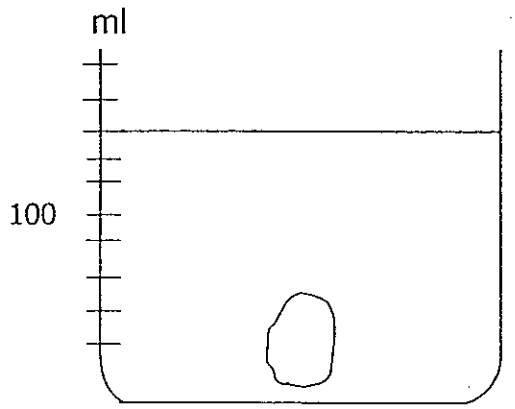
Q17. a) Salmons lay eggs, but horses give birth to young alive.
b) Salmon
c) Gives birth to young alive.
d) (i) Do not have hair on their body
(ii) Have hair on their body

Q18. a) So air could go in.
b) Spores floating in the air would go in the holes and the bread would have bread mould.

Q19. a) The ladybirds would die.
b) There was no air. The ladybirds would not have sufficient food and oxygen to feed on.

Q20. a) The iron rod is a better electromagnet than the steel rod.
b) It is to ensure that the results of the experiment are reliable and consistent.

Q21. a)



b) It will be the same.
c) Play dough has a definite volume.

Q22. a) 220 cm^3
b) Air has no definite volume and can be compressed.

Q23.

Statements	True	False	Not possible to tell
Material B is opaque.		√	
Material A is able to partially block the light.	√		
Material E is darker in colour than Material D.			√
Material C allows more light to pass through than Material F.	√		

Q24. The sun changes the position in the sky. It changes because the sun moves across the sky throughout the day.

Q25. At 12 am the shadow is the shortest, because the sun is directly above the tree.