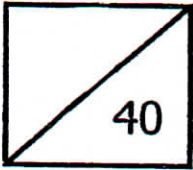




Rosyth School
Topical Test 2011
Science
Primary 4



Name: _____

Total

Class: Pr 4 - _____

Register No. _____

Duration: 1h

Date: 3rd March 2011

Parent's Signature: _____

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.

	Maximum	Marks Obtained
Part I	20	
Part II	20	
Total	40	

* This paper consists of 11 pages altogether.

This paper is not to be reproduced in part or whole without the permission of the Principal.

Part I (20 MARKS)

For each question from 1 to 10, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write your answer in the bracket provided.

1. In what ways are the life cycles of a butterfly and mosquito similar?

- A: They have four stages in their life cycles.
- B: They moult several times during the larva stage.
- C: They can fly only when at the adult stage.
- D: The young and adult eat the same type of food.

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

()

2. Look at the table below.

	Animal A	Animal B
Lays eggs on land	No	Yes
4 stage life cycle	Yes	No
Young resembles adult	No	Yes

Use the information above to identify animals A and B in the table below.

	Animal A	Animal B
(1)	Mosquito	Frog
(2)	Mealworm Beetle	Chicken
(3)	Frog	Butterfly
(4)	Mosquito	Cockroach

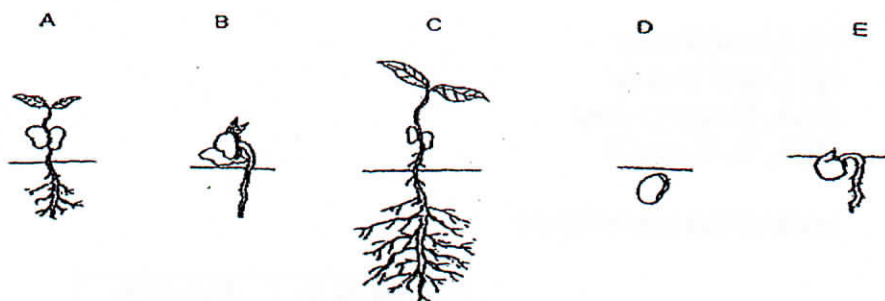
()

3. Life cycles of plants are important because they ensure that _____.

- (1) the fruits will not be exhausted
- (2) new plants will grow taller and healthier
- (3) new plants of the same kind are produced
- (4) there is a continuous supply of useful materials

()

4. Study the given stages of a bean plant

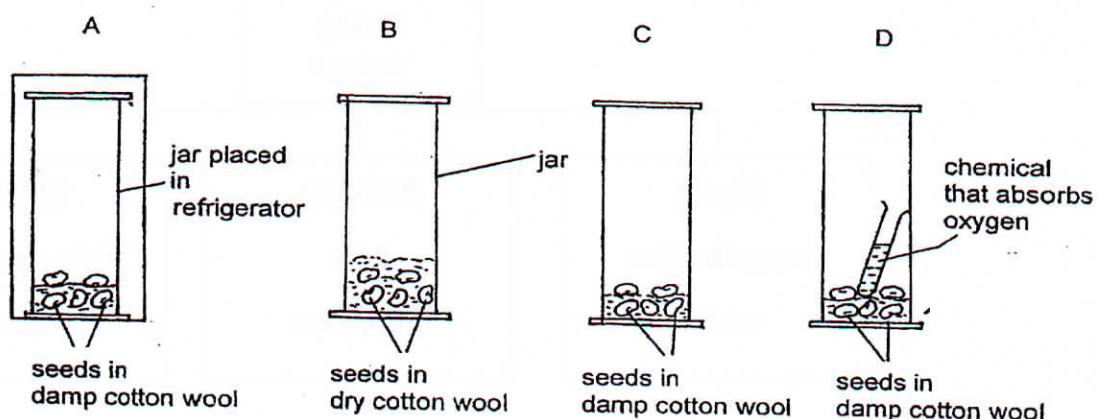


Using all the stages, which one of the following shows the correct order to form the life cycle of the bean plant.

- (1) B, A, C, D, E
- (2) C, D, E, A, B
- (3) D, ~~B~~ E, A, C
- (4) A, C, ~~E~~ B, D

()

5. There are four jars as shown below each containing five seeds. Jar B, C and D are placed near the window while Jar A is placed in the refrigerator.



Tom wanted to find out if water is required for germination. Which jars should he choose?

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

()

6. Read the following sentences carefully:

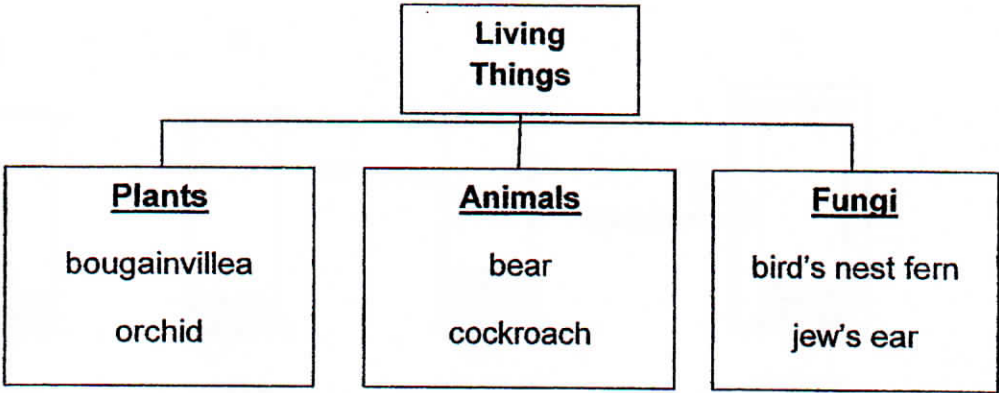
- A: John jumped up and screamed in pain when his mother pinched his hand.
 B: The fish in the bowl swam away frantically when Alan placed his hand in the fishbowl.
 C: The deer leapt away when it saw a lion approaching it.

Which one of the following characteristics of living things is shown in the above sentences?

- (1) Can reproduce
- (2) Can grow and die
- (3) Can respond to changes around them
- (4) Need air, food and water

()

7. Look at the classification diagram below.



Which one of the living things is classified wrongly?

- (1) orchid
- (2) cockroach
- (3) bird's nest fern
- (4) jew's ear

()

8. Which of the following cannot be classified as a matter?

- (1) air
- (2) cloud
- (3) smoke
- (4) sound

()

9. Alex moulded a lump of plasticine into a big square block. He then cut the plasticine into 6 equal pieces. Which one of the following is true about the total mass and volume of the 6 pieces of plasticine?

	Total Mass	Total Volume
(1)	increase	decrease
(2)	remain the same	increase
(3)	decrease	remain the same
(4)	remain the same	remain the same

()

10. Which of the following is/are properties of matter?

A: All matter can grow.

B: All matter has mass.

C: All matter can be seen.

D: All matter takes up space.

(1) A and C only

(2) B and D only

(3) B, C and D only

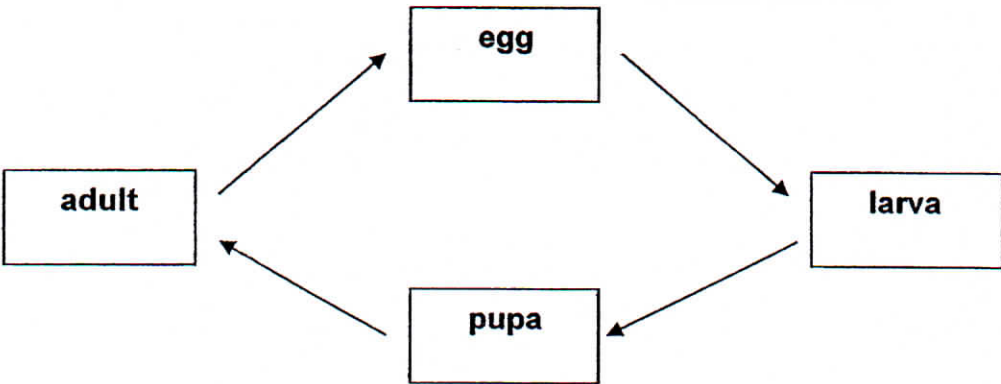
(4) A, B, C and D

()

Part II (20 MARKS)

For questions 11 to 17, write your answers in the space provided.

11. The diagram below shows the life cycle of an animal P



Susan observed that a larva moulted many times during that stage.

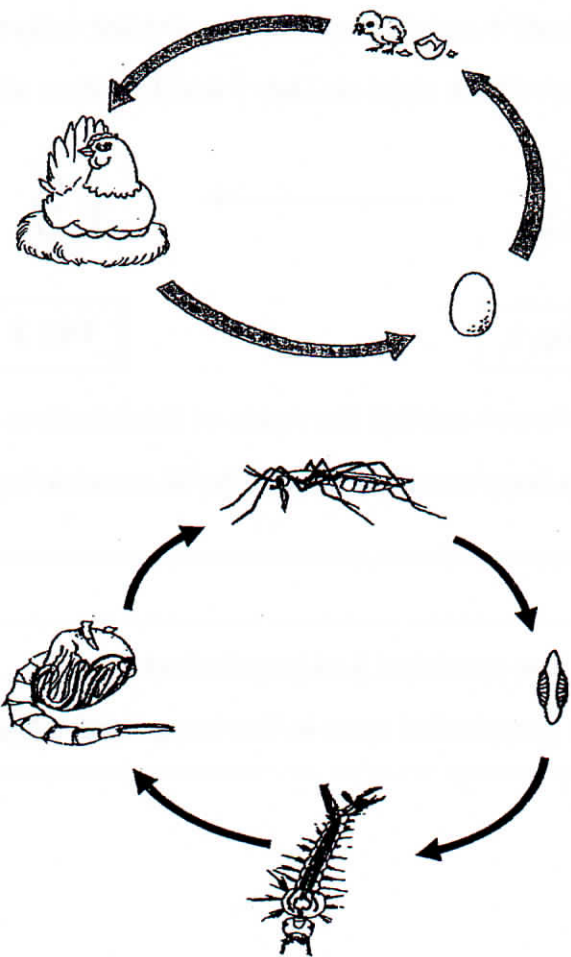
- (a) What observation would she have made to deduce that the larva has moulted? (1 mark)

- (b) Explain why the animal P has to moult at that stage? (1 mark)

- (c) If Susan wants to confirm that the animal is an insect, at which stage will it be most obvious? (1 mark)

- (d) State two characteristics of all insects. (1 mark)

12 The diagram below shows the life cycles of two animals, chicken and mosquito respectively.



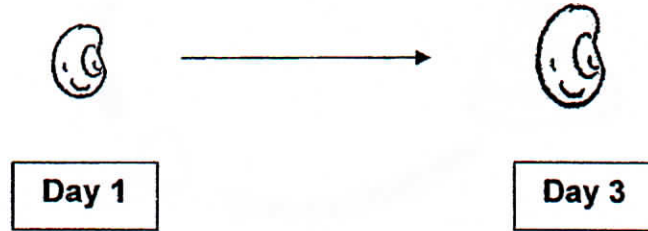
(a) Based on the diagram, state one similarity and one difference between the two life cycles. (2 marks)

Similarity: _____

Difference: _____

(b) Name an animal that has a similar life cycle as the mosquito? (1 mark)

13. Kai Li placed a seed in a container of moist cotton wool for three days. She observed the seed on Day 1 and Day 3 as shown below.

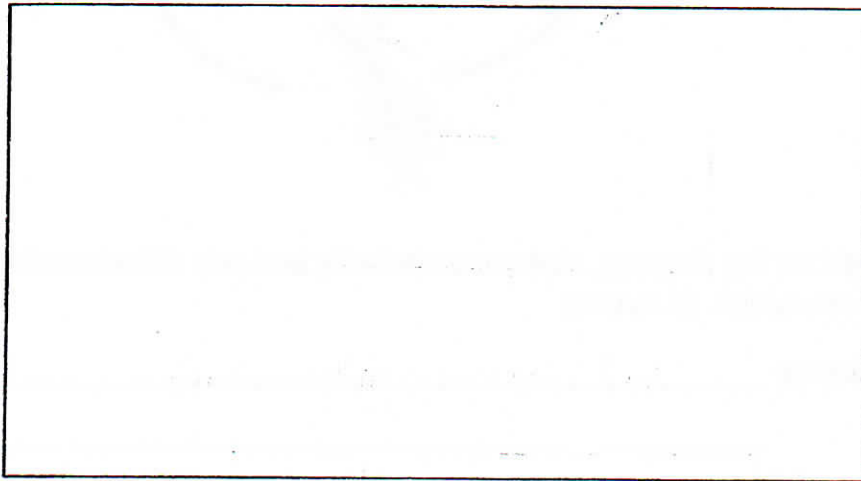


She also found out that the mass of the seed has increased in Day 3.

- (a) What has happened to the seed for its mass to increase? (1 mark)

In Day 5, the seed had just germinated.

- (b) Draw the germinated seed in the box provided below. (1 mark)



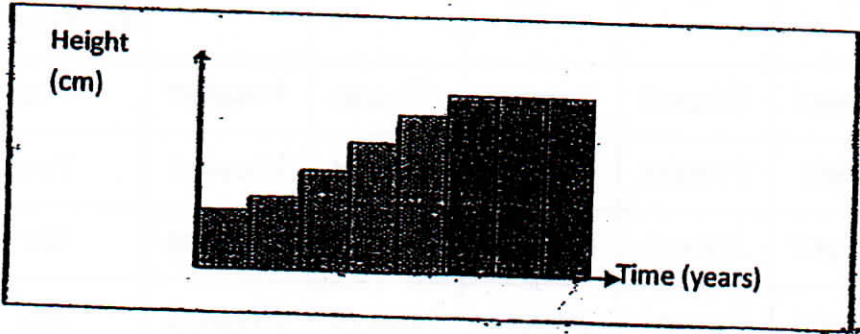
- (c) What will happen to the mass of the seed leaves after Day 5? (1 mark)

14. Corrine carried out an investigation to find out the conditions necessary for seeds to germinate. She recorded the results in the table below.

Set-Up	Soil	Water	Light	Air	Warmth	Started to germinate?
A	Present	Present	Present	Present	Present	Yes
B	Absent	Present	Present	Present	Present	Yes
C	Absent	Absent	Present	Present	Present	No
D	Present	Present	Absent	Present	Present	Yes

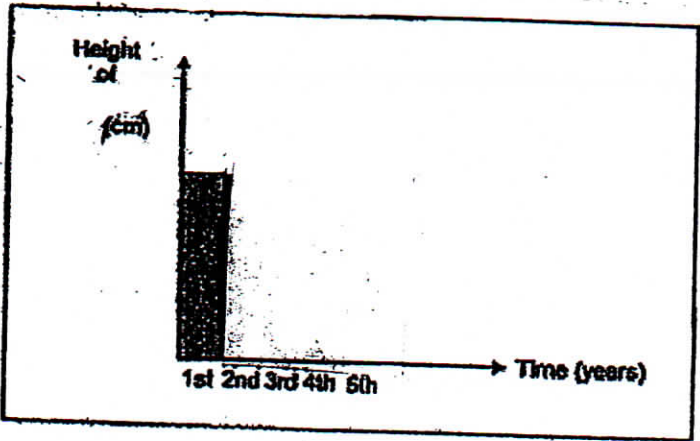
- (a) From the results, ^{what is/are not necessary for seeds to germinate?} ~~soil, water, light, air, warmth~~
- (b) Corrine used the same type of seeds for a fair investigation. ^{why was it} ~~important?~~
~~important?~~

15. The graph below shows the height of a thing over a period of 8 years.



- (a) Describe what has happened to the height of the thing over the period of 8 years.

- (b) In the graph provided below, draw the height of a Barbie doll over a period of 5 years. The 1st year is done for you.



16. Lisa wrote the following in her Science journal.

Rhinoceros

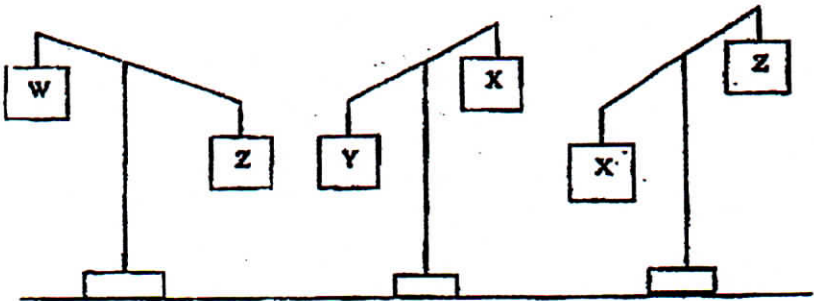
A rhinoceros lives on land. It has hair on its skin. It reproduces by laying eggs. Their young feed on their mother's milk.

Her teacher read it and told her that she had made a mistake with one of its characteristics.

- (a) Write the correct characteristic for her.

- (b) Based on what is in her journal, is a rhinoceros a mammal? Give two reasons for your choice.

17. Ben hung four boxes, W, X, Y and Z on a lever balance as shown in the diagram below and compared their masses.



- (a) Box _____ has the smallest mass.
- (b) Box _____ has the biggest mass.

END OF PAPER



ANSWER SHEET

EXAM PAPER 2011

SCHOOL : ROSYTH
SUBJECT : PRIMARY 4 SCIENCE

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	4	3	1	2	3	3	4	4	2

- 11)a)The larva has shed its old skin.
b)The larva sheds its skin in order to grow bigger.
c)At the adult stage.
d)All the Insects have 3 body segments.

- 12)a)Similarity: Both of them start their life cycles with an egg.
Difference: The mosquito's young does not resemble the adult while the Chicken's young resemble the adult.
b)Mealworm beetle.

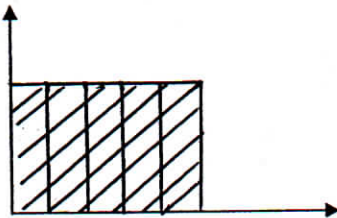
- 13)a)It has take in water so its mass increases.
b)



- c)The mass of the seed leaves would have decreased after day 5.

- 14)a)Soil and light.
b)This is to ensure that the type of seeds does not affect the results.

- 15)a)Its height has increased till the 5th year and after that the height remained the same.
b)



- 16)a)The Rhinoceros produces by giving birth to young.
b)I has hair on its skin.

- 17)a)W
b)Y