

METHODIST GIRLS' SCHOOL
Founded in 1887



PRIMARY 3
SCIENCE
WEIGHTED ASSESSMENT 3

Total Time for Paper: 40 min

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 3. _____

Date : _____

Parent's signature: _____

Section A	20
Section B	10
Total	30

This paper consists of 11 printed pages including this page.

Section A

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 in the bracket provided. [20 marks]

1 Four pupils shared what they had learnt in school about life cycles.



Ming Lee

Animals do not go through the same life cycle as their parents.

All living things go through a life cycle.

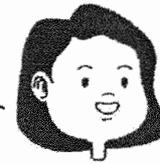


Mala



Collin

Different living things go through the same life cycle.



Siti

A life cycle is a repeated pattern of change.

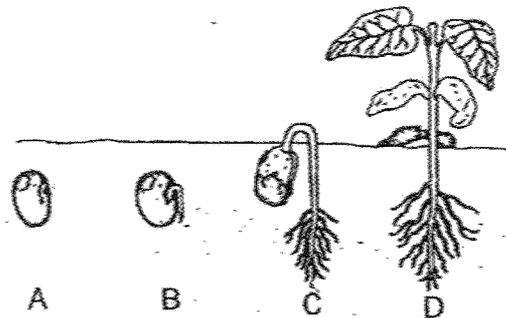
Which pupils shared the correct statements?

- (1) Mala and Siti
- (2) Collin and Mala
- (3) Ming Lee and Siti
- (4) Ming Lee and Collin

()

(Go on to the next page)

- 2 The diagram shows the stages of growth of a bean plant.



The seed leaves provide food for the seed to grow at stages _____.

- (1) A and B
 (2) C and D
 (3) A, B and C
 (4) A, B, C and D ()
- 3 Joshua carried out an experiment to find out if seeds need water to grow into seedlings. He put some seeds in the pots and watered them daily.

Pot	Amount of water given daily (cm ³)	Number of seeds in each pot
A	100	20
B	0	10
C	100	10
D	200	20

Which pots should Joshua use to find out if water is necessary for the seeds to grow into seedlings?

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

(Go on to the next page)

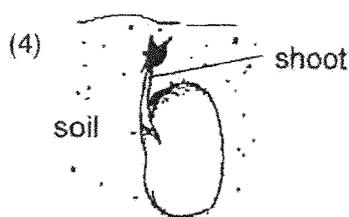
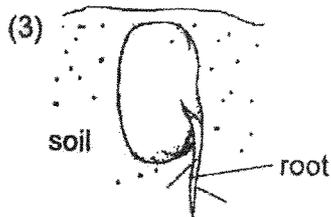
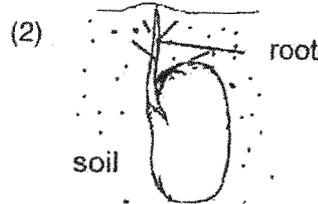
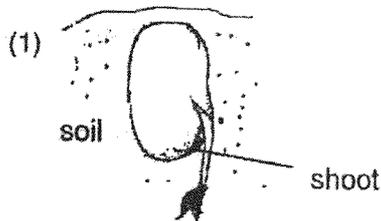
4 Which of the following statements are true?

- A Not all plants grow from seeds.
- B The roots grow before the shoot.
- C A young plant with leaves can make food.
- D Plants that grow from seeds have four stages in their life cycles.

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

()

5 Alison was growing some green bean seeds. Which of the following shows what she would first observe?



()

(Go on to the next page)

6 Study the table below.

A	B
Grasshopper Cockroach Chicken	Butterfly Beetle Frog

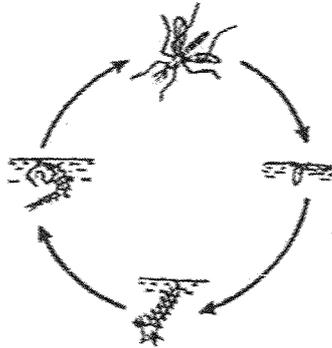
Which of the following correctly states the heading for A and B?

	A	B
(1)	Young resembles the adult	Young does not resemble the adult
(2)	Reproduce by laying eggs	Does not reproduce by laying eggs
(3)	Does not have pupa stage	Has pupa stage
(4)	Animals that cannot fly	Animals that can fly

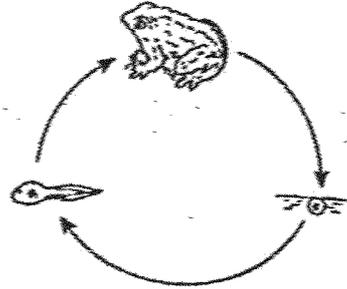
()

(Go on to the next page)

- 7 Ravi, Benny and Susan discussed about the life cycle of a mosquito and a frog shown below.



Life cycle of a mosquito



Life cycle of a frog

After their discussions, they recorded the following statements.

Ravi : The larva of a mosquito goes through moulting but not the young of a frog.

Benny : The young of a frog looks like its adult but not the mosquito.

Susan : The young of the frog lives in water and on land but the larva of the mosquito lives in water only.

Whose statements are not correct?

- (1) Ravi and Benny
- (2) Ravi and Susan
- (3) Benny and Susan
- (4) Ravi, Susan and Benny

()

(Go on to the next page)

8 Study the table below.

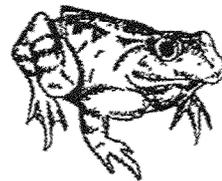
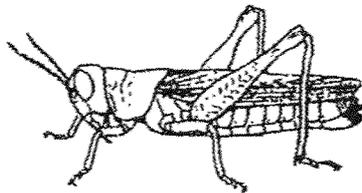
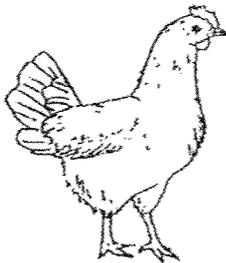
Characteristic	Animal W	Animal X	Animal Y	Animal Z
Does it have a 4-staged life cycle?	No	Yes	No	Yes
Does its young moult?	No	Yes	No	Yes
Does the adult lay eggs on land?	Yes	Yes	Yes	No
Does the young look like the adult?	No	No	Yes	No

Which animal W, X, Y or Z is most likely a beetle?

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

()

9 The diagram below shows three animals.



Which of the following statements about the life cycles of these animals is correct?

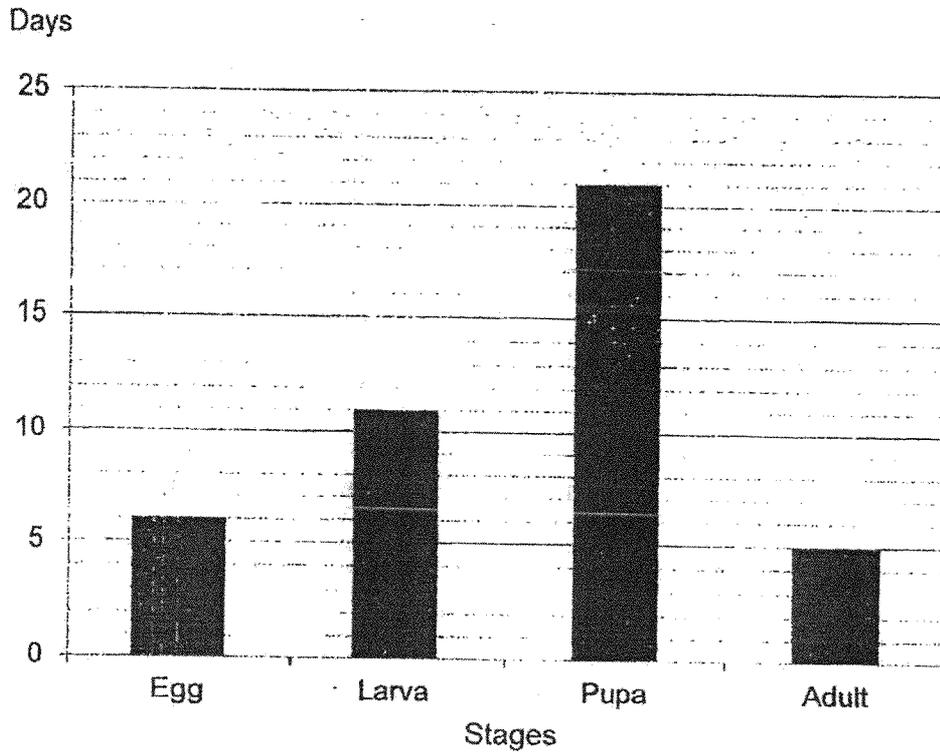
- (1) The adults have wings.
- (2) The eggs are laid in water.
- (3) These animals have a nymph stage.
- (4) Their life cycles have three stages.

()

(Go on to the next page)

- 10 The graph below shows the number of days in each stage of the life cycle of Insect X.

Number of days in each stage of the life cycle of Insect X



Based on the graph above, which of the statements below are true?

- A The egg takes 6 days to hatch.
- B The young of Insect X looks like the adult.
- C Insect X cannot fly in the adult stage.
- D Insect X does not need to eat for 21 days after its larva stage.

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

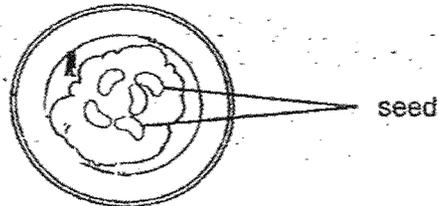
()

(Go on to the next page)

Section B

For questions 11, 12 and 13, write your answers in the space provided. [10 marks]

11 Jason wanted to investigate how temperature would affect the growth of seeds. He had five set-ups. Each set-up consists of five seeds placed on some moist cotton wool as shown in the diagram below. He then put each set-up in a different location.



Set-up	A	B	C	D	E
Location	Oven	Cupboard	Room	Freezer	Ice cooler box
Temperature	80 °C	25 °C	23 °C	4 °C	10 °C

(a) In which two set-ups would the seeds most likely grow? [1]

Set-ups _____ and _____

(b) Explain your answer in (a). [1]

In another experiment, Jason placed the experiment shown below next to a window.

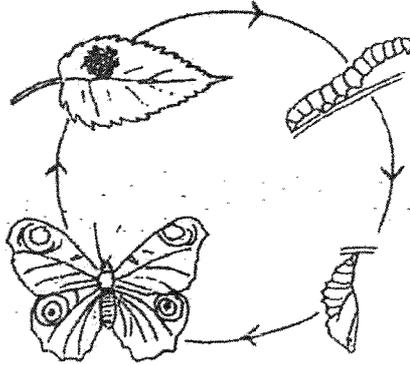


(c) Based on the diagram, will the seeds grow? Give a reason for your answer. [1]

(Go on to the next page)



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



(a) Why does the butterfly lay eggs on leaves?

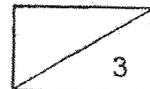
[1]

(b) State two differences between the larva and pupa stages in the life cycle of a butterfly.

[2]

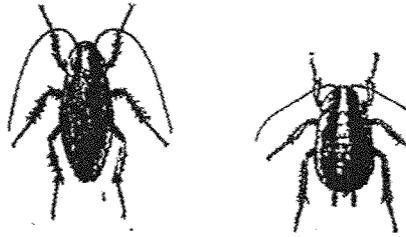
(i) _____

(ii) _____



(Go on to the next page)

13 The diagram below shows an adult cockroach and its nymph.

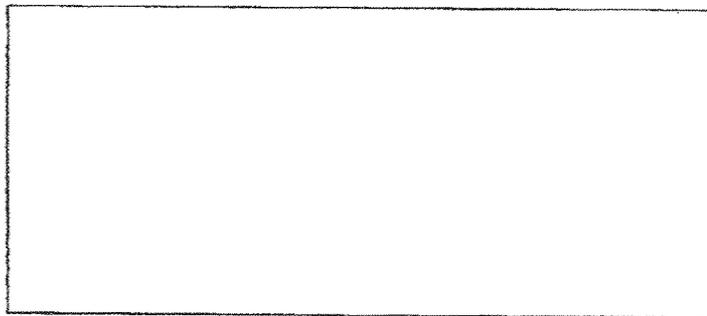


- (a) State one difference between the adult cockroach and its nymph.
(Do not mention colour, size or length.)

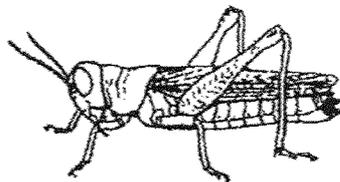
[1]

- (b) Draw and label the life cycle of a cockroach in the box below.

[2]



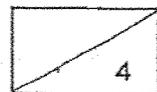
The picture below shows a grasshopper.

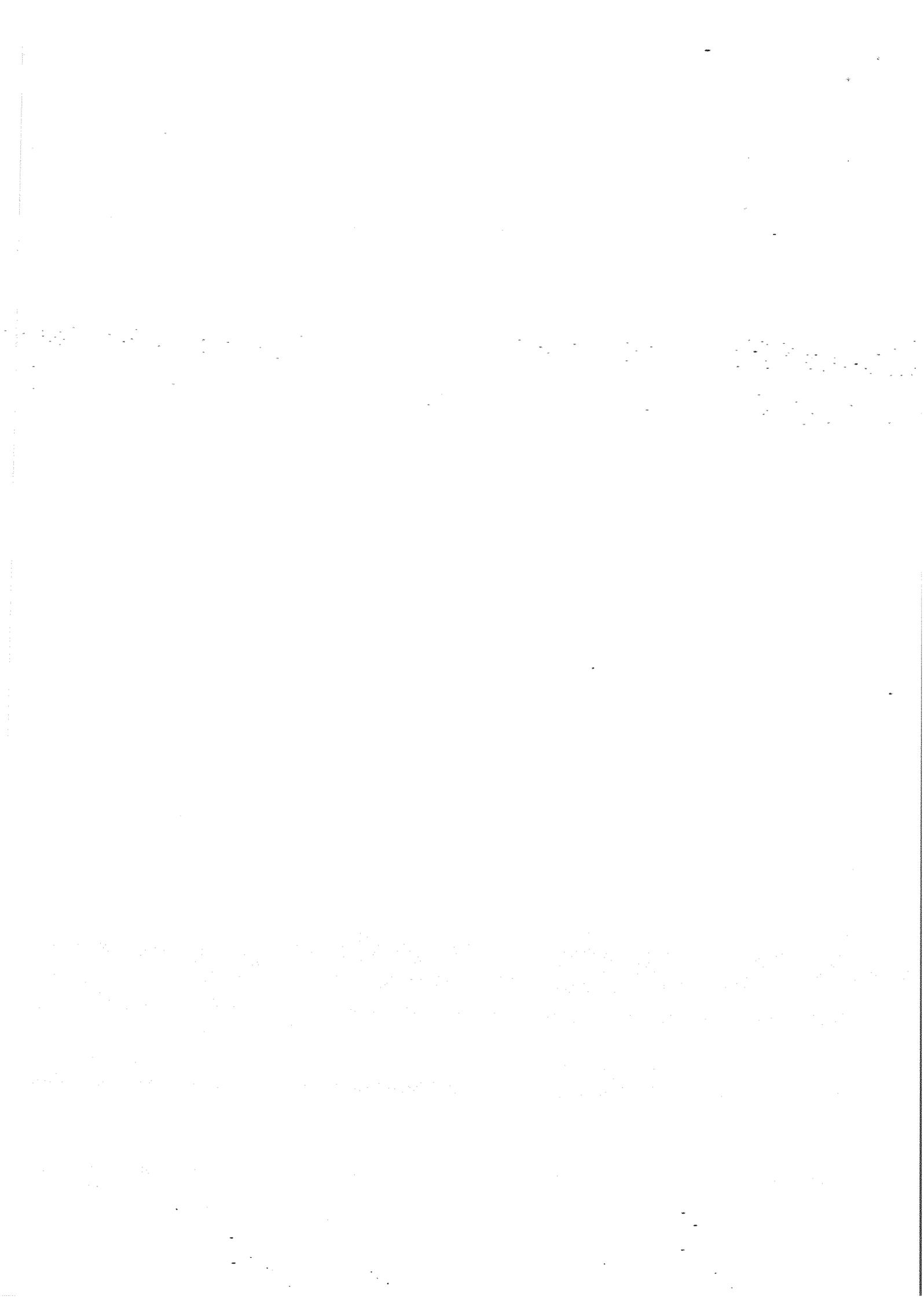


- (c) State a similarity between the life cycles of the cockroach and the grasshopper.

[1]

End of paper





S9 Test 2

WA 3

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

Q11)	<p>(a) Set-up B and C</p> <p>(b) Water, air and warmth are present for seeds to germinate.</p> <p>(c) No. The seeds need water to grow.</p>
Q12)	<p>(a) To ensure the larva will have food to feed on when the egg hatches</p> <p>(b) (i) The larva feeds on food while the pupa does not</p> <p>(ii) The larva moves from place to place while the pupa does not</p>
Q13)	<p>(a) The nymph has no wings but the adult has wings.</p> <div style="text-align: center;"> <pre> graph TD Egg --> Nymph Nymph --> Adult Adult --> Egg </pre> </div> <p>(b)</p> <p>(c) Both cockroach and the grasshopper have three stages in their life cycle</p>