

Rosyth School Second Semestral Assessment for 2006 SCIENCE Primary 3

Total 100
Marks:

	Marks:
Register No	Duration: 1 h 30 min
Parent's Signat	ure:

Instructions to Pupils:

- 1. Do not open the booklets until you are told to do so.
- 2. Follow all instructions carefully.
- 3. This paper consists of 2 booklets, Booklet A and Booklet B.
- 4. For questions 1 to 30 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.
- 5. For questions 31 to 46, give your answers in the spaces given in the Booklet B.

	Maximum	Marks Obtained
Booklet A	60 marks	
Booklet B	40 marks	:
Total	100 marks	

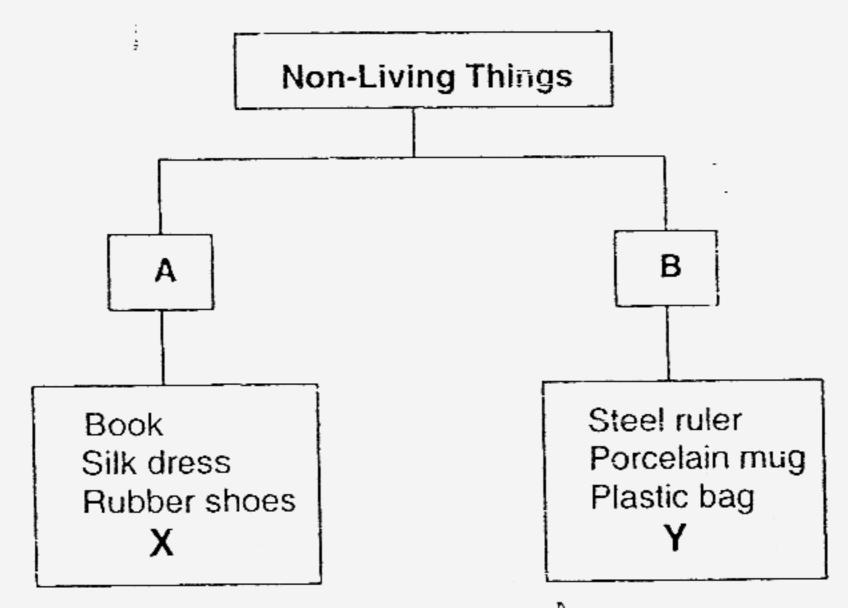
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^{*} This booklet consists of _11 pages . (pg. 1 to 11)

Part I (60 MARKS)

For each question from 1 to 30, 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.

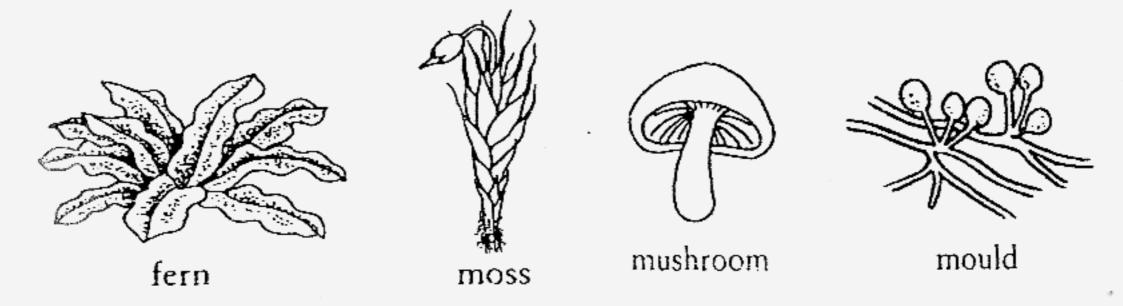
Tommy classified some objects using the classification chart below.



Which one of the following objects could X ad Y be?

X	Υ
Newspaper	Clay pot
Leather shoes	Silk shirt
Gold medal	Wooden shelf
Magnetic button	Mirror

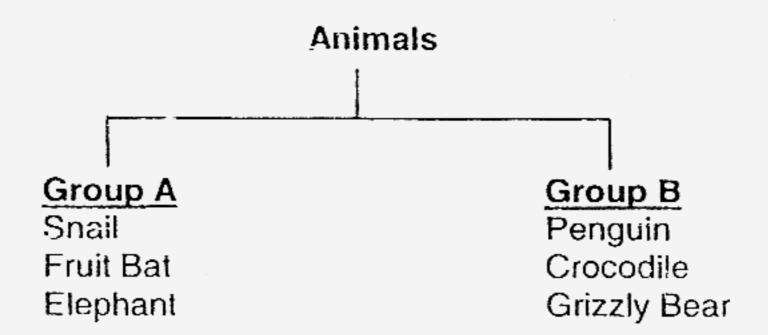
 The living things shown below are grouped together based on a common characteristic.



What is the common characteristic that they all have?

- (1) Presence of flowers.
- Presence of chlorophyli.
- (3) Reproduce by spores.
- (4) Able to decompose to obtain nutrients.

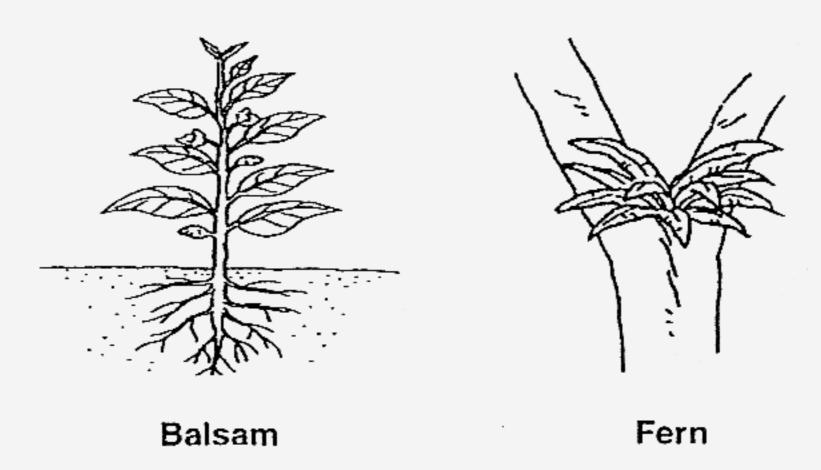
3. Study the classification chart below.



Which one of the following sets of headings for Group A and Group B is correct?

	Group A	Group B
(1)	Plant eaters	Animal eaters
(2)	Small animals	Big Animals
(3)	Animals that lay eggs	Animals that give birth to their young alive
(4)	Animals that live on land only	Animals that live in water only

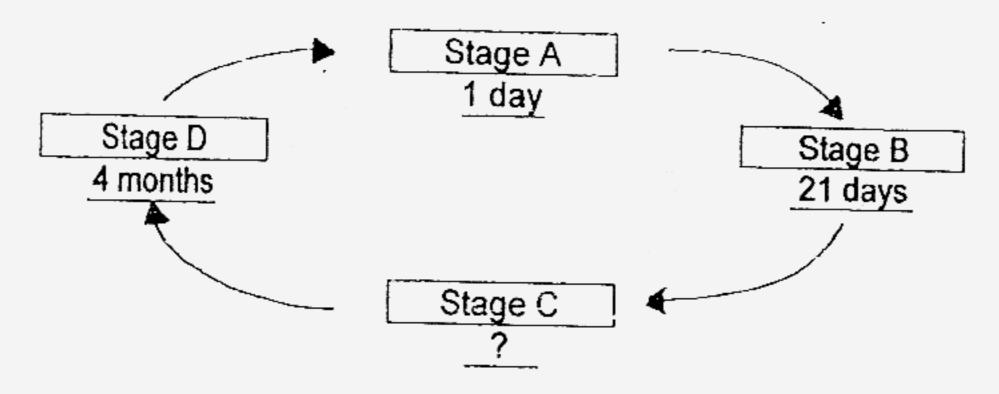
Study the two pictures below.



In what ways are they different from each other?

- A: Balsam is a plant but fern is not.
- B: Balsam bears flowers but fern does not.
- C: Balsam can make its own food but fern cannot.
- D: Balsam reproduces by seeds but fern reproduces by spores.
- (1) A and C only
- (2) B and D only
- (3) C and D only
- (4) A, B, C and D

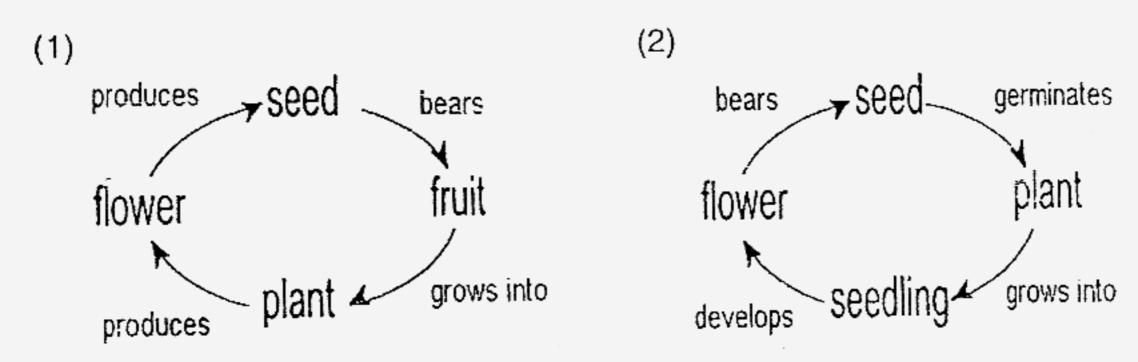
- 5. Which one of the following is not a cycle?
 - (1) Day and night
 - (2) Age of a person
 - (3) Change in seasons
 - (4) Movements of the moon around the Earth
- 6. The diagram below shows the life cycle of an animal. Each box represents a stage. The age of the animal at that stage is shown in the box.

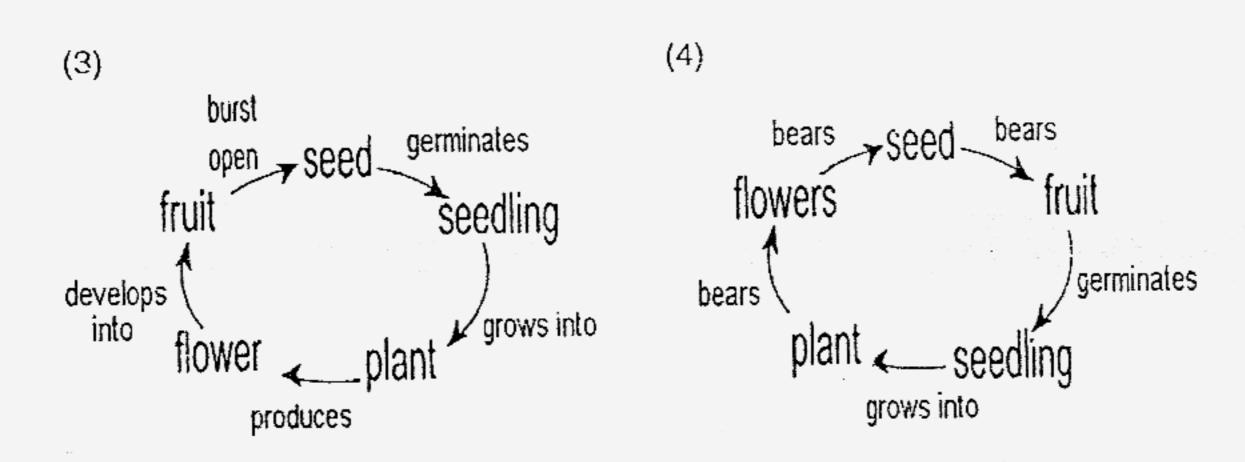


What could be the possible age of the animal at Stage C?

- (1) 11 days
- (2) 56 days
- (3) 2 weeks
- (4) 20 weeks
- 7. In what ways are a rambutan different from a tomato?
 - A: Colour of skin
 - B: Texture of skin
 - C: Number of seeds
 - D: Size of seed
 - (1) A and B only
 - (2) C and D only
 - (3) B, C and D only
 - (4) A, B, C and D
- 8. Plants make their own food. In which direction, does the food travel in the plant?
 - (1) It travels from the fruit to the stem.
 - (2) It travels from the stem to the leaves.
 - (3) It travels from the roots to other parts of the plant.
 - (4) It travels from the leaves to other parts of the plant.

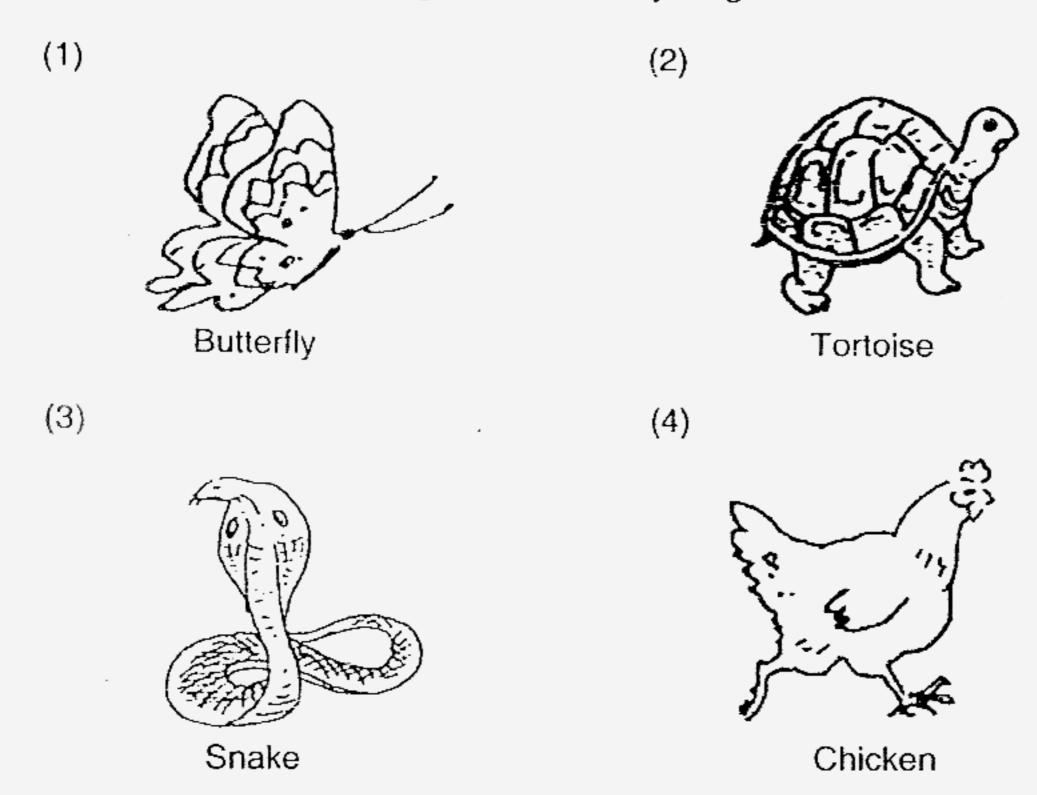
- 9. Which of the following statements are not true about plants?
 - A: Plants respire all the time.
 - B: Plants give out the most amount of oxygen at night.
 - C: Plants alone help to balance the amount of gases in the air.
 - D: Plants photosynthesize only in the day and respire only at night.
 - (1) A and B only
 - (2) C and D only
 - (3) B, C and D only
 - (4) A, B, C and D
- 10. Which diagram represents the development of a papaya plant correctly?



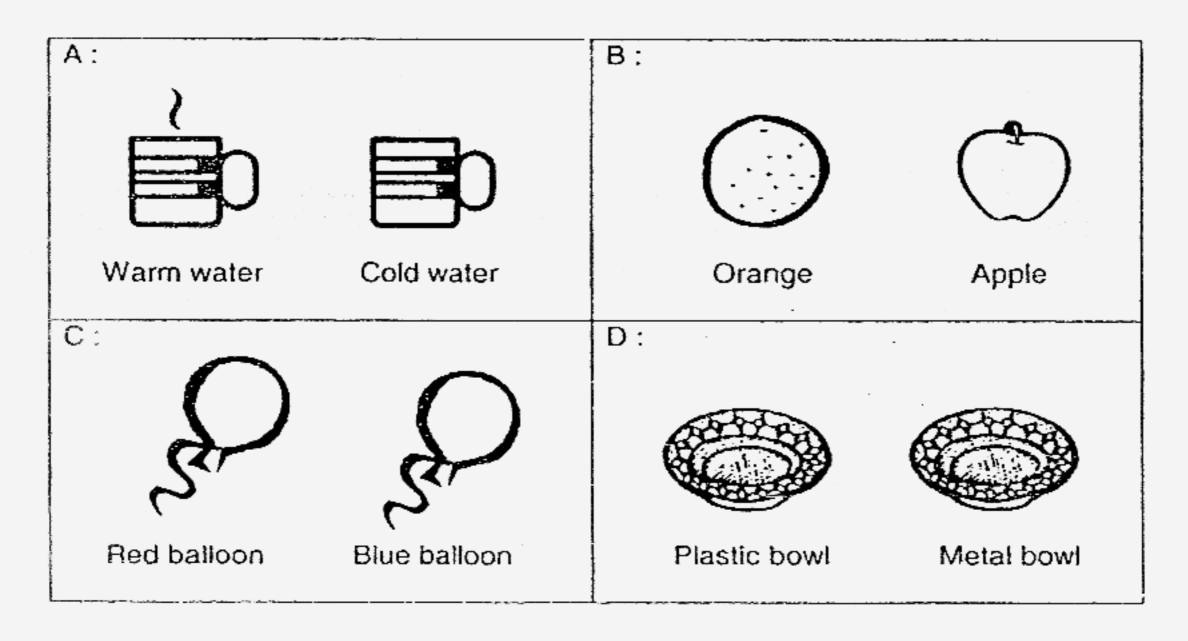


- 11. Which of the following senses tell me that the shell of a durian is hard and thorny?
 - A: Sense of sight
 - B: Sense of taste
 - C: Sense of smell
 - D: Sense of touch
 - (1) A and D only
 - (2) B and C only
 - (3) A, B and C only
 - (4) A, B, C and D

12. Which one of the following animals have young which do not look like them?



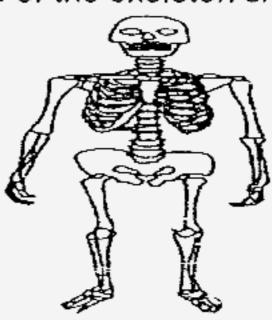
Mary was blindfolded before she was given four pairs of objects as shown 13. below.



Which pair of objects would she not be able to differentiate?

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

14. Which of the following parts of the skeleton shown below is/are immovable?



- (1) Knee joint
- (2) Elbow joint
- (3) Shoulder joint
- (4) Joints in the skull
- 15. Which one of the following statements about our joints is false?
 - (1) All joints only allow movement in one direction.
 - (2) A joint is a meeting place of two bones.
 - (3) Joints allow us to move with the help of muscles attached to them.
 - (4) Both our knee joints and shoulder joints are examples of hinge joints.

Clow

- 16. Which of the following organs does the rib cage protect?
 - A: Brain
 - B: Heart
 - C: Lungs
 - D: Stomach
 - (1) A only
 - (2) B only
 - (3) B and C only
 - (4) B, C and D only
- 17. Which one of the following pairs of systems helps us to move?
 - Skeletal and digestive
 - (2) Muscular and skeletal
 - (3) Muscular and digestive
 - (4) Skeletal and circulatory
- 18. Which two actions listed below make use of arm and hand muscles?
 - (1) Waving and smiling
 - (2) Writing and painting
 - (3) Talking and winking
 - (4) Drawing and breathing

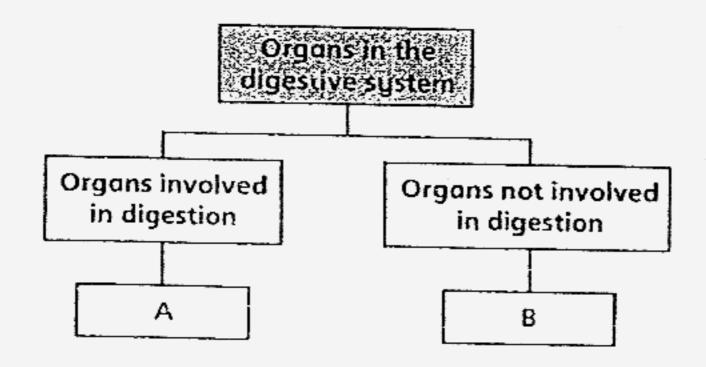
Study the table below.

X	Υ
Skull	Gullet
Ribcage	Stomach
Shoulder Blade	Small intestine

What could be the possible headings for X and Y respectively?

	X	Υ
1)	Skeletal system	Digestive system
2)	Skeletai system	Circulatory system
3)	Digestive system	Skeletal system
4)	Circulatory system	Digestive system

20. The organs that make up the digestive system can be placed into two groups as shown below.



Which of the following organs can be placed in A and B?

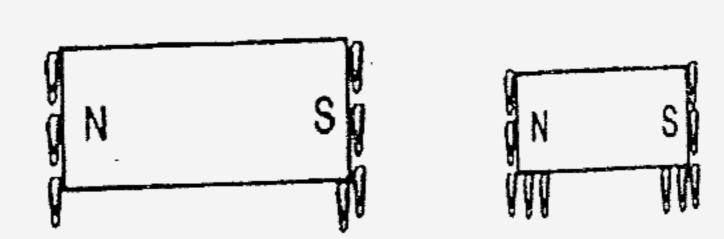
	Α	В
(1)	Mouth, Stomach	Gullet, Small and Large intestine
(2)	Stomach, Small intestine	Mouth, Gullet, Large intestine
(3)	Small intestine	Mouth, Gullet, Stomach, Large intestine
(4)	Mouth, Stomach, Small intestine	Gullet, Large intestine

- Which organ in the digestive system controls how much water in the waste is being removed from the body?
 - (1) Mouth
 - (2) Stomach
 - (3) Small intestine
 - (4) Large intestine

- 22. Which one of the following statements is not true?
 - Saliva is a digestive juice.
 - (2) Digestion does not take place in the gullet.
 - (3) The digestion of food is completed in the small intestine.
 - (4) Absorption of completely digested food takes place in the large intestine.
- 23. Which of the following(s) can be separated by using a magnet?
 - A: Rice from flour.
 - B: Sugar from sand.
 - C: Iron needles from steel nails.
 - D: Broken glass pieces from iron filings.
 - (1) A only
 - (2) D only
 - (3) A and B only
 - (4) C and D only
- 24. Which one of the following is correctly grouped?

	Objects made from glass and wood	Objects made from metal and plastic
-	Pen	Pencil
	Picture frame	Eraser
	Rice cooker	Torch light
	Display cupboard	Electrical wire

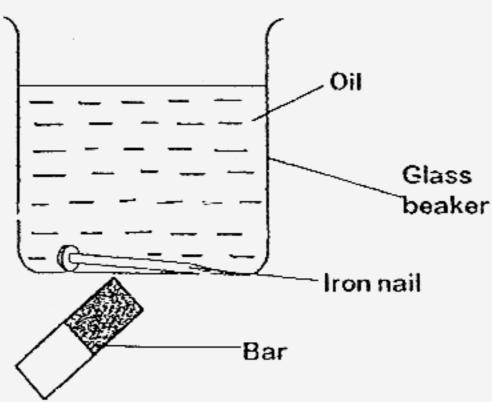
25. Jerry observed how his two magnets attracted some paper clips.



What does his observation show?

- (1) The North pole is strenger than the South pole.
- (2) The big magnet is stronger than the small magnet.
- (3) The magnets can attract paper clips only at the poles.
- (4) The strength of a magnet does not depend on its size.

26. Lynn was able to remove the iron nail from the container of oil using a bar as shown below.



What does the above experiment show?

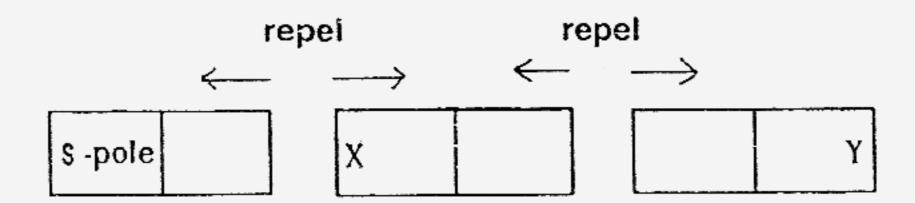
- A: The bar is a magnet.
- B: The iron nail has become a temporary magnet.
- C: A magnetic force can pass through glass only.
- D: A magnetic force can pass through glass and oil.
- (1) A and D only
- (2) B and C only
- (3) B, C and D only
- (4) A, B, C and D
- 27. Jack had four magnets of different shapes. He gradually brought the North pole of each magnet near a pile of pins until it attracted the pins. He measured the distance between the magnet and the pins; and observed the number of pins attracted. His observations were recorded in the table below.

Magnet	Distance between the magnet and the pins	Number of pins attracted	
U-shaped magnet	7 cm	9	
Bar magnet	2 cm	10	
Ring magnet	5 cm	4	
Rod magnet	2 cm	7	

Based on the data in the table above, which of the magnets has the strongest pull?

- (1) U-shaped magnet
- (2) Bar magnet
- (3) Ring magnet
- (4) Rod magnet

28. Janet observed that the three magnets repelled one another as shown below.

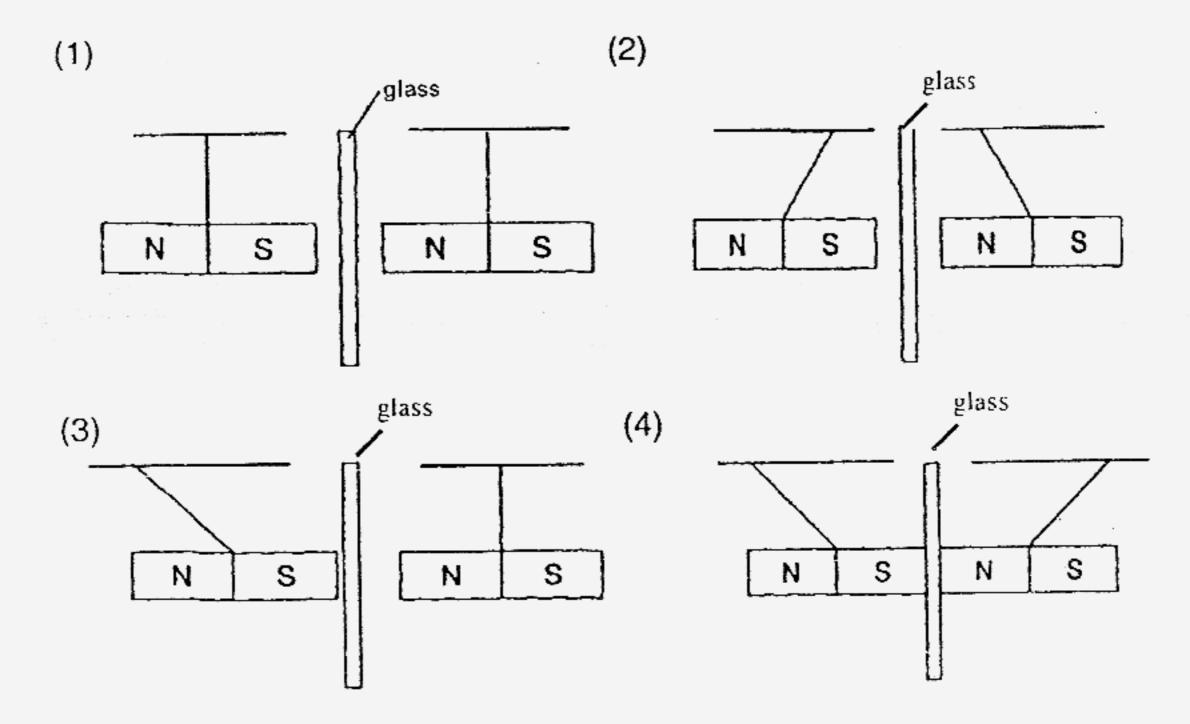


Identify the poles at X and Y.

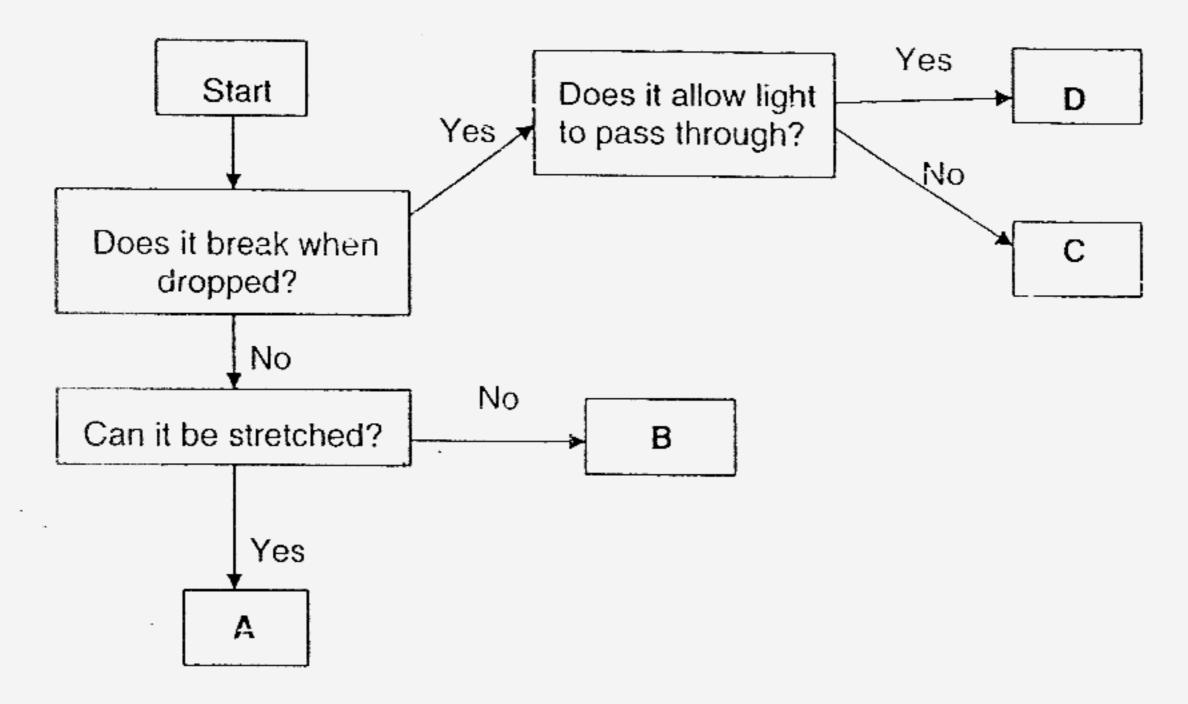
	X	Υ
(1)	N-pole	S-pole
(2)	S-pole	N-pole
(3)	N-pole	N-pole
(4)	S-pole	S-pole

Two bar magnets, suspended by strings, are separated by a thin piece of glass.

Which one of the following diagrams shows what will happen when the magnets are brought close together?



30. Study the flowchart below.



Which of the following objects can be represented by A, B, C and D?

	Α	В	С	D
(1)	Balloon	Sponge	Wooden ruler	Lens
(2)	Rubber band	Steel bar	Clay tile	Glass
(3)	Hose	Paper clip	Bottle cap	Water bottle
(4)	Paper clip	Cling wrap	Porcelain	Plastic bag

End of Part I



Rosyth School Second Semestral Assessment for 2006 **SCIENCE**

Primary 3

Name:		Totai Marks:	40
Class: Pr	Register No	Duration: 1 h	}
Date: 2 nd Nov 2006	Parent's Signature:		
-			

Booklet B

<u>Instructions to Pupils:</u>

- 1. For questions 31 to 46, give your answers in the spaces given in this Booklet B.
- * This booklet consists of 8 pages. (pg. 12 to 19)

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spiny anteater : _____

Part II (40 MARKS)

For questions 31 to 46, write your answers in this booklet.

water snake : _____

31. Study the table below carefully.

e)

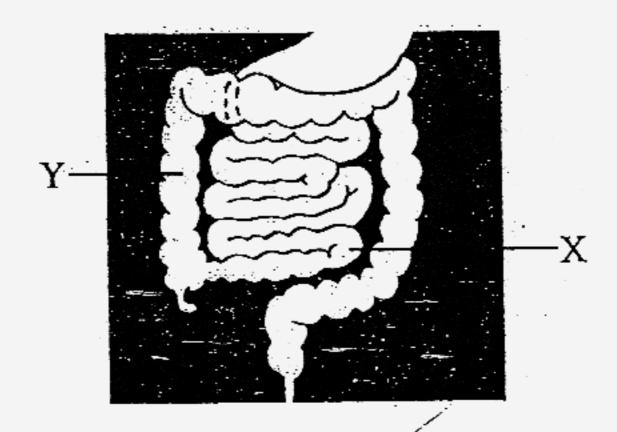
Animal	Body covering	Movement	Way of having young	Habitat
A	Hair	Walk	Lay eggs	Land
В	Hair	Fly	Give birth	Land
C	Feathers	Fly	Lay eggs	Land
<u>D</u>	Feathers	Run	Lay oggs	Land
E	Scales	Swim	Give birth	Water
F	Scales	Swim	Lay eggs	water

From the table above, identify the letter that represents each of the following animals. (3m)

a)	guppy	•	b)	bat	:
c)	ostrich	:	d)	parrot	

f)

32. The diagram shows organs X and Y of the digestive system in man.



- a) Which other system, besides the digestive system, does organs X and Y, belong to in our body? (1m)
- b) Name two actions that must take place in the organs, X and Y, to move the food substance in them. (1m)

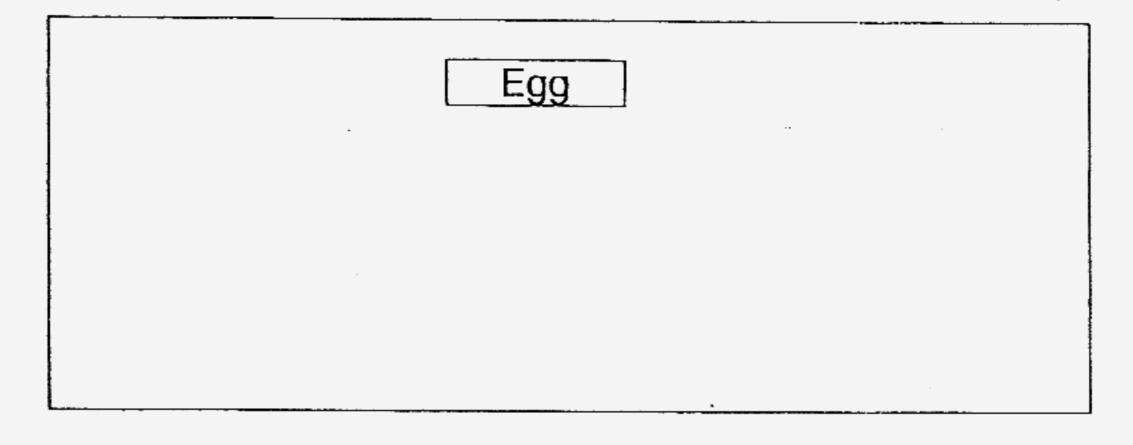
33. Refer to the	water plants below.
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Cattail	Hydrilla	Arrowhead	Water hyacinth

Group the water plants using the table below. (2m)

Fully submerged	Partially submerged	Floating
-		

34. a) Complete the life cycle of a butterfly in the box below. (1m)



b) Which stage of a butterfly undergoes moulting? (1m)

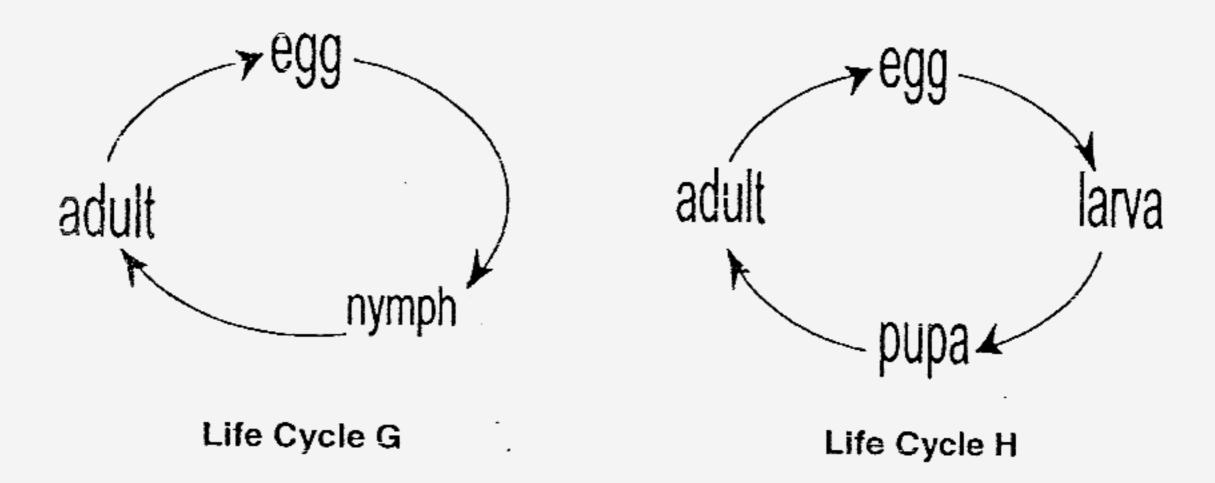
35. Based on functions, state a similarity and a difference between an adult plant and a young plant. (2m)

Similarity:

7

Difference:

36. Study the two life cycles of insects as shown below.



a)	What is the difference between the two life cycles, G and H? (1m)

b)	In which life cycle, G or H, would you place a mosquito? (1m)
	Life cycle

- Moulting is a process that is common to both life cycles of insects.
 Describe what is moulting? (1m)
- d) Why is moulting important to the life cycles of insects? (1m)

Nelson and his friends were at the beach having a barbeque. Nelson and his friends made the following statements. Nelson: It's so hot standing here! Ronnie: Oh no! The sausages are burnt! Samuel: The chicken wings are delicious! Write down the sense organ and sense used by each child when making their observations. (3m) Name Sense Organ Sense a) Neison b) Ronnie c) Samuel List two important functions of our skeleton. (2m) 38. Function 1: Function 2: Read each of the statements below carefully and write "T" for true statements 39. and "F" for false statements in the boxes provided. (2m) The young will always have a similar life cycle as their a) parents. Twins who look like each other will also have identical b) thumbprints. Hair length is a characteristic that can be passed down c) from a mother to her daughter. Living things always reproduce their own kind. d) 4

37.

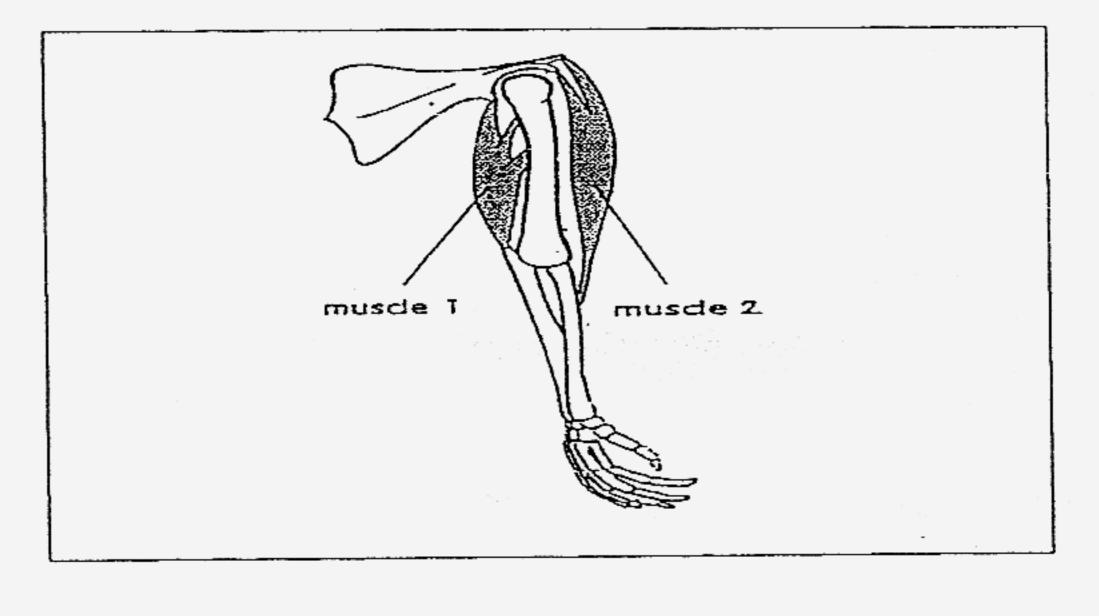
40. Study the classification table below.

Syste	ems
System Y	System Z
Artery	Windpipe

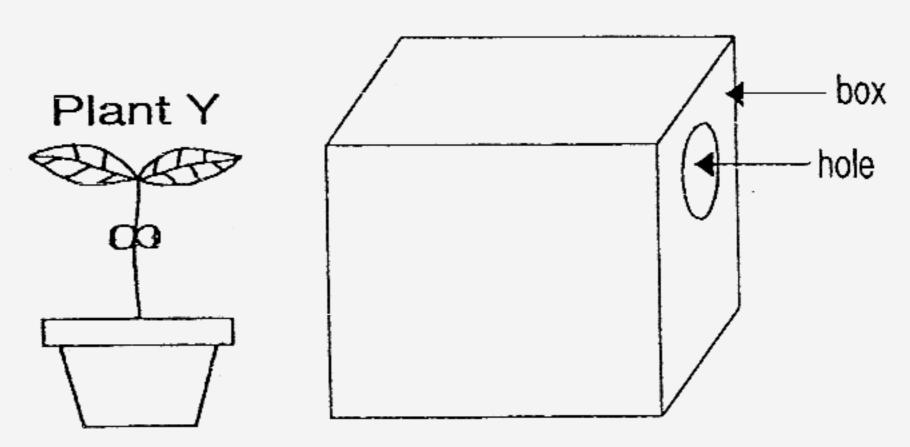
- a) Complete the classification table above. (2m)
- b) Which systems, do Y and Z belong to in man? (2m)

System Y :	
System Z :	

41. What happens to muscles 1 and 2 when you straighten your arm? (2m)



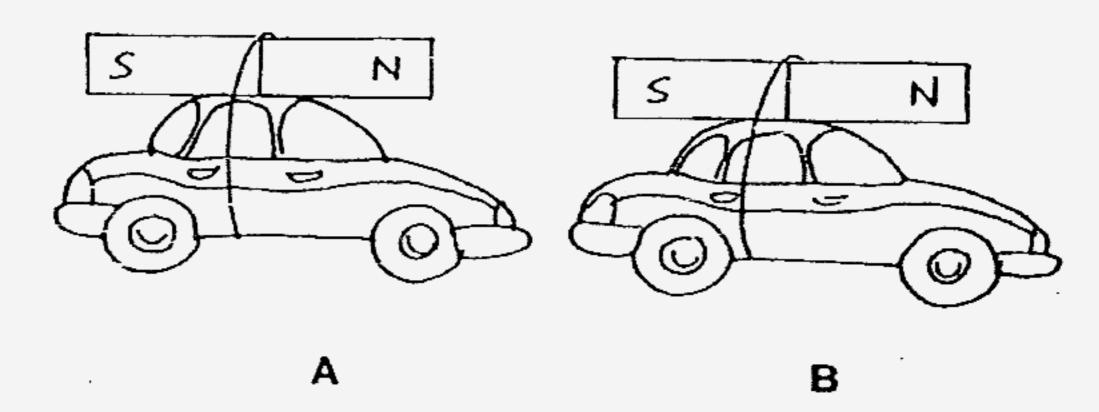
42. Ming Sheng was given a potted plant Y and a box with a hole as shown below.



a) What should he do if he wants his plant Y to bend towards one side?
 (2m)

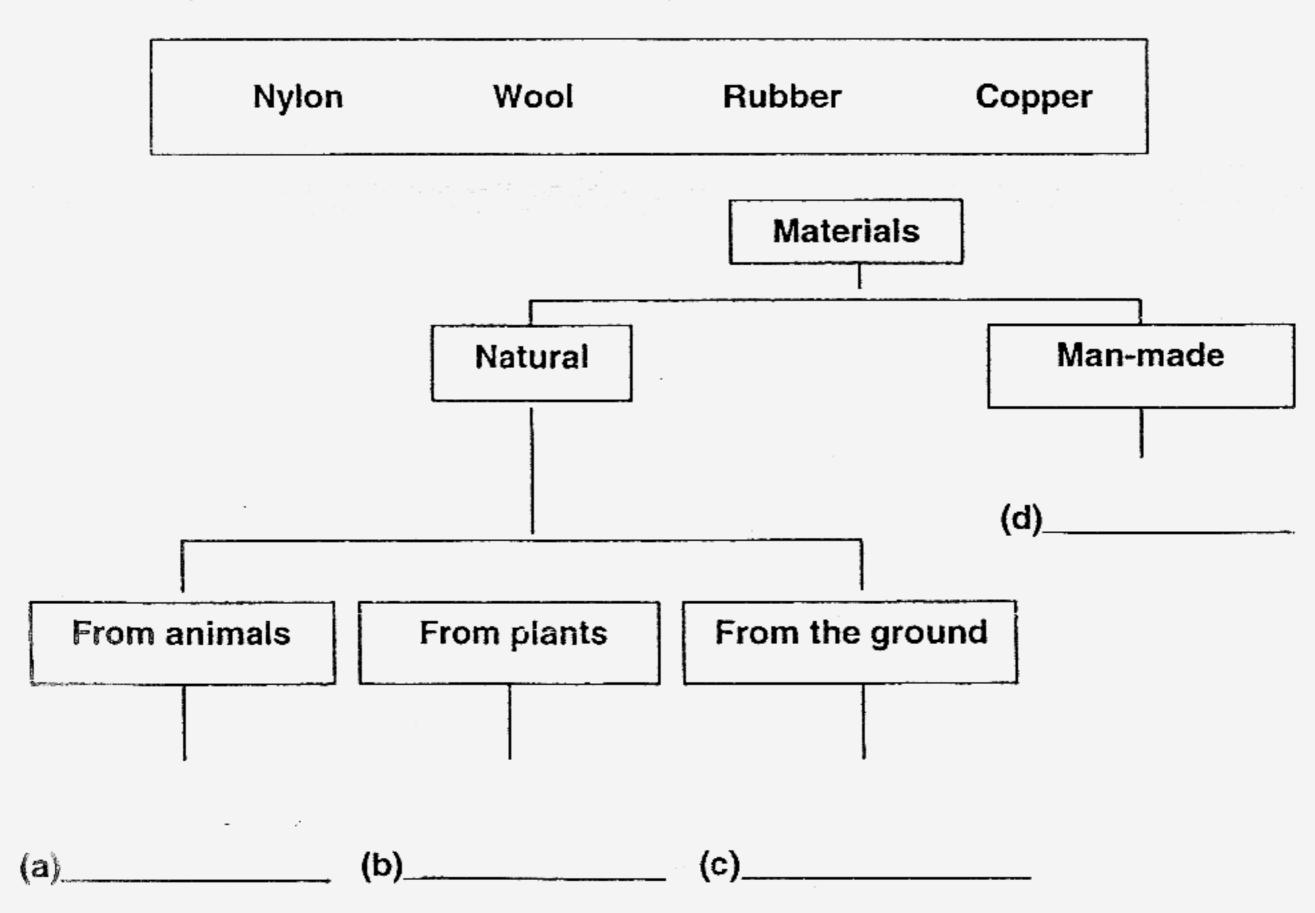
- b) What characteristics of living things does the above experiment show?
 (1m)
- c) Why is it important for plants to grow towards light? (1m)

43. Magnets are tied to the two toy cars as shown in the diagram below.

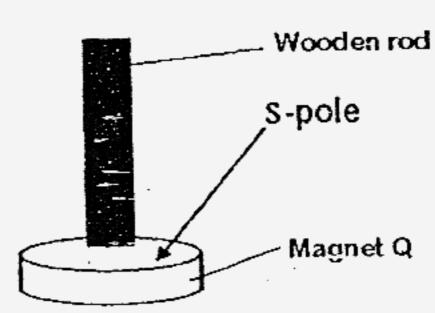


- a) If the two toys cars are brought near each other, what do you think will happen? (1m)
- b) Give a reason for the result in (a). (1m)

44. Group the following materials correctly in the chart below. (2m)



45. Study the set-up shown below.



 a) Describe how you can make another ring magnet float above Magnet Q, shown in the diagram. (1m)

- b) What does this tell you about the property of magnets? (1m)
- 46. Look at the diagram below carefully.





- a) What will happen if a piece of paper is placed between the magnet and the nails? (1m)
- b) Would you made the same observation as in (a), if the piece of paper is changed to a piece of copper? Explain why. (1m)

End of Paper

- 2) 7) 4)9) 1) 3 3) 5) 4 2 8) 6) 4 10) 3 11) 1 12) **1** 13) **3** 14) 4 15) 17) 2 16) 3 18) 2 19) 1 20) 4 21) 4 22) 4 23) **2** 24) 4 25) 4 **27) 3** 26) 1 **28) 3** 29) 4 30) 2
- Q31a. Guppy E В b. Bat Ostrich D c. d. Parrot F Water snake e. f. Spiny anteater À

Q32a. Circulatory System

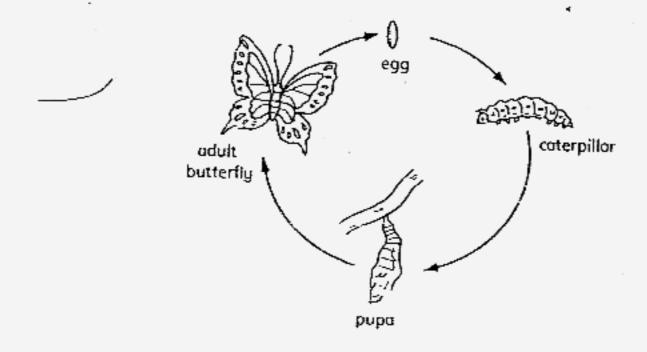
b. X: Digestion completed

Y: Water is removed from the undigested food.

Q33.

Fully submerged	Partially submerged	Floating
Hydrilla	Cattail	Water hyacinth
	Arrowhead	

Q35a.



b. Larva stage

Page 1 of 3

Q35. Similarity: Both need air, water and nutrients to grow.

Difference: Adult plants have bigger leaves than the young plants.

Q36a. Life Cycle G goes under 3 stages and Life Cycle H goes under 4 stages.

b. Life Cycle **H**

- It sheds its old skin and grows a new one as it grows bigger. This is called moulting.
- d. Moulting is important to the life cycle of an insects as it will grow bigger it form to an adult insects.

Q37.

Name	Sense Organ	Sense
Nelson	Skin	Touch
Ronnie	Eyes	Sight
Samuel	Tongue	Taste

Q38a. It gives our body shape

b. It protects the delicate organs in our body.

Q39a. True

b. False

c. False

d. True

Q40a.

Syst	ems
System Y	System Z
Artery	Windpipe
heart	lungs

b. System Y: Circulatory System Z: Respiratory

Q41. Muscle 1 relax while muscle 2 contracts.

- Q42a. He should put the box over the Plant Y.
 - b. Living things respond to change.
 - c. It needs light to make food.
- Q43a. The two toys cars will attract.
 - b. The two unlike poles magnet are facing each other causing them to attract.
- Q44a. Wool
 - b. Rubber
 - c. Copper
 - d. Nylon
- Q45a. The other South pole magnet must face each other.
 - b. Like poles of two different magnets will repel or push each other away.
- Q46a. The nail will attract to the magnet.
 - b. Yes. It is because copper is not a magnetic material.