

CA2



AI TONG SCHOOL

2005

CONTINUAL ASSESSMENT (2)

PRIMARY FIVE

SCIENCE

DURATION : 1 HR 45 MINS

DATE: 25 AUGUST 2005

INSTRUCTIONS

**Do not open the booklet until you are told to do so.
Follow all instructions.
Answer all questions.**

Name : _____ ()

Class : Primary 5 _____ Marks: _____

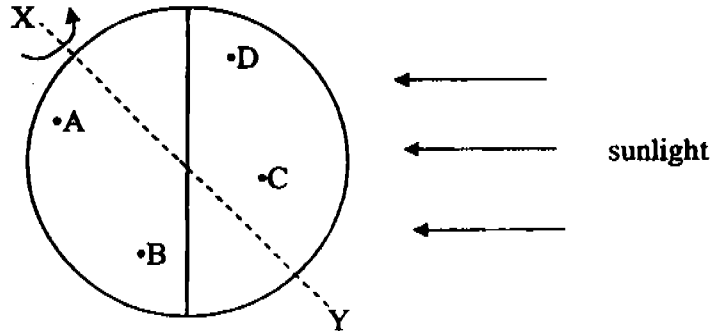
Parent's Signature : _____ Date : _____
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58

Section A: (30 x 2 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.

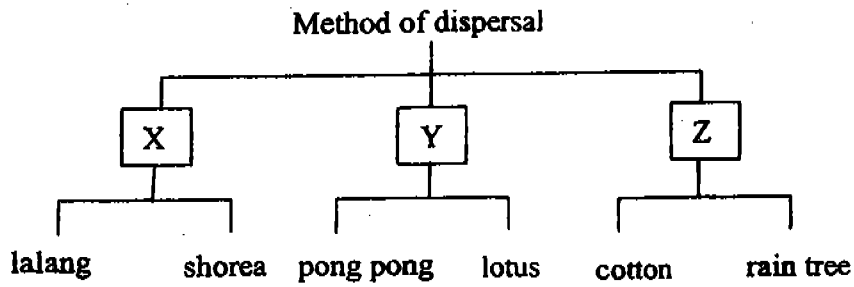
1. The diagram below shows the planet Earth rotating on its axis XY. Areas A, B, C and D are 4 places on Earth. Which area would be the next to experience sunrise?



- (1) A
 (2) B
 (3) C
 (4) D
2. When the Earth has travelled round the Sun once, the Earth would have turned _____ about its own axis.
- (1) 1 time
 (2) 24 times
 (3) 28 times
 (4) 365 times
3. Andy compared a plant cell to an animal cell and recorded his observations in the table below. Which comparison is incorrect?

	Plant Cell	Animal Cell
(1)	Rectangular shape	Irregular shape
(2)	Cell wall present	Cell wall present
(3)	Chloroplast present	Chloroplast absent
(4)	Cell sap present	Cell sap absent

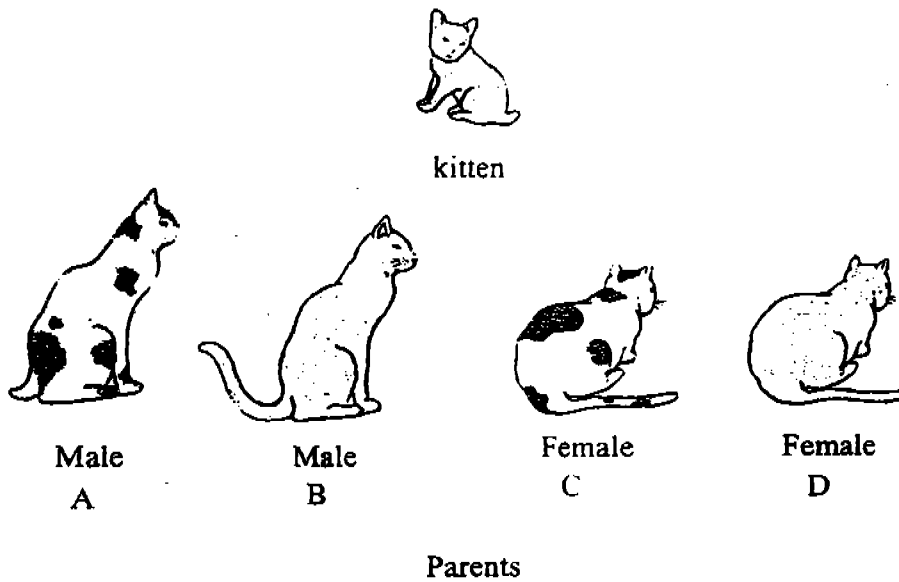
4. The diagram shows 3 methods of fruit and seed dispersal.



Which one of the following plants can be grouped under Z?

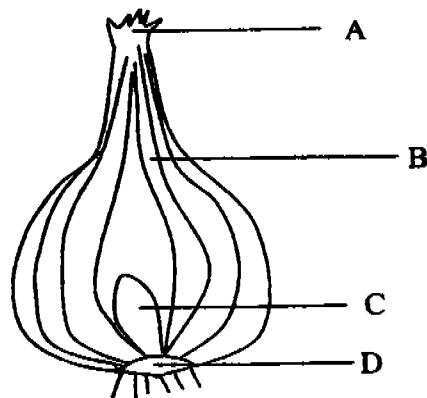
- (1) angsana
- (2) balsam
- (3) mimosa
- (4) mangrove

5. Which two cats are likely to be the parents of the kitten shown below?



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

6. Which part of the onion will grow into a new plant?



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

7. In which of the following lists are all the organisms grouped correctly?

	Method of Reproduction		
	Grown from seeds	Grown from underground stem	Grown from suckers
(1)	Water chestnut plant	Pineapple plant	Chilli plant
(2)	Chilli plant	Water chestnut plant	Pineapple plant
(3)	Chilli plant	Pineapple plant	Water chestnut plant
(4)	Water chestnut plant	Chilli plant	Pineapple plant

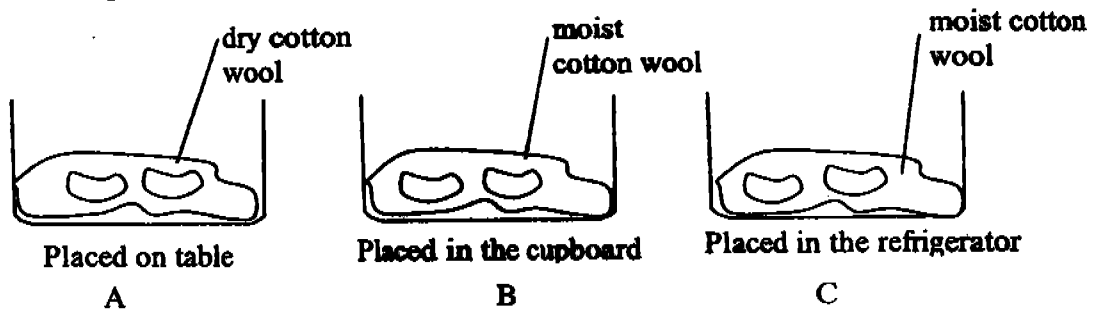
8. Fertilized eggs from different animals are similar because they _____

- (1) have hard and porous shells
- (2) need to be incubated
- (3) can develop into young animals
- (4) are produced by two different species

9. Which of the following controls most of the activities within the cell?

- (1) cell wall
- (2) cell membrane
- (3) nucleus
- (4) cytoplasm

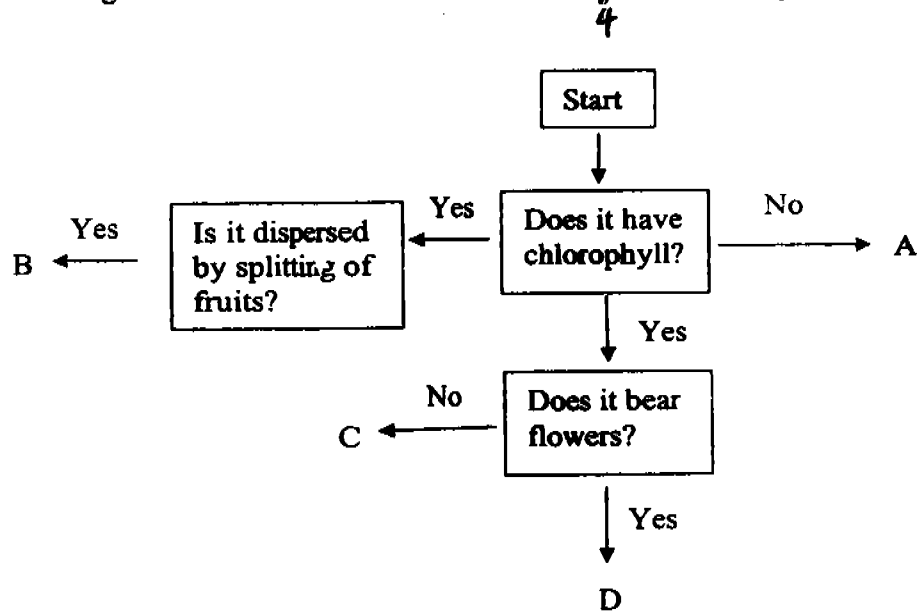
10. David placed two seeds in each beaker as shown in the diagram below.



In which beaker(s) will the seeds not germinate?

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

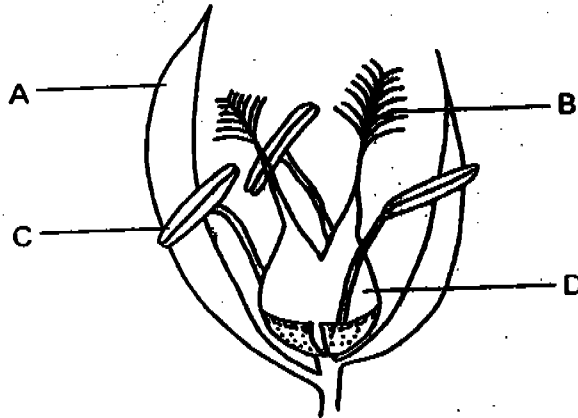
11. The following flowchart shows the characteristics of ~~7~~ different organisms.



Which are organisms A, B, C and D?

	A	B	C	D
(1)	fungi	balsam	fern	papaya
(2)	fern	mushroom	angsana	tomato
(3)	moss	angsana	tomato	balsam
(4)	fungi	balsam	pong pong	tomato

12. The following diagram shows parts of a flower.



Which part, A, B, C or D, will develop into a fruit?

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

13. For energy from the Sun to be transferred to plants, _____ must be present.

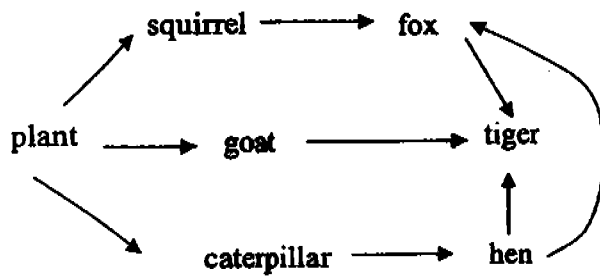
- A carbon dioxide
- B chlorophyll
- C oxygen
- D water

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

14. Which one of the following statements about digestion is not true?

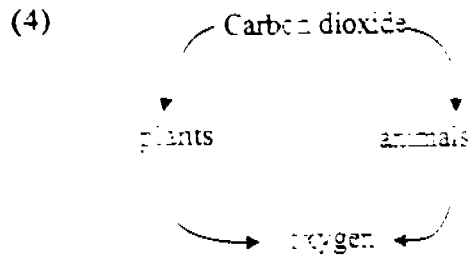
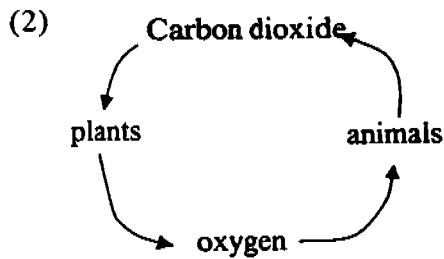
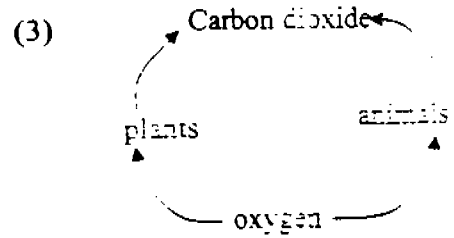
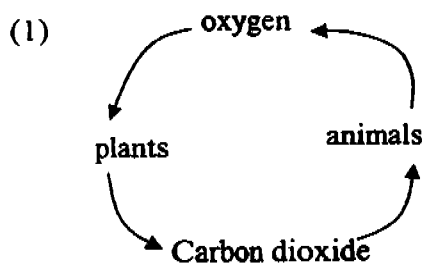
- (1) Saliva in the mouth helps to digest food.
- (2) Digestive juices in the gullet helps to digest food.
- (3) Digestion takes place in the stomach.
- (4) Digestion of food is complete in the small intestine.

15. The arrows in the diagram below show the flow of energy from one living thing to another. The energy is transferred as food. Which organism in the diagram below depends on more than two types of animals as a direct source of energy?



- (1) fox
- (2) goat
- (3) tiger
- (4) squirrel

16. Which one of the following diagrams correctly shows the exchange of gases between living things all the time?



17. Which one of the following materials are conductors of electricity?

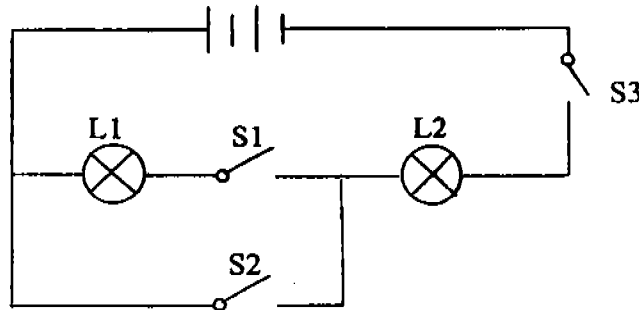
- (1) nylon and aluminium
- (2) plastic and iron
- (3) glass and steel
- (4) silver and copper

18. David wants to find out whether copper or steel wire can affect the brightness of a bulb. Which one of following variables must he keep constant?

- A Type of wire
- B Length of wire
- C Number of batteries
- D Arrangement of batteries

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

19. A circuit is set up using two bulbs, L1 and L2, and three switches, S1, S2 and S3 as shown in the diagram below.



Which one of the following set-ups is correct?

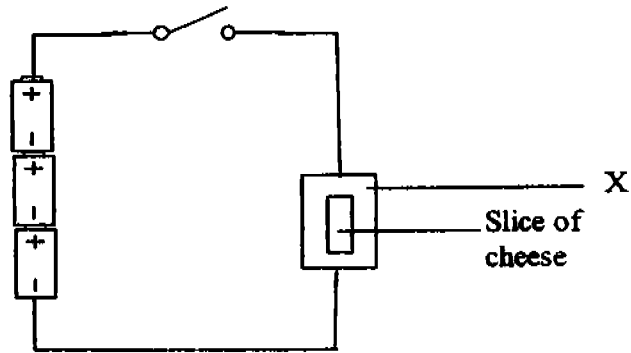
Set -up	S1	S2	S3	L1	L2
A	closed	open	open	lighted up	not lighted up
B	open	closed	open	not lighted up	lighted up
C	closed	open	closed	lighted up	not lighted up
D	open	closed	closed	not lighted up	lighted up

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

20. Which one of the following can use the natural source of electricity?

- (1) torchlight
- (2) washing machine
- (3) refrigerator
- (4) calculator

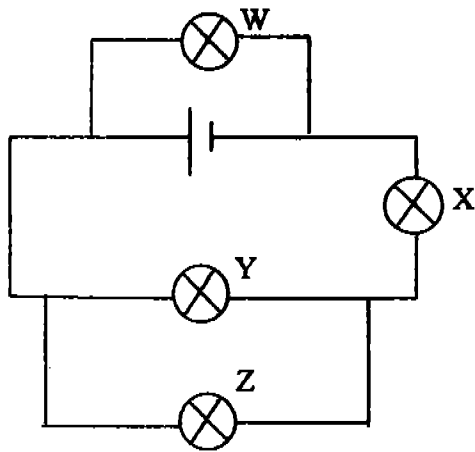
21.



The cheese starts to melt when the switch is turned on. What can X be?

- A silver
 - B wood
 - C plastic
 - D copper
- (1) A and D only
 - (2) B and C only
 - (3) A, B and C only
 - (4) A, B, C and D

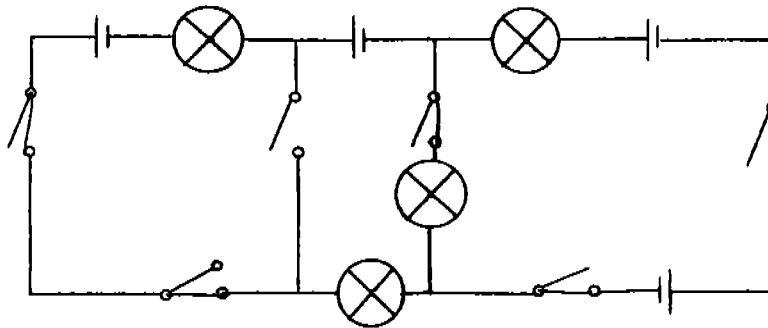
22. Study the circuit diagram.



Which bulb, if faulty, would allow only one other bulb to light up in the circuit?

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

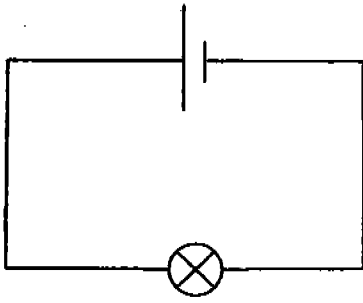
23. In the circuit shown, what is the least number of switches that must be closed for all the bulbs to light up?



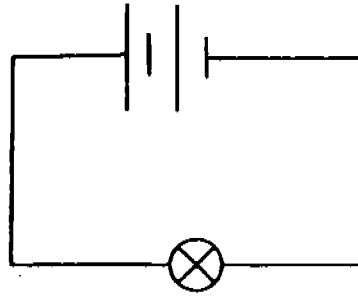
- (1) 3
- (2) 4
- (3) 5
- (4) 6

62
5A

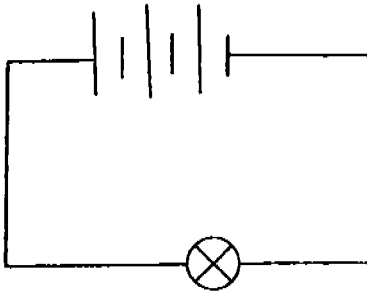
24. Study the four circuit diagrams. In which set-up will the bulb be the brightest?



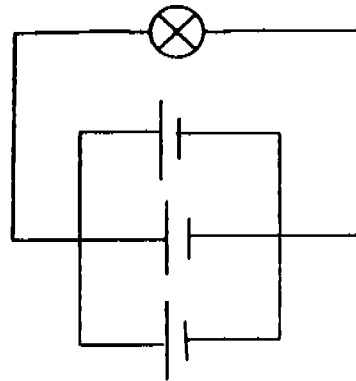
Set-up A



Set-up B



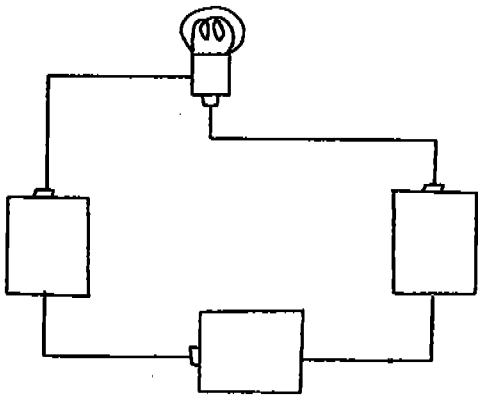
Set-up C



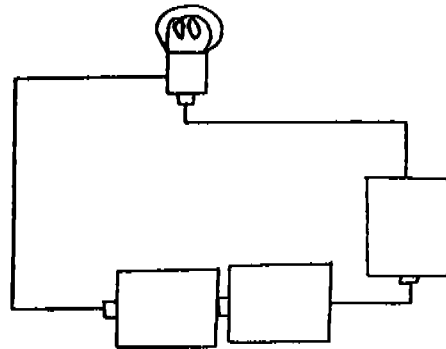
Set-up D

- (1) Set-up A
- (2) Set-up B
- (3) Set-up C
- (4) Set-up D

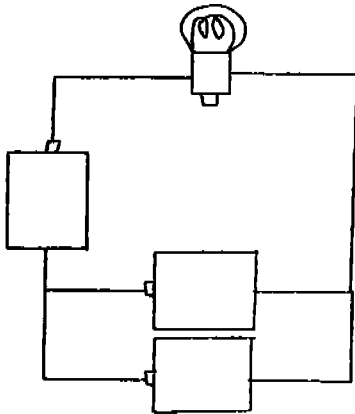
25. In which of the following circuits will the bulb not light up?



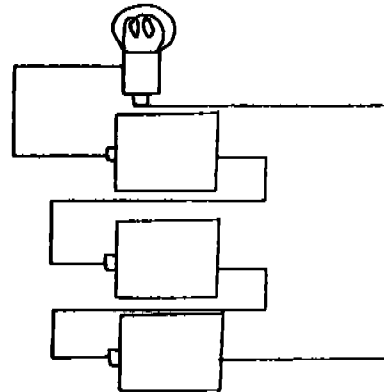
Circuit A



Circuit B



Circuit C

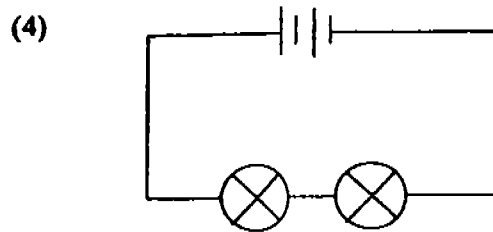
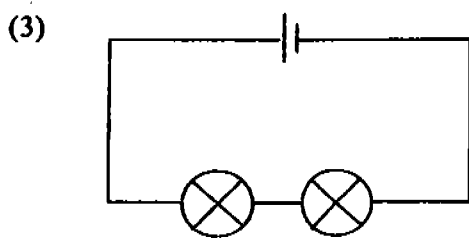
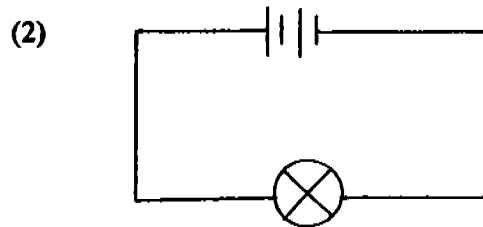
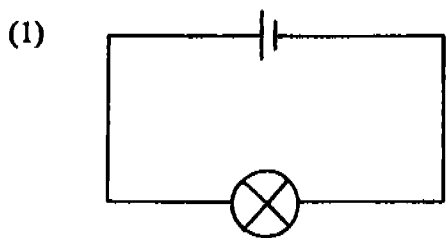


Circuit D

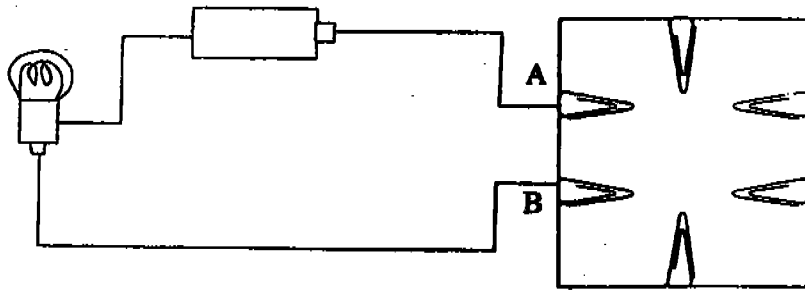
- (1) A
- (2) B
- (3) C
- (4) D

64

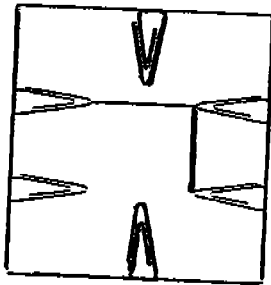
26. In which one of the circuits shown would the bulb or bulbs glow least brightly?



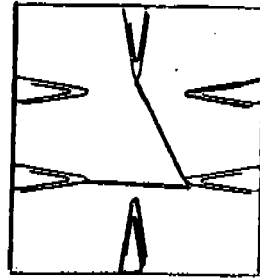
27.



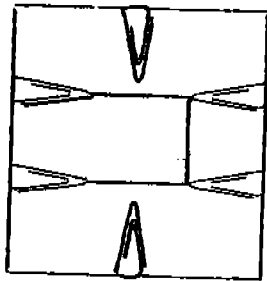
Timothy made a circuit card to light up the bulb in the diagram shown above. Which of the following arrangements of the circuit card would light up the bulb?



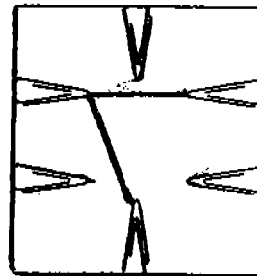
Circuit Card A



Circuit Card B




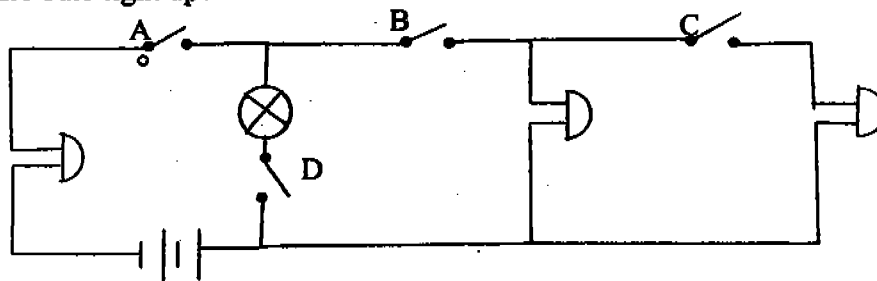
Circuit Card C



Circuit Card D

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

28. Study the circuit shown below. “” represents a buzzer connected to the circuit. Which switches should be closed in order to hear the sound of all the buzzers but not see the bulb light up?

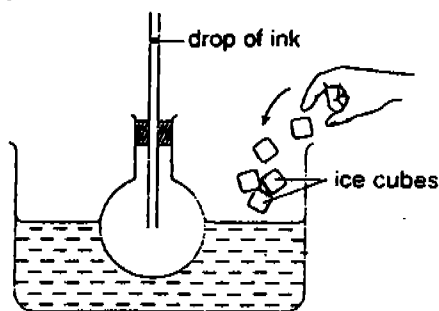


- (1) A and B only
 (2) B and D only
 (3) A, B and C only
 (4) A, B, C and D
29. In which processes is heat lost?

- A melting
 B freezing
 C condensation
 D evaporation

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

30. Tom conducted an experiment as shown below.



The flask and the basin of water have the same temperature. When he added the ice-cubes into the water, _____

- (1) the drop of ink will rise
 (2) the drop of ink will fall
 (3) the water level will decrease
 (4) the temperature of the water will increase

Name: _____ ()

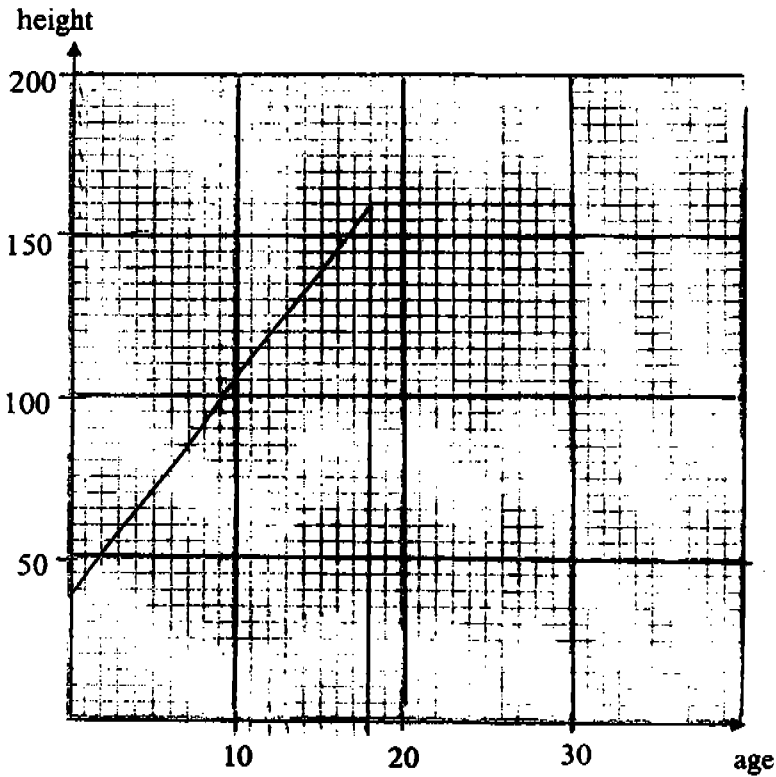
Class: _____

Section B (20 marks)

Write your answer in the spaces provided.

31. The Sun rises at dawn and sets in the evening. At night, we no longer see the Sun. Why does the Sun appear to change its position throughout the day. [1]

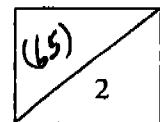
32. The graph below shows the changes in Mary's height from birth till she reaches the age of 30.



At which age did Mary's height stop increasing?

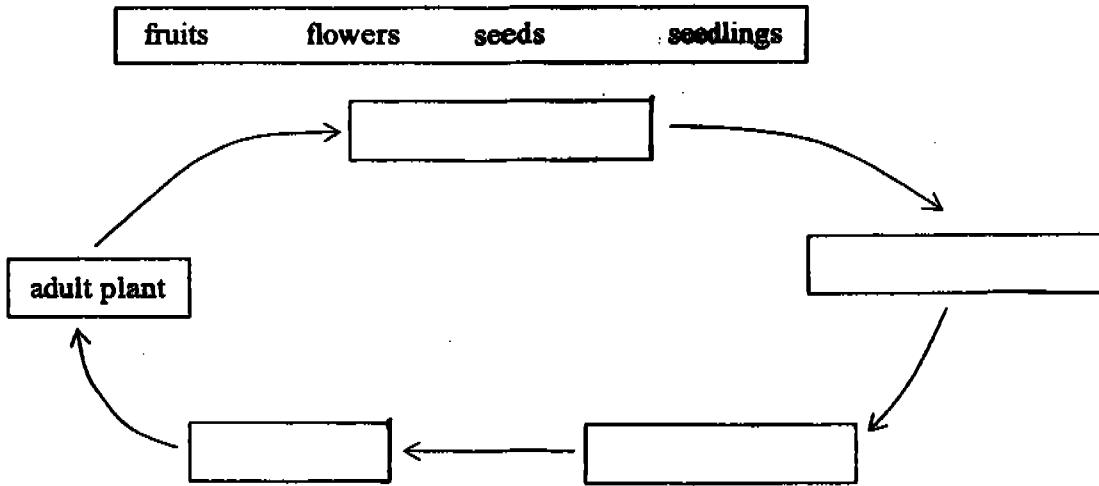
[1]

15



of

33. The growth of a French bean plant is shown below. Complete it with the help of the words given. [2]

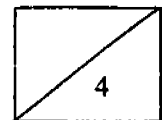


34. Describe one characteristic of leaves that can reproduce new plants. [1]

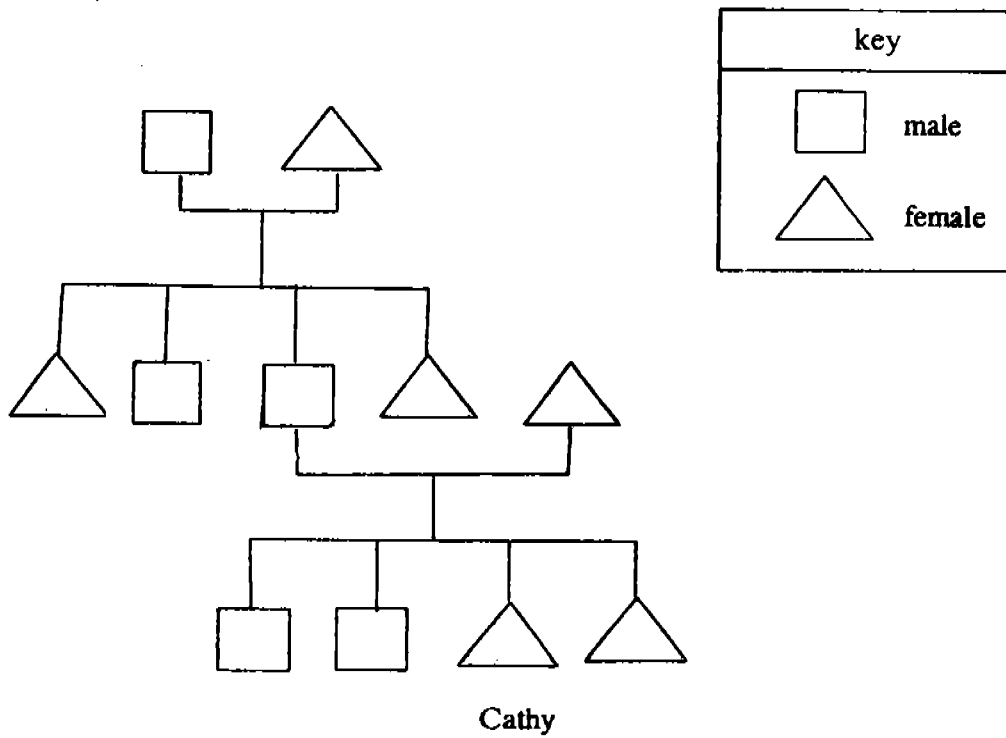
35. What does the umbilical cord carry from the mother to the developing baby in her womb? [1]



(a) _____

(b) _____



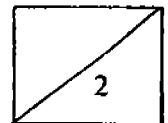
36. Study Cathy's family tree carefully.



key	
	male
	female

(a) Whose side of the family tree did Cathy draw? [1]

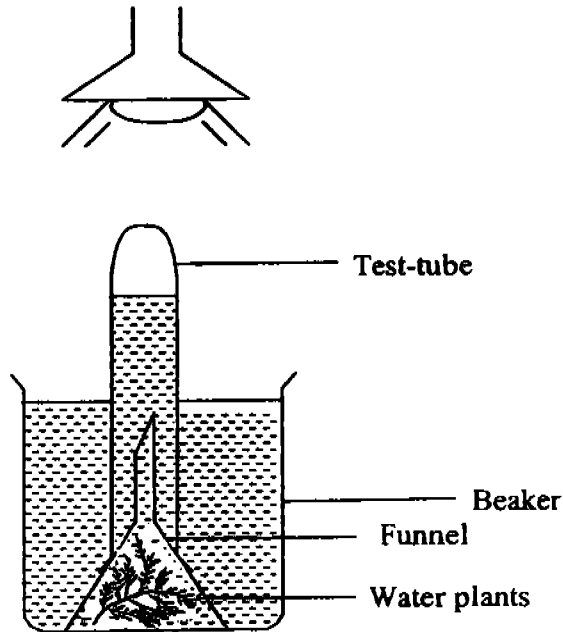
(b) Circle the symbol that represents Cathy's uncle. [1]



67

70

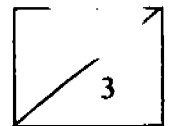
37. Mrs Tan used the set-up as shown below to show her class that a gas is produced when water plants carry out photosynthesis. She placed the set-up under a lamp for two days.



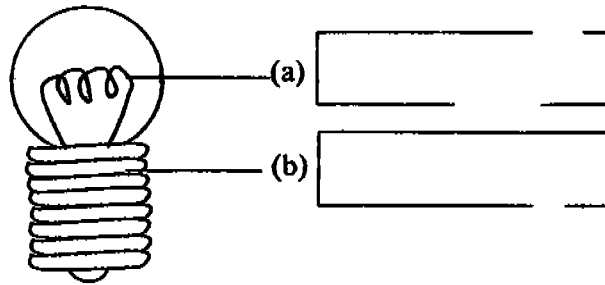
(a) Why does she put the set-up under a lamp? [1]

(b) What gas is produced in the test-tube? [1]

38. Although the batteries in a torch are correctly arranged, the bulb does not light up. State one possible reason why the bulb does not light up. [1]



39. Label parts (a) and (b) of the bulb. [1]



40. Six objects are put into two groups, Group A and Group B.

A	B
Eraser Chalk Plastic ruler	Stapler Pencil lead Hole puncher

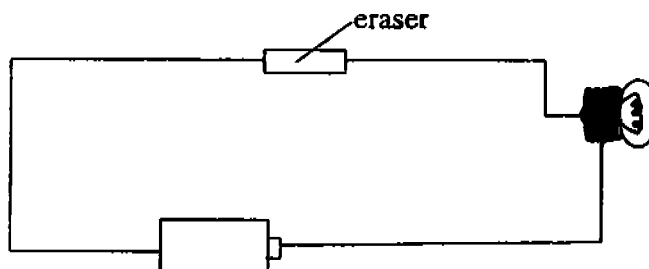
(a) Which group can a gold ring be put in? [1]

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

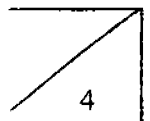
electricity

torS

41. Study the diagram below.



State one reason why the bulb in this circuit cannot light up. [1]



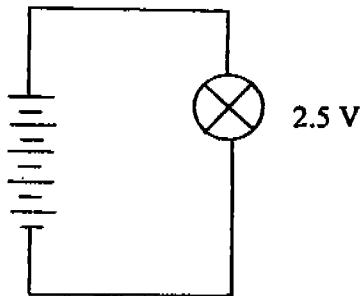
69

72

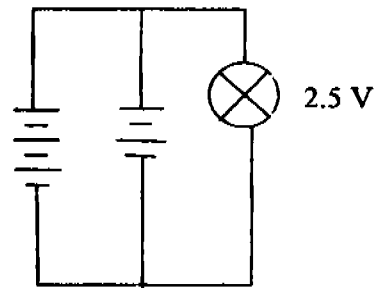
42. How do fuses help to ensure our safety when we use electricity?

[1]

43. Study the two circuit diagrams.



Circuit A



Circuit B

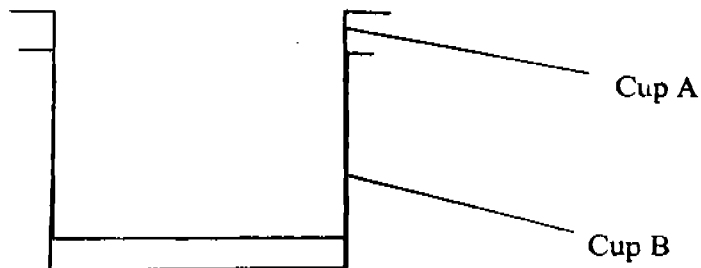
(a) In which circuit is the bulb more likely to fuse?

[1]

(b) Explain your answer in (a).

[2]

44.



Suggest and explain one way of separating Cups A and B that are stuck tightly together without damaging either of them.

[1]

Ai Tong Primary School
Primary 5 Science CA2 (2005)

Exam Stars

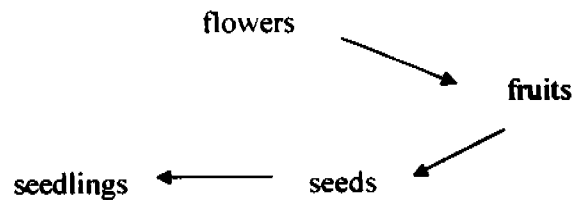
Answer Sheets

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	4	2	2	2	3	2	3	3	4
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	4	4	2	3	3	4	3	4	4
Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
1	2	3	3	3	3	3	3	2	2

31. The Earth is rotating on its own axis, thus the Sun appear to change its position throughout the day.

32. 18 years old.

33.



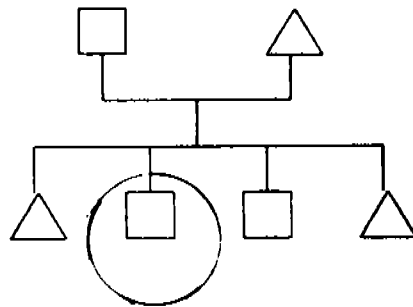
34. The leaves are usually fleshy.

35a. Oxygen

35b. Food

36a. Cathy drew her father's side of the family.

36b.



- 37a. The lamp is to provide light for the plants to carry out photosynthesis.
37b. Oxygen
38. The batteries are flat.
- 39a. Filament
39b. Metal casing
- 40a. Group B
- 40b. A gold ring is a conductor of electricity hence it can be put in Group B, as stapler, pencil lead and hole puncher are also conductors of electricity.
41. The eraser is an insulator of electricity and it has caused a break in the circuit as electricity does not flow through it. Hence no electricity is flowing in the circuit.
42. It breaks the circuit when too much electrical current is flowing in the circuit thus preventing it from catching fire.
- 43a. Circuit A
- 43b. In circuit A, the batteries are arranged in series, causing the bulb to fuse as too much current is flowing to it but in Circuit B, the batteries are arranged in parallel, thus the bulb will glow brightly but may not fuse.
44. Put some ice cubes into cup A. Cup A will contract as it cools and can eventually be separated from Cup B.
- OR**
- Immersed in hot water so that Cup B expands and can eventually be separated.