

Pei Chun Public School  
Continual Assessment 2 – 2004  
Science  
Primary 4

CA

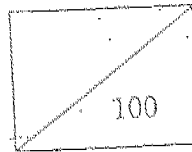
Name : \_\_\_\_\_ ( ) Date : 25 August 2004

Class : Pri. 4 ( )

Parent's Signature : \_\_\_\_\_

Science Teacher : \_\_\_\_\_

Marks :



Time : 1h 30 min

Section A (25 × 2 marks)

For questions 1 to 25, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. Which of the following animals have similar life cycles as that of a cockroach?

- A: beetle
- B: mosquito
- C: dragonfly
- D: grasshopper

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

2. What is the correct order of the development of a balsam seed to a balsam plant?

- (1) seed → shoot → root → flower → fruit
- (2) seed → flower → fruit → root → shoot
- (3) seed → root → shoot → fruit → flower
- (4) seed → root → shoot → flower → fruit

3. Which set of plants reproduces by seeds?

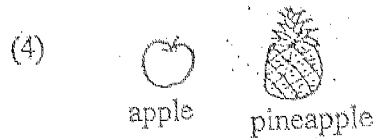
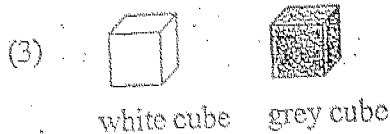
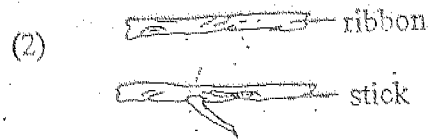
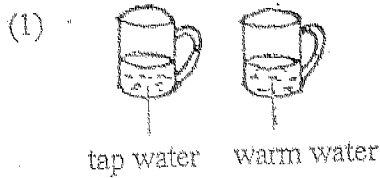
- (1) hibiscus and garlic
- (2) tomato and rambutan
- (3) lady's finger and tapioca
- (4) onion and morning glory

4. Mrs Tan noticed that the cake had turned very mouldy.  
Which senses did she use?

- A: smell
- B: touch
- C: taste
- D: sight

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

5. Ahmad wants to compare four different sets of items. In which set will he not be able to compare using his sense of sight?



6. Which of the following statements are true about the human digestive system?

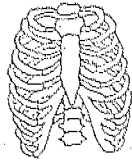
- A: Food is not digested in the gullet.
- B: There is no digestive juice in the mouth.
- C: Food is digested completely in the stomach.
- D: The large intestine is shorter than the small intestine.
- E: Inside the large intestine, most of the water from the undigested food is absorbed by the body.

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

7. Yihao is folding a paper aeroplane. He has to use his \_\_\_\_\_ joints.

- (1) finger and wrist
- (2) wrist and elbow
- (3) finger and elbow
- (4) shoulder and wrist

8. Which organs are protected by the part of the skeleton shown below?

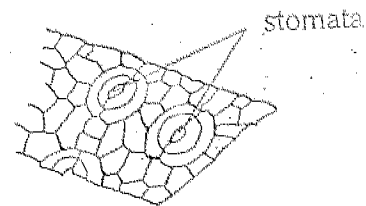


- A: liver
- B: heart
- C: lungs
- D: kidneys
- E: stomach

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

( )

9. The diagram shows part of a leaf seen under a microscope. Which statements about the stomata are correct?



- A: They take in only carbon dioxide.
- B: They absorb sunlight for the leaf to make food.
- C: They are mostly found on the underside of the leaf.
- D: They allow excess water vapour to escape through them.

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

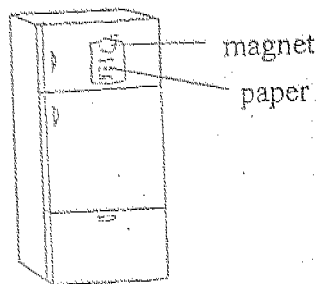
( )

10. Which of the following does not cause water pollution?

- (1) Littering of beaches.
- (2) Oil spills from ships.
- (3) Dripping of water from taps.
- (4) Dumping of waste products into water.

( )

11. The picture shows a piece of paper attached to the door of a refrigerator by a magnet.



The paper does not drop because the \_\_\_\_\_.

- (1) paper is a magnetic material
- (2) paper is magnetized by the magnet
- (3) paper is glued to the door of the refrigerator
- (4) door of the refrigerator is made of a magnetic material

12. Which of the following are not appropriate ways to conserve water?

- A: Drink less water.
- B: Turn off the taps fully.
- C: Have a shower instead of a bath.
- D: Make proper use of half and full toilet flushes.
- E: Water the plants with water that has been used for washing clothes.

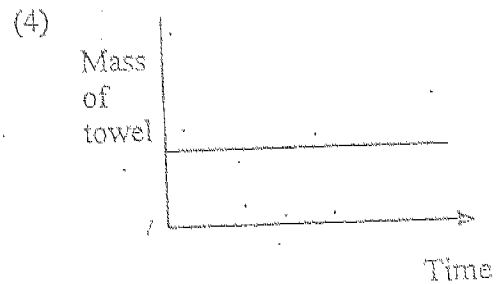
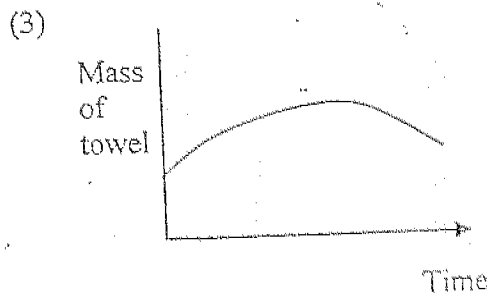
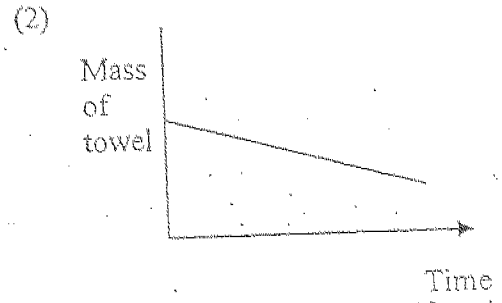
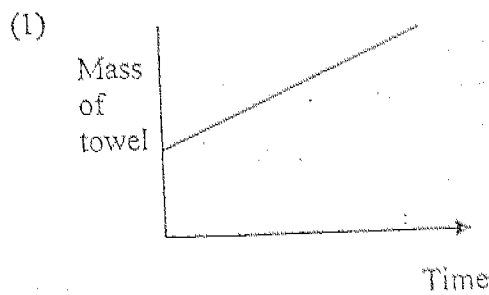
- (1) A and B only
- (2) A and E only
- (3) C and D only
- (4) C, D and E only

13. 5 cubes of ice are added to a glass of water. After some time, the water in the glass will change in \_\_\_\_\_.

- A: state
- B: shape
- C: volume
- D: temperature

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

14. A wet towel is left to dry in the sun. Which of the following graphs shows correctly the change in the mass of the towel?



15. Which of the following activities will result in the lowest breathing rate?

- (1) Drawing a picture.
- (2) Running a 100-metre race.
- (3) Taking a roller coaster ride.
- (4) Watching a very frightening movie.

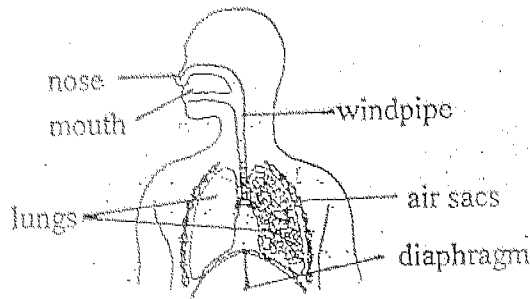
16. The table shows how some living things breathe. Which is wrong?

	living things	lungs	skin	gills
(1)	whale			✓
(2)	monkey	✓		
(3)	penguin	✓		
(4)	earthworm		✓	

17. Plants need water, \_\_\_\_\_ to make food.

- (1) oxygen and sunlight
- (2) nitrogen and sunlight
- (3) carbon dioxide and warmth
- (4) carbon dioxide and sunlight

18.



The table shows what happens to the movement of our diaphragm, ribs and chest when we breathe in. Which is correct?

	movement of ribs	movement of diaphragm	chest
(1)	out and upwards	upwards	contracts
(2)	out and upwards	downwards	expands
(3)	in and downwards	upwards	contracts
(4)	in and downwards	downwards	expands

( )

19. Which of the following are the functions of the blood?

- A: It keeps the heart pumping.
- B: It excretés waste materials from the body.
- C: It carries nutrients and waste matter in the body.
- D: It carries oxygen and carbon dioxide in the body.

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

( )

20. Study the food chain below.

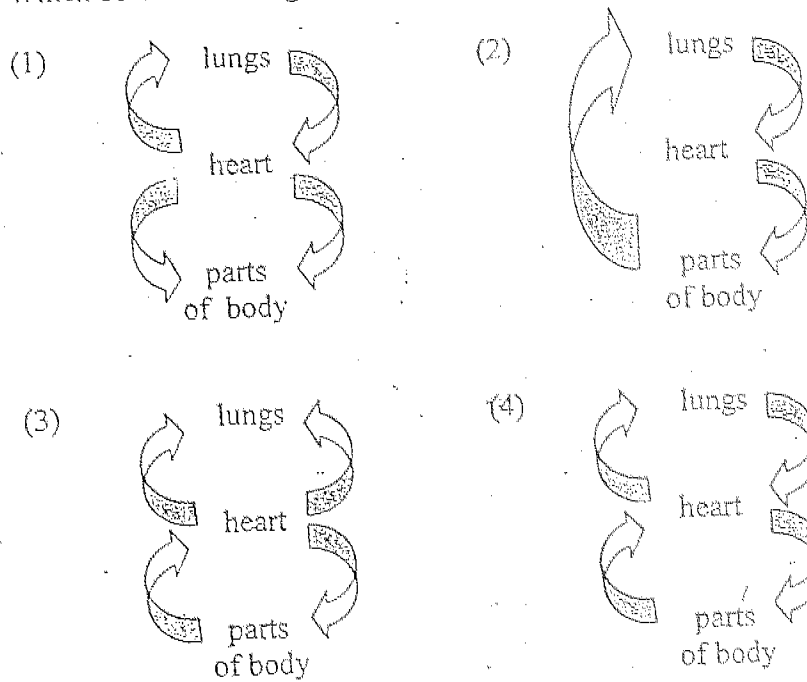
grass → grasshopper → bird → snake

Each arrow represents "is eaten by".  
Which statement about the food chain is false?

- (1) The grasshopper uses the energy from the grass to make food.
- (2) Energy from the grass is passed on to all the animals.
- (3) The bird gets its energy from the grasshopper.
- (4) Without the grass, all the animals will die.

( )

21. Which of the following shows the correct flow of blood in man?



22. All living cells carry out respiration. Which of the following occurs during respiration?

	food	oxygen	carbon dioxide
(1)	is formed	is released	is taken up
(2)	is formed	is taken up	is released
(3)	is broken down	is released	is taken up
(4)	is broken down	is taken up	is released

23. Ravi made some statements about the Sun. Which of the statements are true?

- A: The Sun gives us warmth.
- B: There will be no water cycle without the Sun.
- C: Too much sunlight is harmful to our skin only.
- D: Animals can make food using light from the Sun.

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

24. Which of the following has the biggest volume?

- (1) 200 g of rice
- (2) 200 g of sand
- (3) 200 g of plasticine
- (4) 200 g of cotton wool

( )

25. The diagram shows the transfer of energy from the Sun to the animals.

Sun → P → chicken → Q → R

Which of the following identifies P, Q and R correctly?

	P	Q	R
(1)	grass	man	tiger
(2)	corn	snake	cagle
(3)	corn	goat	lion
(4)	seaweed	fish	kingfisher

( )

For questions 26 to 30, please refer to Booklet K.

End of Section A



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Continual Assessment 2 – 2004  
Science  
Primary 4

Name : \_\_\_\_\_ ( )

Date : 25 August 2004

Class : Pri. 4 ( )

Parent's Signature : \_\_\_\_\_

Science Teacher : \_\_\_\_\_

Time : 1h 30 min

Marks for Section A	60
Marks for Section B	30
Marks for Booklet K (excludes Section A Qns. 26 – 30)	10
Total marks	100

Section B (30 marks)

For questions 31 to 42, write the answers in the spaces provided.

31. Siti described a fruit.  
"It is green and round. It is very sour."

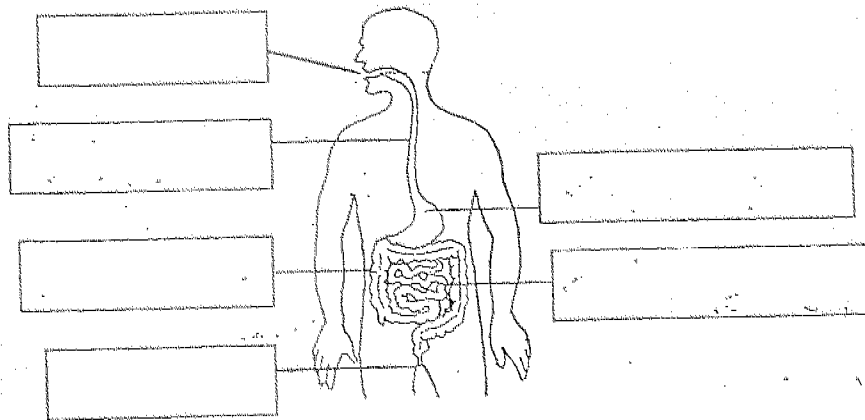
(a) Which two senses did Siti use to describe the fruit?

(1m)

(b) Which is our largest sense organ?

(1m)


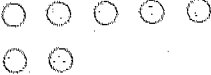
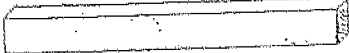

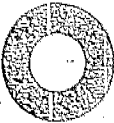
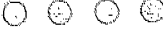


32. The picture shows our digestive system. Label only the parts where digestion of food takes place. (2m)



33. Match the plant parts with their functions. (3m)

- |             |   |   |   |
|-------------|---|---|---|
| (a) leaves  | ⊗ | ⊗ | protect the seeds                             |
| (b) veins   | ⊗ | ⊗ | transport food made by the leaves to the stem |
| (c) stomata | ⊗ | ⊗ | carry out photosynthesis                      |
| (d) roots   | ⊗ | ⊗ | support the branches and leaves               |
| (e) fruits  | ⊗ | ⊗ | allow air to enter and leave the leaves       |
| (f) stems   | ⊗ | ⊗ | hold the plant firmly to the ground           |

34. The strength of 4 magnets are tested and the results shown in the table.

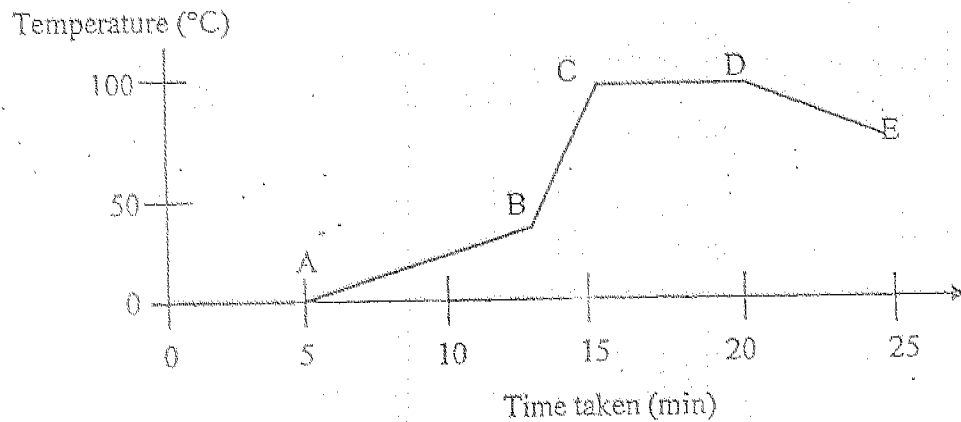
Magnets	Number of pins attracted
(J) 	
(K) 	
(L) 	
(M) 	

Based on the results, fill in the blanks below.

(3m)

- Magnet \_\_\_\_\_ is the strongest.
- Magnet \_\_\_\_\_ is the weakest.
- Magnets \_\_\_\_\_ and \_\_\_\_\_ have the same strength.
- From this experiment, we can conclude that the strength of a magnet does not depend on its \_\_\_\_\_ or \_\_\_\_\_.

35. The graph shows some ice cubes being heated.



(a) Which point of the graph shows that all the ice cubes have melted completely? (1m)

\_\_\_\_\_

(b) Which part of the graph shows that the water is gaining heat very quickly? (1m)

\_\_\_\_\_

(c) For how long does the water boil? (1m)

\_\_\_\_\_

36. Fill in the blanks with the correct words. (2m)

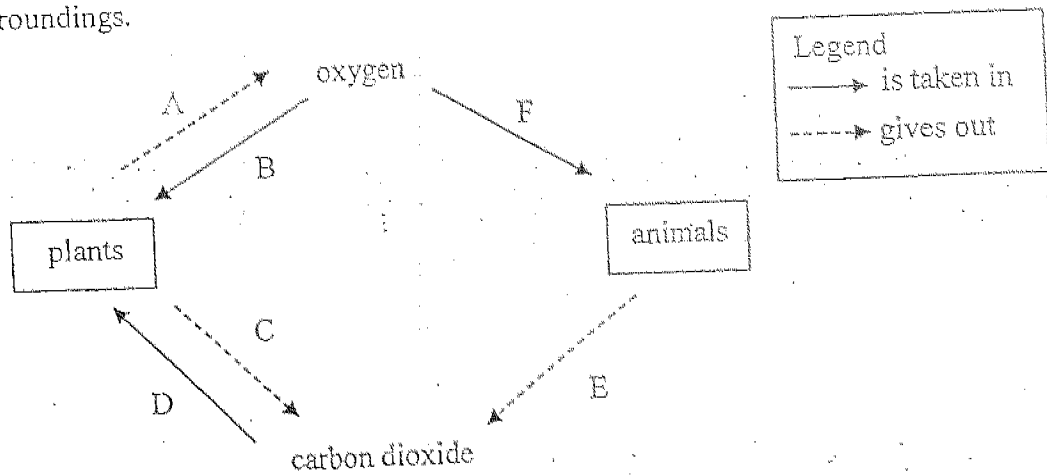
When we breathe in, air passes down the \_\_\_\_\_ which branches into two smaller tubes leading to the \_\_\_\_\_. These tubes branch further into tiny tubes that end in balloon-like structures called \_\_\_\_\_. When air reaches these structures, oxygen passes through their walls and is carried to the rest of the body by the \_\_\_\_\_.

\_\_\_\_\_

37. Write 'T' if the statement is true and 'F' if the statement is false in the boxes provided. (2m)

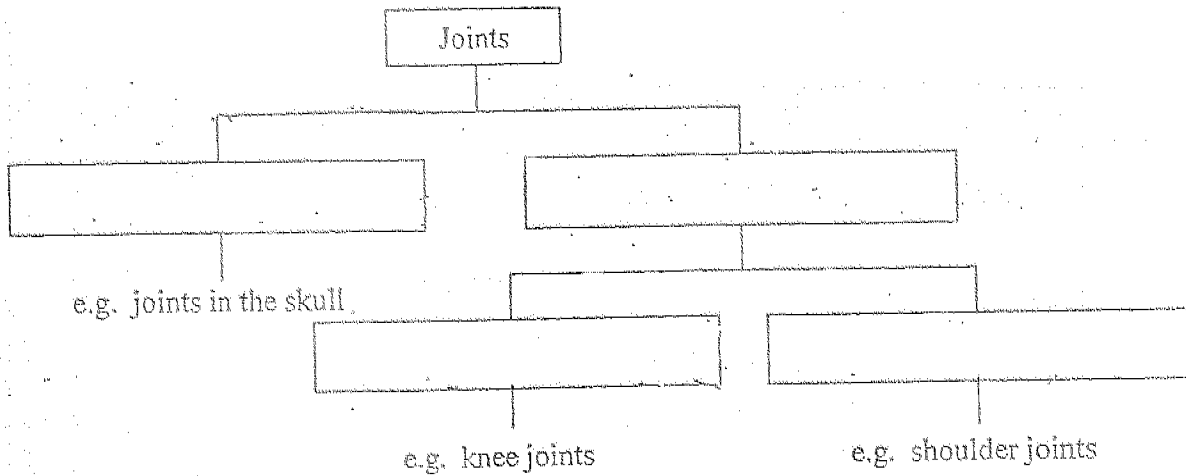
- (a) There is no air in soil.
- (b) Carbon dioxide makes up one percent of the air.
- (c) Bacteria in the soil use nitrogen in the air around them.
- (d) There are more than three gases in the air.

38. The 6 arrows in the diagram show the exchange of gases between living things and their surroundings.

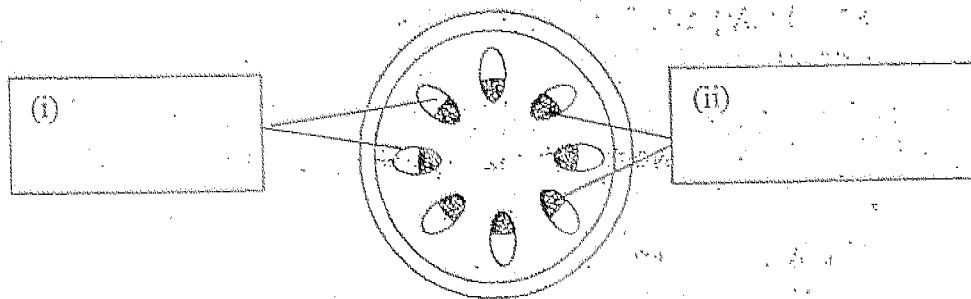


- (a) Name the arrows which show a process that takes place all the time. (1m)  
\_\_\_\_\_
- (b) Name this process. (1m)  
\_\_\_\_\_
- (c) Name the process represented by D and A. (1m)  
\_\_\_\_\_
- (d) Name two conditions not shown in the diagram that are necessary for the process in (c) to take place. (1m)  
\_\_\_\_\_

39. In the classification table below, give a suitable sub-heading in each of the boxes. (2m)

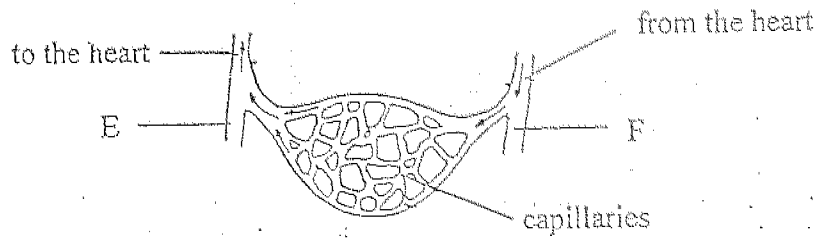


40. The diagram shows a cross-section of a stem.



- (a) Label the tubes in the diagram above. (1m)
- (b) Water and mineral salts are transported by the \_\_\_\_\_ tubes. (½m)
- (c) Food made by the leaves is transported by the \_\_\_\_\_ tubes. (½m)

41. The diagram shows a part of the circulatory system.



(a) Name the blood vessels E and F. (1m)

E: \_\_\_\_\_

F: \_\_\_\_\_

(b) E carries blood rich in \_\_\_\_\_ and waste material. (½m)

(c) F carries blood rich in \_\_\_\_\_, digested food and water. (½m)

(d) Why is blood pumped faster to the other parts of the body when we exercise? (1m)

\_\_\_\_\_

\_\_\_\_\_

42. An experiment was conducted to find out which brand of batteries was the best. A torch was used to test the life span of the batteries and the results are shown in the table below.

Brand of batteries	Life span of batteries in hours
A	12
B	10
C	15
D	14

- (a) Which brand of batteries was the best? (1m)

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- (b) What must not be changed to ensure a fair test? (1m)

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For questions 43 to 46, please refer to Booklet K.  
*End of Paper*



CA2

- 1) 3            28) 2            31) a) The sense of sight and taste  
2) 4            29) 3            b) Our skin  
3) 2            30) 1            32)  
4) 3  
5) 1  
6) 3  
7) 1            33) a) carry out photosynthesis  
8) 2            b) transport food made by the leaves  
                 to the stem.  
9) 4            c) allow air to enter and leave the leaves  
10) 3            d) hold the plant firmly to the ground.  
11) 4            e) protect the seeds.  
12) 2            f) support the branches and leaves.  
13) 3            34) a) J    b) L    c) K and M  
                 d) size and shape  
14) 2            35) a) A            b) BC            c) 5 min  
15) 1            36) windpine  
                 lungs  
16) 1            air sacs  
                 blood  
17) 4  
18) 2            37) a) F    b) F    c) T            d) T  
19) 3            38) a) BC and EF    b) respiration    c) photosynthesis  
                 d) sunlight and water  
20) 1            39) immovable joints            movable joints  
21) 4            hinge joints            ball and socket joint  
22) 4            40) i) phloem            ii) xylem  
                 b) xylem            c) phloem  
23) 1            41) a) E : vein    b) F : artery  
24) 4            b) carbon dioxide            c) oxygen  
25) 2            d) To supply more food and oxygen to produce more  
                 energy.  
26) 3            42) a) C