

# Anglo-Chinese School (Junior)



CONTINUAL ASSESSMENT 1 (2016)

PRIMARY 5

SCIENCE

BOOKLET A

Wednesday

9 MARCH 2016

1 hour

Name: \_\_\_\_\_ ( ) Class: 5.( )

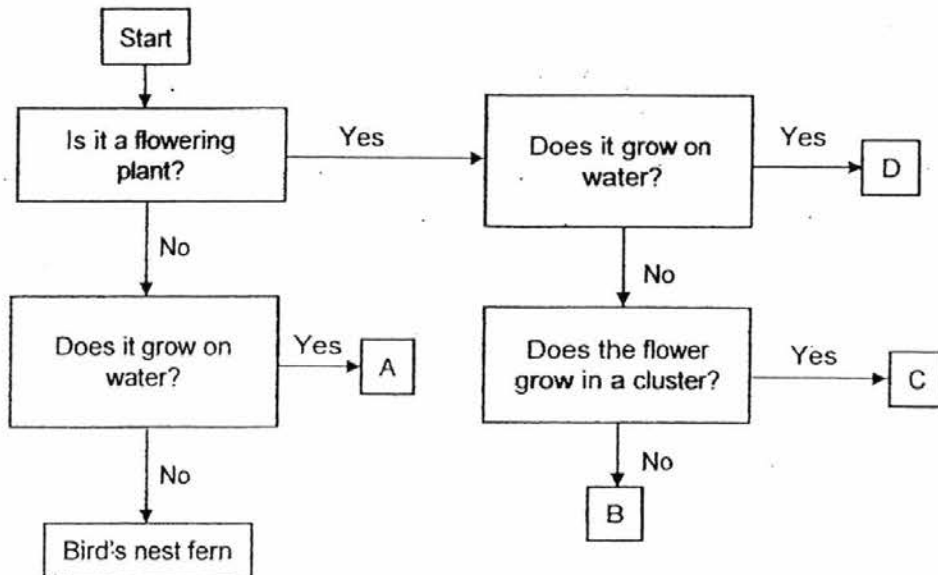
## INSTRUCTIONS TO PUPILS

- 1 Do not turn over the pages until you are told to do so.
- 2 Follow all instructions carefully.
- 3 There are 15 questions in this booklet.
- 4 Answer ALL questions.
- 5 Shade your answers in the Optical Answer Sheet (OAS) provided.

**Booklet A (30 marks)**

For each question from 1 to 15, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (15 x 2 marks)

1. Study the flowchart and plant below.



Plant





Based on the flowchart, which letter, A, B, C or D is most likely to represent the plant?

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

2. Bob needs a container to grow a plant. The container must have the three following conditions.

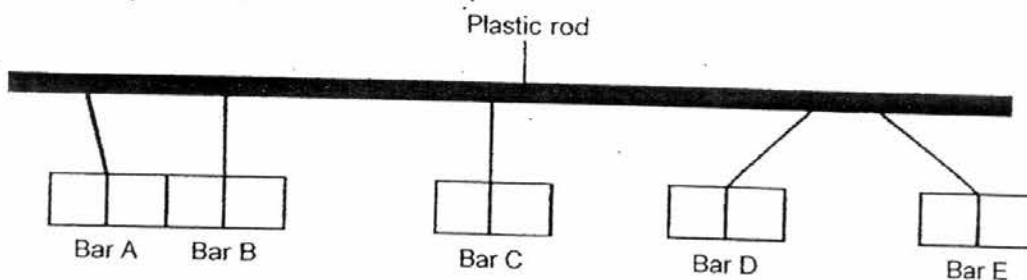
1.	Water should not be able to pass through it.
2.	He should be able to see the soil through the container.
3.	It should not break when it is dropped.

He wants to reuse a container to grow his plant. He has four containers as shown below.

			
made of plastic	made of paper	made of aluminum	made of glass
Container A	Container B	Container C	Container D

Based on the conditions stated above, which container would be most suitable to grow the plant?

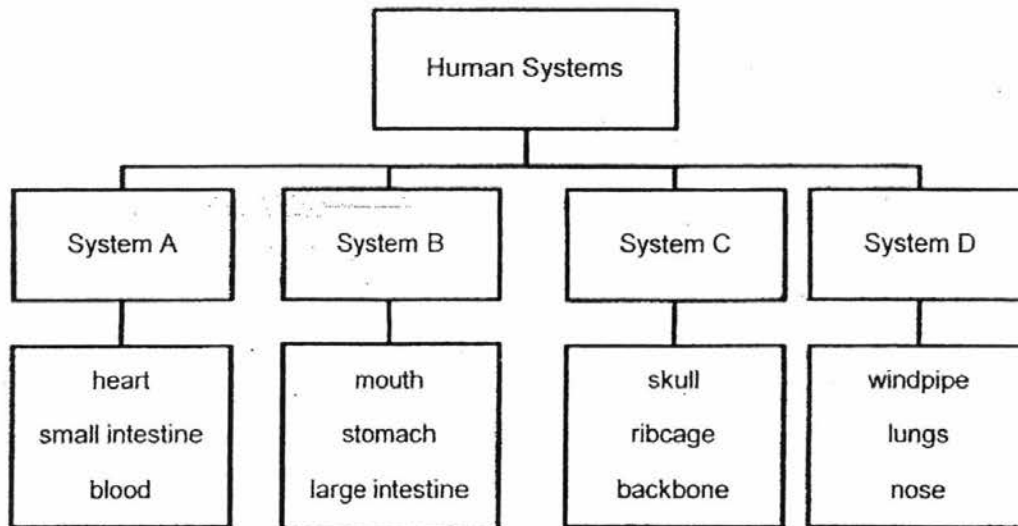
- (1) Container A  
 (2) Container B  
 (3) Container C  
 (4) Container D
3. The diagram below shows five metal bars, A, B, C, D and E, of the same size tied to a plastic rod.



Which one of the metal bars, A, B, C or D, is most likely made of a non-magnetic material?

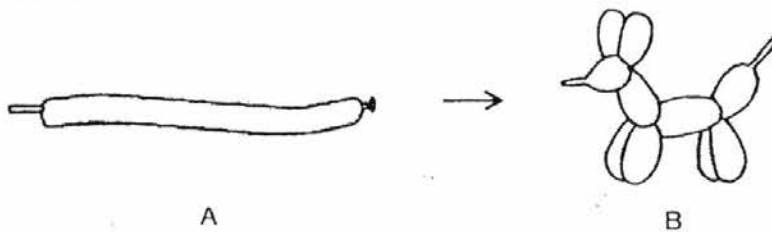
- (1) Bar A  
 (2) Bar B  
 (3) Bar C  
 (4) Bar D

4. Study the classification chart below.



Which one of the systems above has a part that is incorrectly grouped?

- (1) System A
  - (2) System B
  - (3) System C
  - (4) System D
5. An entertainer blew up a balloon, A, and then twisted it to form the figure of a puppy, B, as shown below.



Three children, Amos, Bob and Chuck, made the following conclusions. Which child(ren) is/are correct?

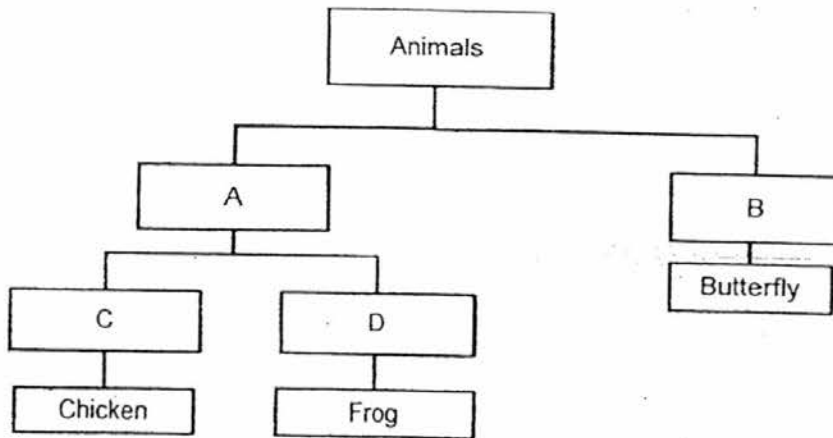
Amos : There is less air in B than A.

Bob : The mass of air in B is the same as A.

Chuck: Both the shape and volume of air in B are different from A.

- (1) Amos only
- (2) Bob only
- (3) Amos and Chuck only
- (4) Bob and Chuck only

6. Ali drew the classification table below based on the life cycle of animals.



What are the suitable headings for A, B, C and D?

	A	B	C	D
(1)	Three-stage life cycle	Four-stage life cycle	The young looks like the adult	The young does not look like the adult
(2)	Three-stage life cycle	Four-stage life cycle	The young does not look like the adult	The young looks like the adult
(3)	Four-stage life cycle	Three-stage life cycle	The young does not look like the adult	The young looks like the adult
(4)	Four-stage life cycle	Three-stage life cycle	The young looks like the adult	The young does not look like the adult

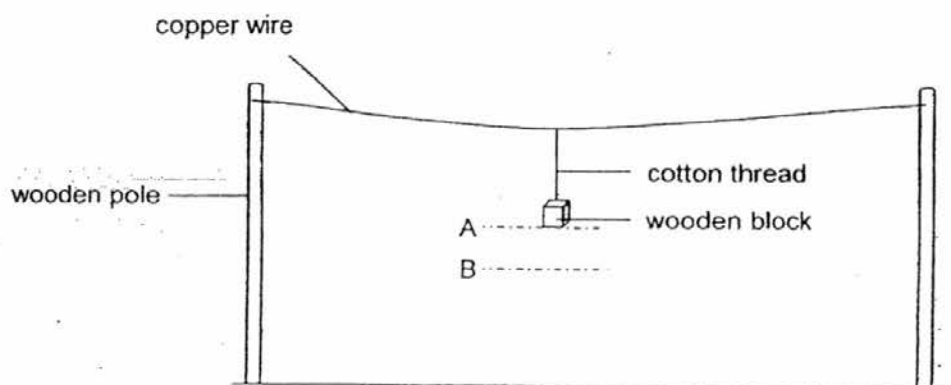
7. Lucy used a light sensor that was connected to a data-logger to measure the amount of light passing through three objects, R, S and T. She then recorded her results in the table below.

Object	None	R	S	T
Amount of light (units)	400	0	200	390

Which of the following is most likely to be objects R, S and T?

	R	S	T
(1)	clear glass	frosted glass	wooden block
(2)	tracing paper	book	mirror
(3)	wooden block	tracing paper	clear glass
(4)	mirror	frosted glass	book

8. A wooden block was hung from a copper wire using a cotton thread and placed in the school field.



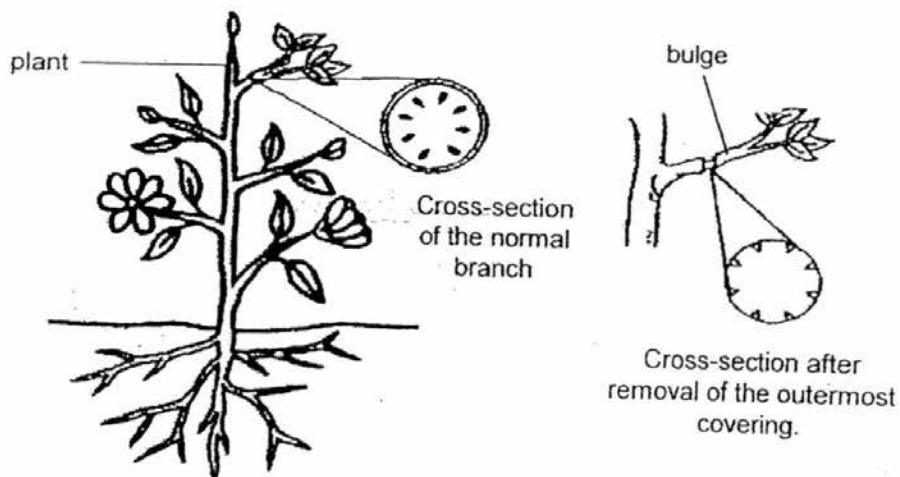
The block was at position A at the start of the experiment at 9 am. At noon, when it was hot and sunny, the block was at position B.

Which of the following best explains why the wooden block was at position B at noon?

- (1) The copper wire expanded.
  - (2) The copper wire contracted.
  - (3) The wooden block expanded.
  - (4) The wooden block contracted.
9. Where can the water-carrying and food-carrying tubes be found in a plant?

	<b>Water-carrying tubes</b>	<b>Food-carrying tubes</b>
(1)	roots and stem only	roots and stem only
(2)	all parts of the plant	all parts of the plant
(3)	roots and stem only	leaves and flowers only
(4)	leaves and flowers only	roots and stem only

10. Alice planted a plant in her garden. She removed the outermost covering of a branch which contained the food-carrying tube. She left the plant to continue to grow for several weeks.



After two weeks, Alice saw a bulge at the top part of the branch where she had removed the outer covering. Which of the following would explain Alice's observation?

- (1) The plant made too little food.
  - (2) The plant could not make food.
  - (3) The plant could not transport food to the other parts of the plant.
  - (4) The plant could not transport water to the other parts of the plant.
11. Which of the following statement(s) is /are true?
- A The air we breathe out is cooler than the air we breathe in.
  - B The air we breathe in contain more oxygen than the air we breathe out.
  - C The air we breathe out contain more carbon dioxide than the air we breathe in.
  - D The air we breathe in contains more water vapour than the air we breathe out.
- (1) A and D only
  - (2) B and C only
  - (3) A, C and D only
  - (4) A, B, C and D

12. Read the following description of the human breathing process below.

- A Air enters the nose.
- B The air goes into the lungs.
- C The air goes through the windpipe.
- D The hair in the nostrils traps dust present in the air.

Arrange the description in the correct order to describe what happens when a person takes a deep breath.

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

13. Which of the following are transported in the blood?

- A Oxygen
- B Digested food
- C Carbon dioxide
- D Waste materials

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

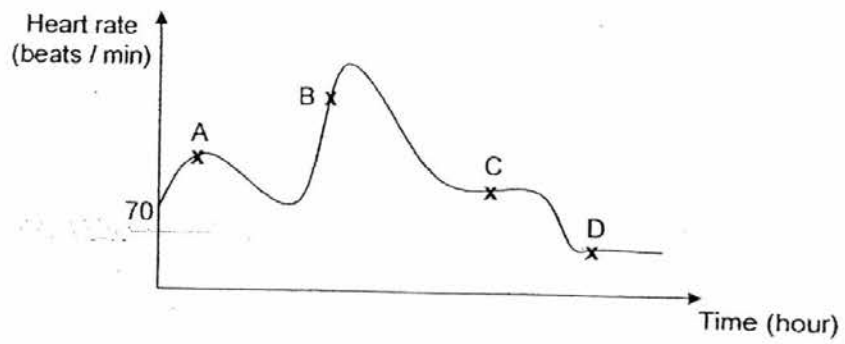
14. Which of the following parts can be found in a plant cell but not in an animal cell?

- A Nucleus
- B Cell wall
- C Chloroplast
- D Cell membrane

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



15. The graph below shows Sam's heart rate from 9 am to 9 pm.



Which of the following activities carried out by Sam corresponds to his heart rate as shown in the graph above?

	A	B	C	D
(1)	sitting	sleeping	running	walking
(2)	sleeping	sitting	walking	running
(3)	sleeping	walking	sitting	running
(4)	walking	running	sitting	sleeping

End of Booklet A

# Anglo-Chinese School (Junior)



## CONTINUAL ASSESSMENT 1 (2016)

PRIMARY 5

SCIENCE

BOOKLET B

Wednesday

9 MARCH 2016

1 hour

Name: \_\_\_\_\_ ( ) Class: 5.( ) Parent's Signature: \_\_\_\_\_

### INSTRUCTIONS TO PUPILS

- 1 Do not turn over the pages until you are told to do so.
- 2 Follow all instructions carefully.
- 3 There are 7 questions in this booklet.
- 4 Answer ALL questions.
- 5 The marks are given in the brackets [ ] at the end of each question or part question.

Booklet	Possible Marks	Marks Obtained
A	30	
B	20	
Total	50	

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This question paper consists of 8 printed pages (inclusive of cover page).

**Booklet B (20 marks)**

For questions 16 to 22, write your answers in this booklet.

The number of marks available is shown in brackets [ ] at the end of each question or part question.

16. Charles found some mushroom growing at different parts of his garden. He observed them over a period of three days and recorded his observations in the table below.

Condition	Number of mushrooms		
	Day 1	Day 2	Day 3
Wet and shady	4	8	16
Dry and shady	1	3	7
Wet and sunny	2	3	5
Dry and sunny	0	1	2

- (a) Based on Charles' observations, what conditions are most suitable for the mushrooms to reproduce the fastest? [1]

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- (b)(i) Which group of living things are mushrooms classified under? [½]

Group: \_\_\_\_\_

- (ii) How do the living things in this group obtain food? [½]

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- (c) Charles observed that mushrooms do not have flowers. Explain how mushrooms reproduce. [1]

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SCORE	3
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17. In an experiment, Haresh used three similar balsam plants, X, Y and Z. One part was removed from each of the plants as stated in the table below. The plants were left in the same part of the garden and watered daily.

Plant	Part being removed
X	All flowers
Y	All leaves
Z	All fruits

- (a) What will happen to the three plants after a week? Explain your answer. [2]

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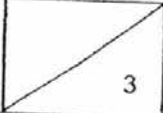
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- (b) State another variable that Haresh should keep the same to ensure a fair test. [1]

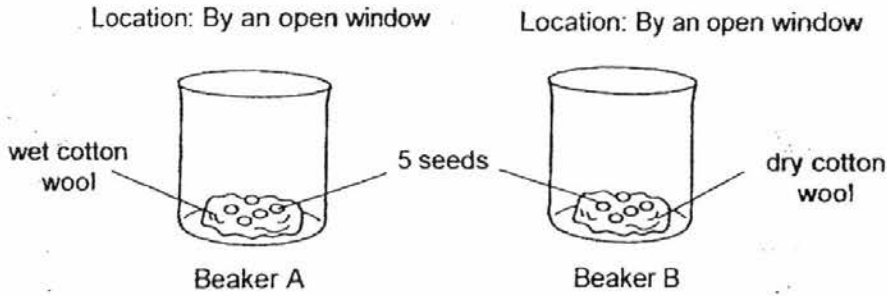
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SCORE	
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18. Si Ling set up the experiment as shown below. 5 seeds were placed on cotton wool in each beaker.



(a) What was the aim of Si Ling's experiment? [1]

\_\_\_\_\_

\_\_\_\_\_

(b)(i) In which beaker will the seeds most likely germinate? [½]

Beaker : \_\_\_\_\_

(ii) Which part of the seed will grow first? [½]

\_\_\_\_\_

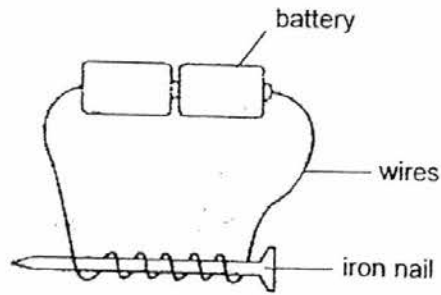
(c) Si Ling wants to conduct another experiment to find out if seeds need light to germinate. She prepared one of the set-ups as shown below. Draw and label the control set-up for her experiment in the box. [1]

<p style="text-align: center;">Location: By an open window</p>	<p><b>Control set-up</b></p>
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SCORE	3
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19. Wei Xuan wants to find out if the number of coils of wire around an iron nail affects the strength of the electromagnet. He sets up the experiment as shown below.



- (a) Complete the table by placing a tick (✓) next to the variable(s) that is/are to be kept the same for the experiment to be a fair test.

[1]

Variables	Kept the same
Type of wire	
Number of coils	
Type of iron nail	
Number of batteries	

- (b) What would Wei Xuan observe if he replaced the iron nail with a copper nail and brought a magnet close to it? Explain your answer.

[1]

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- (c) Wei Xuàn placed a pile of paper clips 5 cm away from two electromagnets. Explain what Wei Xuan must observe so that he can conclude which electromagnet is stronger.

[1]

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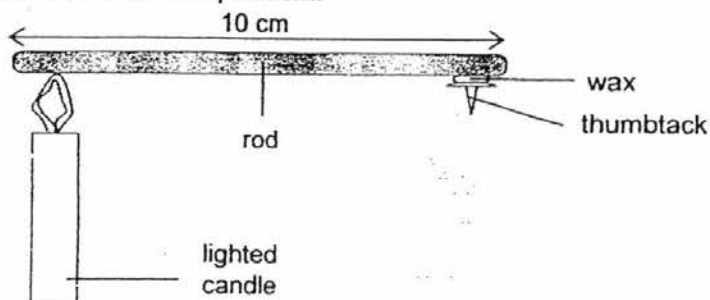


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SCORE	
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20. Andy conducted an experiment as shown below. He repeated the experiment with 4 rods made of different materials. He used the same amount of wax and the same type of thumbtack for each experiment.



He recorded the time taken for the thumbtack to drop in the table below.

Rod	Is thumbtack still attached to the rod?		
	After 30 Seconds	After 45 Seconds	After 60 Seconds
A	Yes	Yes	Yes
B	Yes	Yes	No
C	Yes	No	No
D	No	No	No

- (a) Explain why the thumbtacks on Rods B, C and D dropped after some time. [1]

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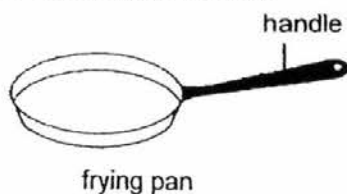
- (b) How will the time taken for each thumbtack to drop be different if the 4 rods were 15 cm long? [1]

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- (c) Refer to the picture of a frying pan below. [1]



Which of the rods, A, B, C or D, is the best material to make the handle of the frying pan? Explain your answer.

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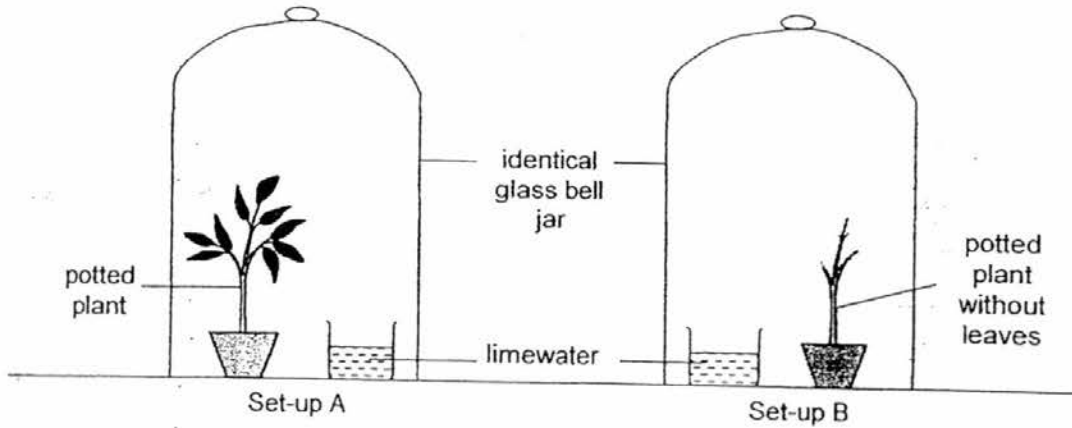


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SCORE	3
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21. Lex sets up the experiment as shown in the diagram below. He placed the set-ups in a dark room for 6 hours.



What would he observe about the limewater in both set-ups at the end of 6 hours? Explain your answer.

[2]

**Set-up A**

Observation: \_\_\_\_\_

Explanation: \_\_\_\_\_

**Set-up B**

Observation: \_\_\_\_\_

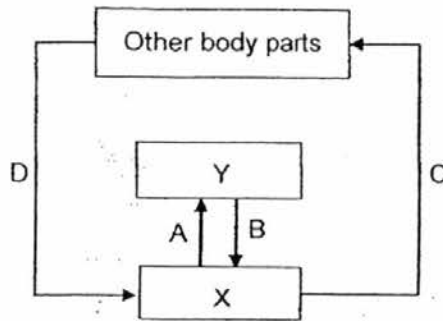
Explanation: \_\_\_\_\_

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SCORE	
	2



22. The diagram below shows the flow of blood in a human circulatory system. X and Y represent 2 organs of the body and A, B, C and D represent blood vessels. The arrows represent the movement of blood in the body.



- (a) What organs do X and Y represent? [1]

X: \_\_\_\_\_

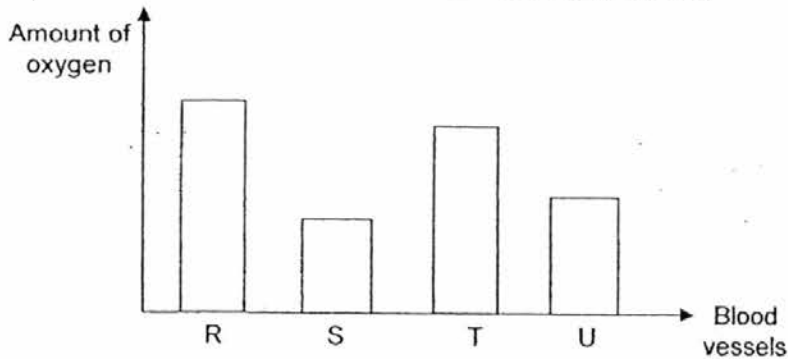
Y: \_\_\_\_\_

- (b) State a difference between the carbon dioxide content in blood vessels A and C. [1]

\_\_\_\_\_

\_\_\_\_\_

The bar chart below shows the amount of oxygen in four blood samples taken from different parts of the blood vessels in the human circulatory system.



- (c) Which blood sample, R, S, T or U, is most likely taken from the blood vessel which carries blood from the heart to the lungs? Explain your answer.

\_\_\_\_\_

\_\_\_\_\_

End of Paper.

SCORE	
	3

**SEMESTRAL ASSESSMENT EXAM PAPER 2016**

**SCHOOL : ANGLO-CHINESE SCHOOL (JUNIOR)**  
**SUBJECT : SCIENCE**  
**TERM : CA1**

**BOOKLET A**

Q1	Q2	Q3	Q4	Q5	Q6	Q7
2	1	3	1	2	1	3
Q8	Q9	Q10	Q11	Q12	Q13	Q14
1	2	3	2	4	4	3
Q15						
4						

**BOOKLET B**

Q16(a) Based on Charles' observation, moisture and wet and shady conditions are best suitable for the mushroom to reproduce.

(b)(i) Group: Fungi

(ii) Living things in this group obtain food from other dead organisms it grows on

(c) Mushrooms reproduce by spores that will eventually become mushrooms.

Q17(a) Plants X and Z will survive but plant Y will die. A plant can still live if the flowers and fruits are removed but will die without leaves.

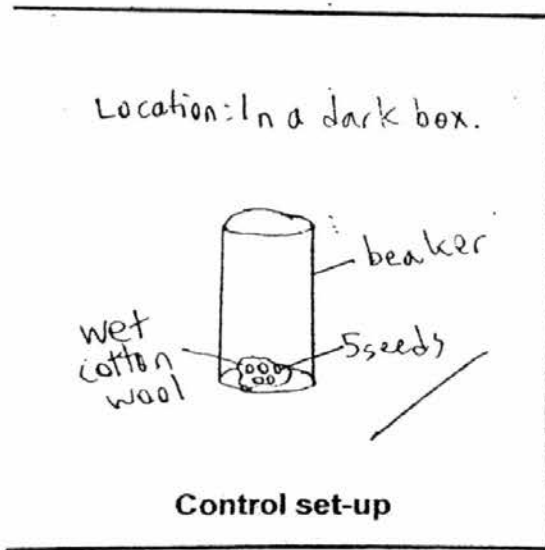
(b) The amount of water given to each plant.

Q18(a) The aim of Si Ling's experiment was to find out if seeds need water to grow.

(b)(i) Beaker A

(ii) The roof of the seed will grow first.

(c)



Q19(a) Type of wire, type of iron nail, number of batteries.

(b) Wei Xuan will observe nothing happening. As copper is a non-magnetic material and has no effect on the magnet nothing will happen.

(c) Wei Xuan will observe that the stronger electromagnet will attract more paper clips.

Q20(a) The thumbtacks dropped because the heat from the candle travelled through the rods and reached the wax and it gained heat and melted.

(b) The time taken would increase because it will take a longer time for the heat to reach the wax.

(c) Rod A is most suitable because it is the worst conductor of heat amongst the four rods.

Q21. Set-up A

**Observation:** The lime water will turn chalky.

**Explanation:** The plant gave out carbon dioxide turning the lime water chalky.

Set-up B

**Observation:** The limewater did not turn cloudy.

**Explanation:** The plant did not give out carbon dioxide as it did not respire.

Q22(a) X: Heart

Y: Lungs

(b) The carbon dioxide level in C is much less than in A.

(c) S. It contains the least amount of oxygen as the oxygen has been used by the other body parts.

3  
END