

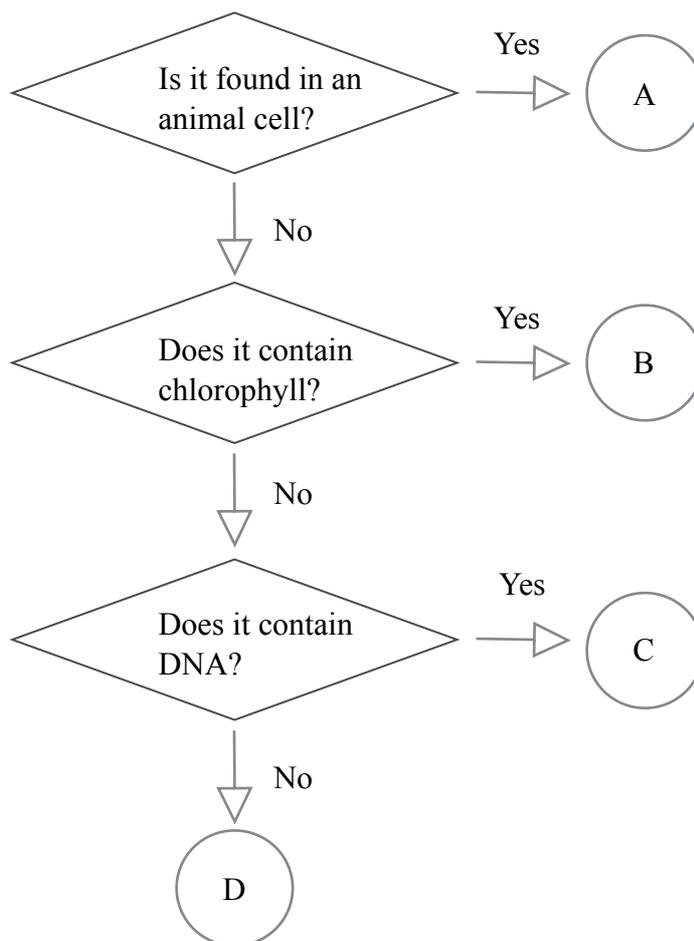
**P5 SCIENCE**  
Test 1  
Booklet A

Starting Time: \_\_\_\_\_  
Ending Time: \_\_\_\_\_

Date: \_\_\_\_\_  
Marks: \_\_\_\_\_

Answer the following questions

1)



1) What can A be?

(1) cell membrane

(2) cell sap

( )

2) What is B likely to be?

(1) chloroplasts

(2) cell wall

( )

3) What is a possible answer for C?

(1) cell wall

(2) nucleus

( )

4) What can D be?

(1) cell wall

(2) nucleus

( )

5) The melting point of A is 80 degree Celsius. The boiling point of A is 300 degree Celsius.

“Will A be a solid, liquid or gas at 100 degree Celsius?” Prata Uncle asked.

(1)Melting point means A is a liquid at 80 degree Celsius. Boiling point means A is a gas at 300 degree Celsius. 100 degree Celsius is nearer to 80, so A will be a liquid at 100 degree Celsius.

(2)Melting point means A is a liquid at 80 degree Celsius. Boiling point means A is a gas at 300 degree Celsius. 100 degree Celsius is nearer to 80, so A will be a solid at 100 degree Celsius.

( )

6)Li MinHo then asked you, “How about 200 degree Celsius?”

(1)As 200 degree Celsius is between 80(liquid) and 300(gas), A is probably a gas at 200 degree Celsius.

(2)As 200 degree Celsius is between 80(liquid) and 300(gas), A is probably a liquid at 200 degree Celsius.

( )

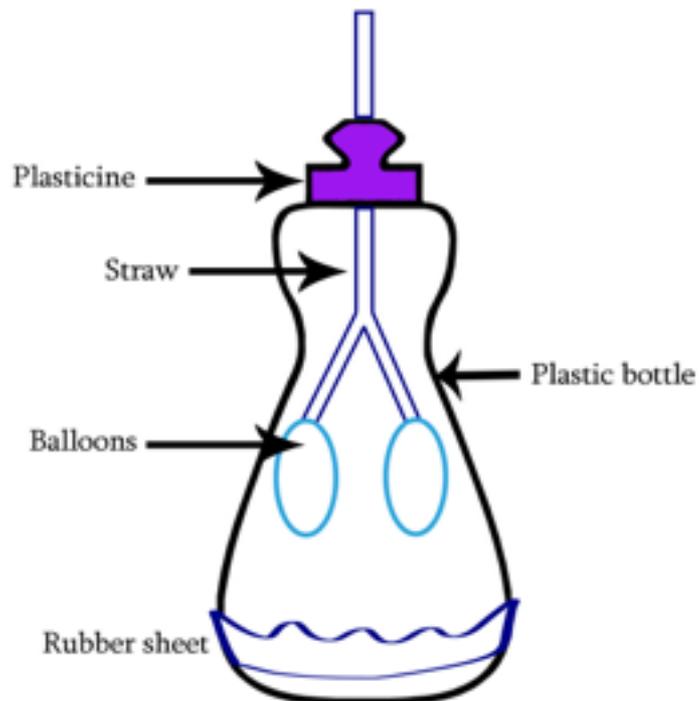
7)BENG-pire found the red blood cell to be strange. How come it has no nucleus?

(1) It can have more space and surface area to carry more oxygen molecules around the body

(2) The bean-like shape does not allow nucleus to fit in it

( )

Durian Boy made a model of the respiratory system as shown below:



8) Which part of the respiratory system do the balloons represent?

- (1) Lungs
- (2) Windpipe

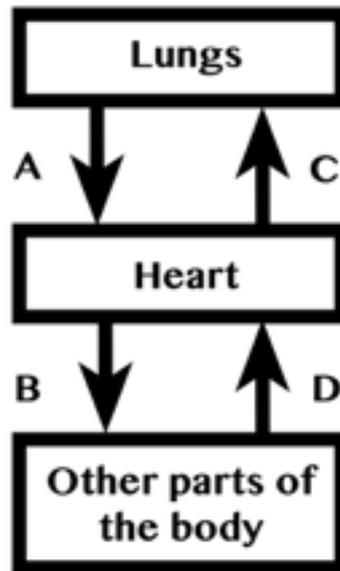
(     )

9) What is the function of the part mentioned in (a)?

- (1) It allows air to travel from the nose to the windpipe
- (2) It allows for gaseous exchange

(     )

Mr Ooo La La drew the following diagram:



10) Which parts carries oxygenated blood?

- (1) A, B
- (2) C, D

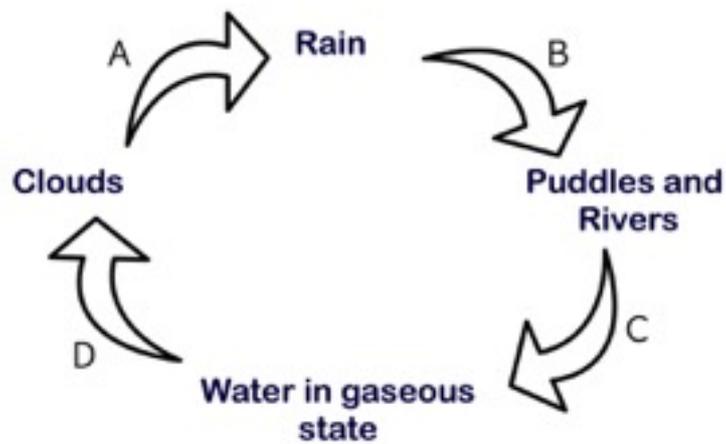
(     )

11) Oxygenated blood moves from the heart to the lungs. True or false?

- (1) False
- (2) True

(     )

Chilli Crab Girl drew a diagram of the Water Cycle:



12) Which option correctly represents the different states in the Water Cycle?

- (1) Clouds- gaseous state
- (2) Clouds- liquid state

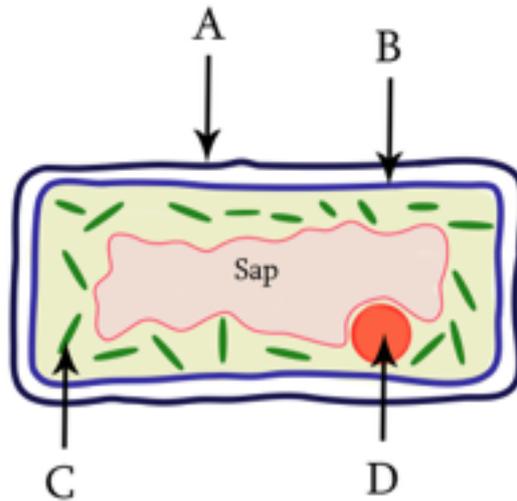
(     )

13) Yoonana says, “The water cycle takes place all the time, even at night.” True or False?

- (1) True
- (2) False

(     )

Mee Siam Aunty drew a plant cell.



14) What are parts A, B and C called?

(1) A-cell wall, B-cell membrane, C-chloroplasts

(2) A-cell membrane, B-cell wall, C-chloroplasts

( )

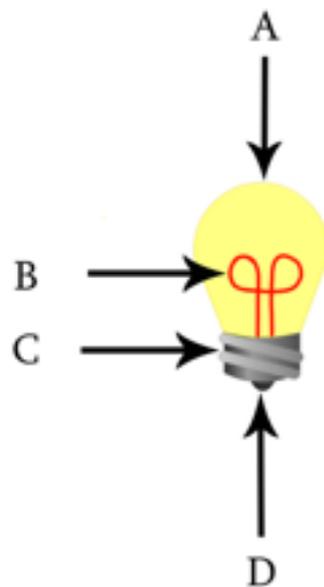
15) What are the function of A and B?

(1) A- allows certain substances to move in and out of cell, B-gives the cell a regular shape

(2) A- gives the cell a regular shape, B-allows certain substances to move in and out of the plant

( )

Kopi-O Girl bought a lightbulb from Jurong East.



16) A-glass bulb, B-tungsten filament, D-metal casing. Which part(s) are labelled wrongly?

- (1) B
- (2) D

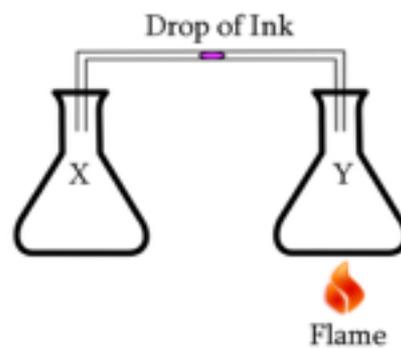
(     )

17) Which type of circuit will increase the brightness of the bulb?

- (1) Parallel circuit
- (2) Series circuit

(     )

Teacher Ai Yo Yo sets up the following:



18) Where will the drop of ink move after 20 minutes?

- (1) Towards X
- (2) Towards Y

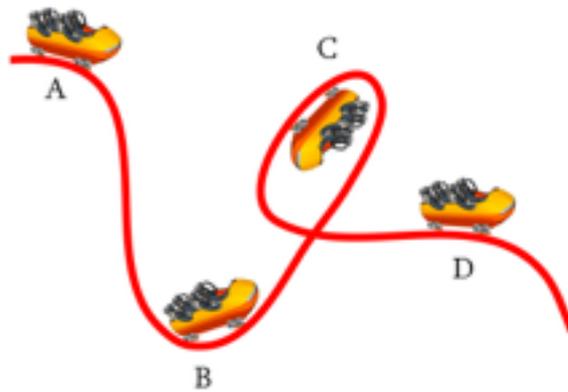
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19) Explain your answer in Q(18)

- (1) The heat from the flame will travel to Flask Y, heating up the air in Flask Y. The hot air will push the drop of ink towards X.
- (2) The heat from the hot water will travel to Flask Y. The hot air will push the drop of ink to the right, towards X.

(     )

Ms MBS, Ms Kaya Toast and Ms Tutu Kueh went to take a roller coaster ride at Universal Studios Singapura. Ms MBS puked after that.



20) Which point has the lowest amount of kinetic energy?

- (1) A
- (2) C

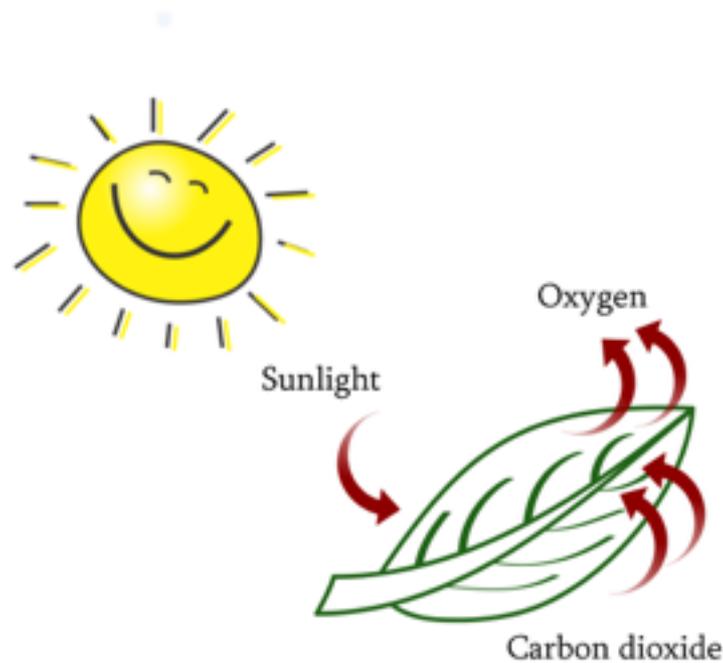
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21) Explain your answer in Q(20)

- (1) A is at the highest point, so it will have the lowest amount of kinetic energy
- (2) A is at the starting point, so it has the lowest amount of kinetic energy

(     )

Captain Singapura observed a plant in Ang Mo Kio-Bishan Park from 5am to 8pm:



22) When will the amount of carbon dioxide be the lowest? Why?

- (1) 4pm. The plant is experiencing the highest rate of photosynthesis, using up the highest amount of carbon dioxide in the process.
- (2) 7pm, as the Sun is setting, so there is less photosynthesis.

( )

23) When will the plant produce the highest amount of oxygen? Why?

- (1) Noon time, as the Sun will be directly above the plant, giving it the highest amount of sunlight for photosynthesis
- (2) 7am, where the air is the freshest with the highest amount of oxygen

( )

**P5 SCIENCE**

Test 1

Booklet B

Starting Time: \_\_\_\_\_

Date: \_\_\_\_\_

Ending Time: \_\_\_\_\_

Marks: \_\_\_\_\_

Answer the following questions(2m each)

1.The image below shows a mini terrarium:



A mini terrarium is like a mini garden in a bottle. BENG-pire said, “I just cap it tightly, place it near the window and it is self-sustaining, like a mini eco-system. I do not need to water the plants everyday or give it air, very convenient and easy to maintain!”

How is the mini terrarium self-sustaining in a closed environment, in terms of

(a) Getting air -

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(b) Getting water -

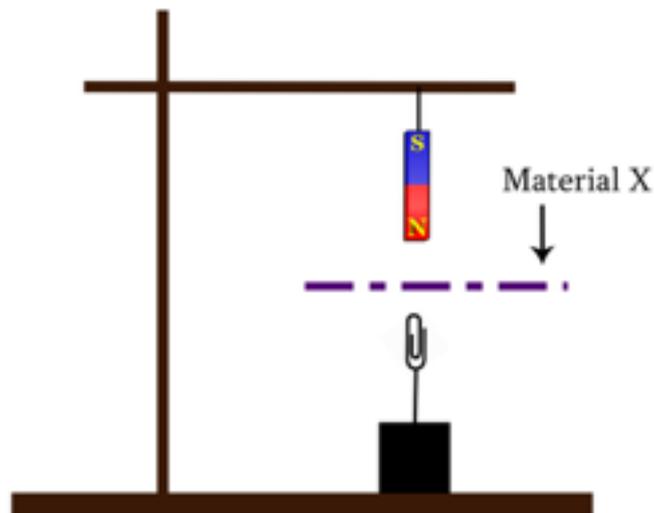
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*Image from: By christopher\* - <http://www.flickr.com/photos/cmichel67/8191287403/>, CC BY 2.0, [https://commons.wikimedia.org/w/index.php?](https://commons.wikimedia.org/w/index.php?curid=22731481)*

*[curid=22731481](https://commons.wikimedia.org/w/index.php?curid=22731481)*

2. Kopi-O Girl set up the following. Material X is placed between the magnet and paper clip as shown. The paper clip is seen “floating” up.



(a) What can Material X be?

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(b) Explain your answer in (a)

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3. Chilli Crab Girl bought a dinosaur toy from Jurassica World toy shop.



(a) She rolls the toy backwards and releases it. It stops after a while. Why?

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(b) State the energy conversion that took place.

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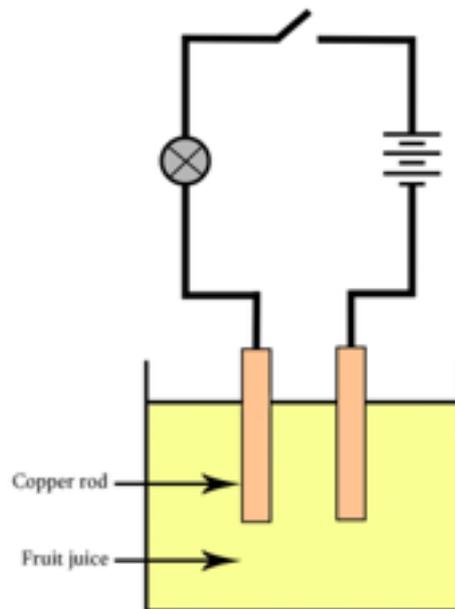
(c) What is the relationship between the number of turns and the distance travelled by the toy?

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(d) Is there any change if the dinosaur legs are longer? Why?

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4. Hokkien Mee Boy sets up the following experiment. When he closes the switch, the bulb lights up.



(a) What can Hokkien Mee Boy conclude about the copper rods and citrus fruit juice?

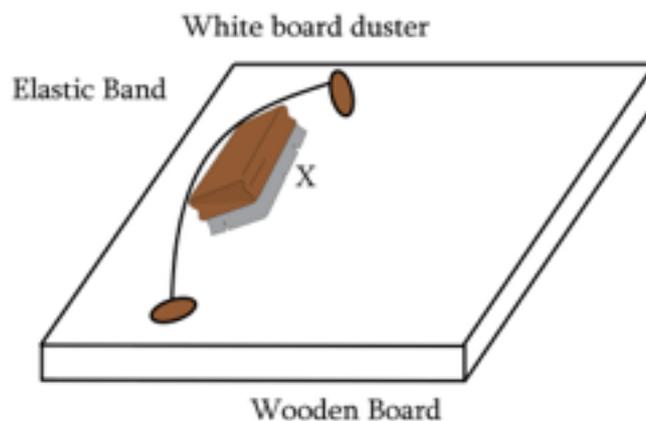
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(b) If he changed the citrus juice to water, will the bulb light up? Why?

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5. Ms Kaya Toast set up the following and conducted an experiment to determine which substance is the best lubricant. The same amount of lubricant was applied on the surface of the wooden board at Spot X.



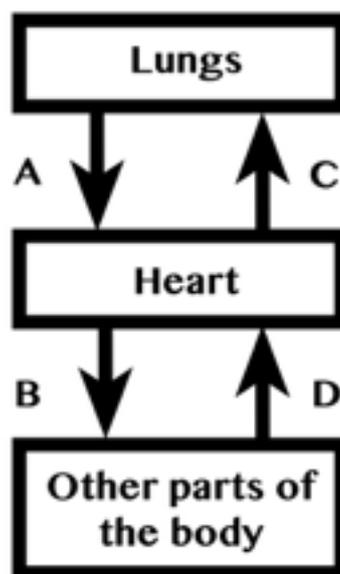
(a) Ms Kaya Toast attempted 3 tries with each lubricant and calculated the average distance the white board duster travelled. She found that the average for Lubricant A was 30cm, Lubricant B was 50cm, Lubricant C was 10cm and Lubricant D was 35cm. From the results, which Lubricant should Ms Kaya Toast use if she wants to ensure others do not slip and fall easily?

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(b) Which lubricant should she use to reduce the most amount of friction between two surfaces?

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6. Babarelala drew the following:



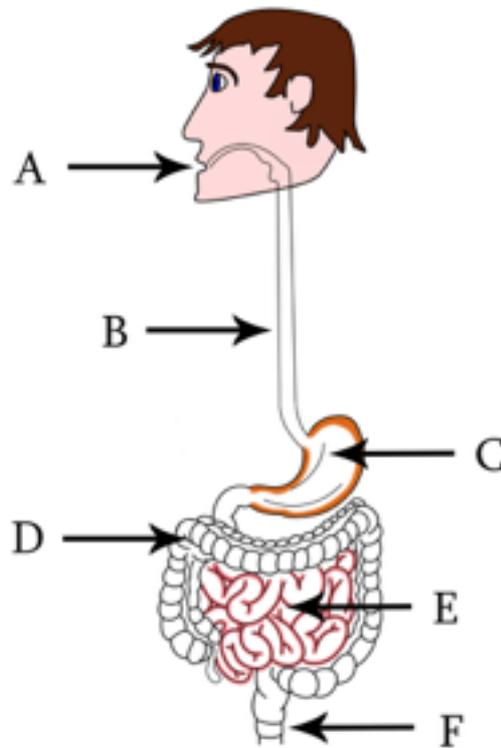
a) Which direction carries blood rich in carbon dioxide?

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b) Why does the heart rate increase when Taeminn jogs?

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7. NOC Sylvia saw a diagram of the Digestive system:



a) What are parts A, B, C, D, E and F?

A: \_\_\_\_\_

B: \_\_\_\_\_

C: \_\_\_\_\_

D: \_\_\_\_\_

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

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

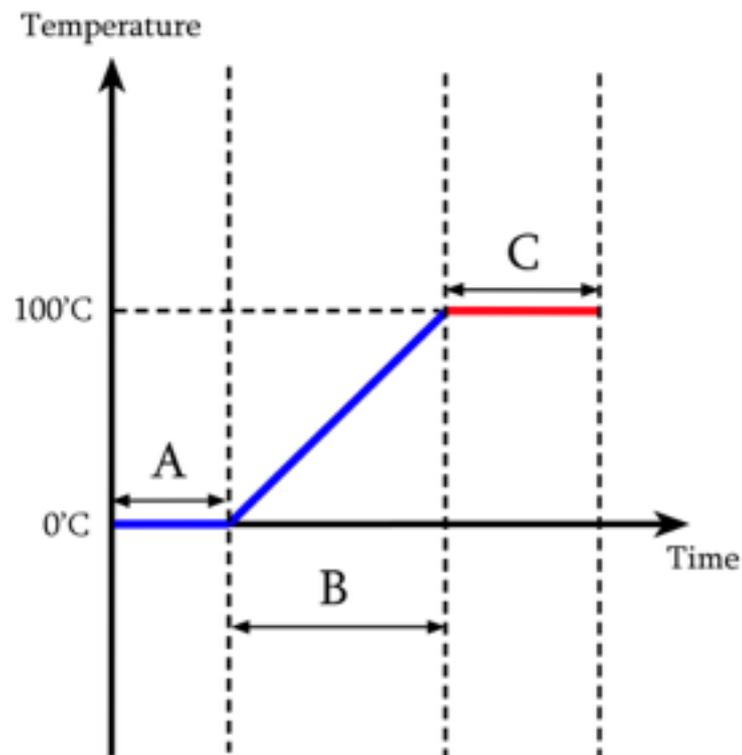
b) What happens at E?

\_\_\_\_\_

c) What happens at D?

\_\_\_\_\_

8. Ms Tutu Kueh made a graph.



(a) What process is taking place at B?

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(b) Explain your answer in (a)

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(c) What will happen to the water after the flame is turned off?

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9.

a) Draw a plant cell and label its parts in the space below:

b) What is the function of the chloroplasts?

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c) What are 2 similarities of the plant cell and animal cell?

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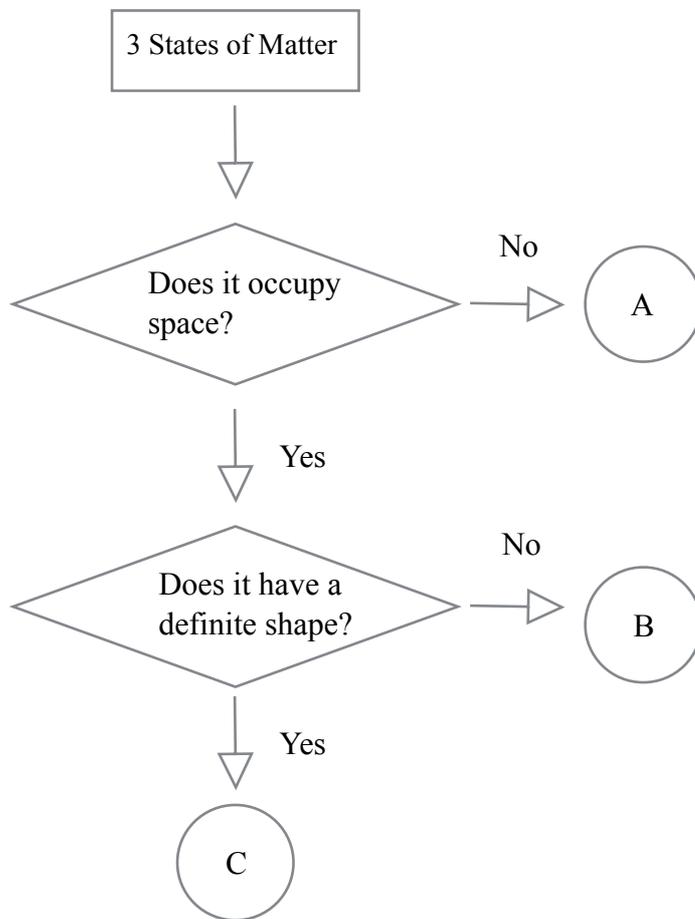
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d) What are 2 differences of the plant cell and animal cell?

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10.



(a) Give an example of A

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(b) What is B likely to be?

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(c) What state of matter is C?

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11.

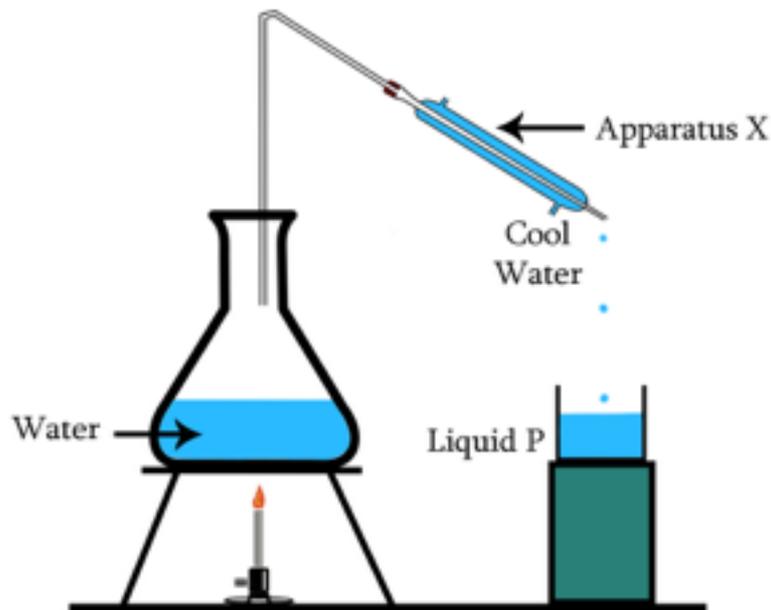
(a) Draw the path of light to show how Ms Ice Kacang can see the iPad on the table:



(b) What property of Light does this show?

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12. Name the processes taking place at:



(a) Conical Flask on the left - \_\_\_\_\_

(b) Apparatus X on the right - \_\_\_\_\_

(c) What is the relationship between the size of the flame and the amount of Liquid P?

\_\_\_\_\_

(d) How does Mrs Durian ensure that her results are accurate?

\_\_\_\_\_

**P5 SCIENCE**

Test 1

Booklet A

- |        |         |         |
|--------|---------|---------|
| 1. (1) | 10. (1) | 19. (1) |
| 2. (1) | 11. (1) | 20. (1) |
| 3. (2) | 12. (2) | 21. (1) |
| 4. (1) | 13. (1) | 22. (2) |
| 5. (2) | 14. (1) | 23. (1) |
| 6. (2) | 15. (2) |         |
| 7. (1) | 16. (2) |         |
| 8. (1) | 17. (2) |         |
| 9. (2) | 18. (1) |         |

Booklet B

- (a) The plants will carry out photosynthesis in the daytime, producing oxygen, which can be used by the plants for respiration. During respiration, the plants give out carbon dioxide, which will in turn be used for photosynthesis.

(b) The water evaporated from the soil and plants will condense on the cool surface of the glass, forming water droplets which will fall back as 'rain' for the plants
- (a) Plastic, paper, ceramic(name any non-magnetic material)

(b) Magnetism passed through Material X to attract the paper clip
- (a) The kinetic energy was used up.

(b) Elastic potential energy → kinetic energy → heat energy and sound energy

(c) As the number of turns increase, the greater the distance travelled by the toy

(d) No, it is the rubber band that affects the distance travelled
- (a) The copper rods and citrus fruit juice are conductors of electricity

(b) Yes, water is a conductor of electricity
- (a) C

(b) B
- (a) C, D

(b) The heart needs to pump more blood so as to transport more digested food and oxygen to all parts of the body during exercise

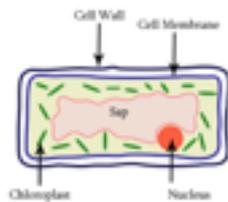
7.

- (a) A-mouth, B-gullet, C-stomach, D-large intestine, E-small intestine, F-anus
- (b) Absorption of digested food
- (c) Absorption of water

8.

- (a) Boiling
- (b) The temperature is rising slowly from 0 degree Celsius to 100 degree Celsius. It reached the boiling point at 100 degree Celsius
- (c) The water will cool down to room temperature

9(a).



- (b) It contains chlorophyll to make food for the plant
- (c) Both have cytoplasm and nucleus
- (d) The plant cell has a cell wall and chloroplasts but the animal cell does not

10.

- (a) Shadow/Light/Heat (name any non-matter)
- (b) Orange Juice/Coffee/Oxygen/ Carbon Dioxide (name any liquid or gas)
- (c) Solid

11.

- (a) Light rays travel from lamp to book first, then book to eye
- (b) Light travels in straight lines

12.

- (a) Evaporation
- (b) Condensation
- (c) As the size of the flame increases, the amount of Liquid P increases
- (d) Repeat the experiment 3 more times