

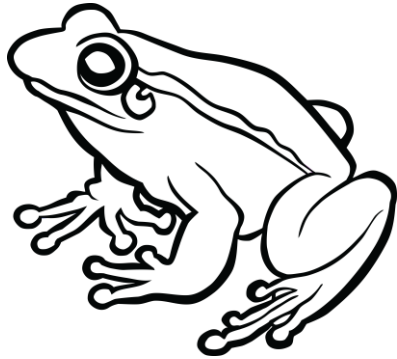
PSLE FOUNDATION SCIENCE

Section A: (18 × 2 MARKS)

For questions 1 to 18, three options are given. Choose the correct answer for each question and write the number in the brackets provided.

1. Which of the following organisms has a 4-stage life cycle?

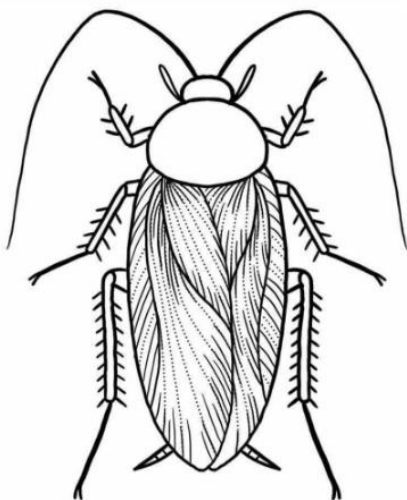
(1)



(2)



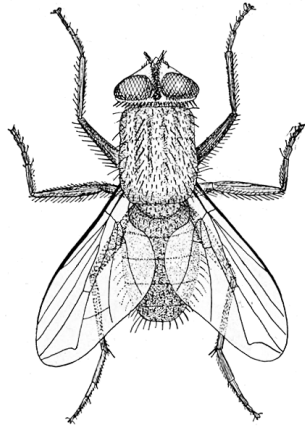
(3)



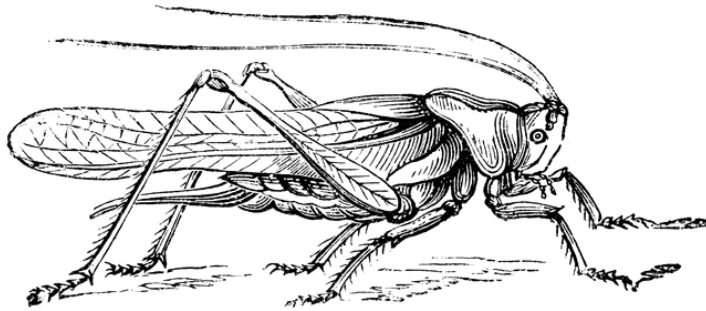
()

2. Which of the following is **not** an insect?

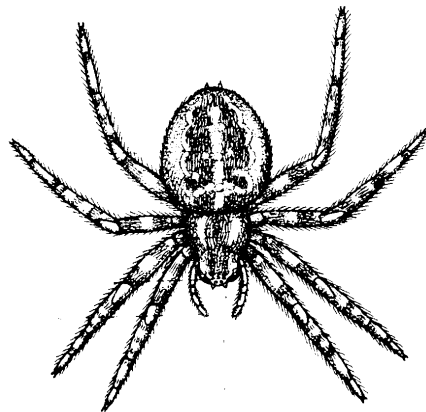
(1)



(2)



(3)



()

3. The table below shows Andy's answer to statements about fungi.

Statements	True	False
A: Fungi are decomposers	√	
B: Fungi reproduce by seeds		√
C: Fungi can make its own food	√	

Which statements did Andy answer correctly?

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

()

4. In which organ does gaseous exchange take place?

- (1) nose
- (2) lungs
- (3) windpipe

()

5. Who made the correct statement about pollination?



Samuel

Pollination can only occur between two flowers.



Linda

The pollen grains from the anther are transferred to the stigma.



Khairul

Pollination occurs only at night.

Who made the correct statement?

- (1) Samuel
- (2) Linda
- (3) Khairul

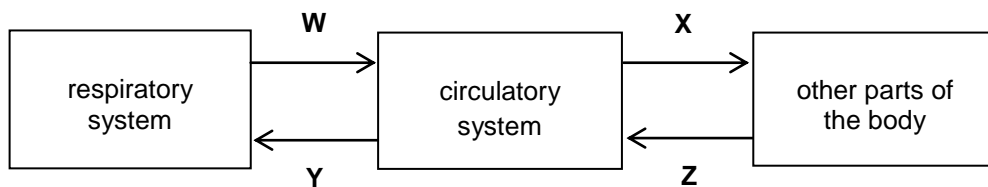
()

6. Which of the following correctly shows the transport of water in a plant?

- (1) Root \rightarrow Stem \leftarrow Leaf
- (2) Leaf \rightarrow Stem \rightarrow Root
- (3) Root \rightarrow Stem \rightarrow Leaf

()

7. The diagram below shows the circulatory and respiratory systems in a human working together. Arrows W, X, Y and Z represent blood vessels in the body.



Which comparison between the blood vessels is correct?

- (1) W contains more oxygen than X.
- (2) Z contains less carbon dioxide than X.
- (3) Z contains more carbon dioxide than Y.

()

8. Study the food chain below.

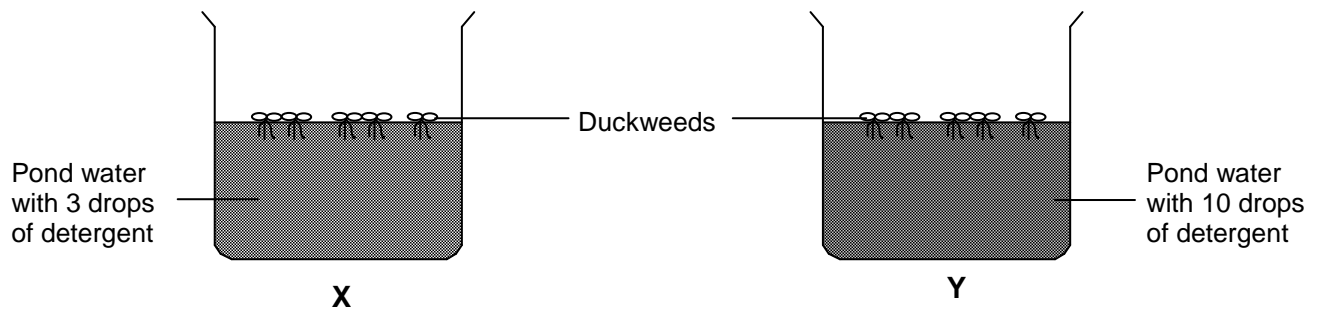


Which of the following statements is correct?

- (1) Organism A is a food consumer.
- (2) Organism B is both a prey and predator.
- (3) Organism C is the only predator in the food chain.

()

9. Steven placed two similar set-ups X and Y as shown below. He changed the amount of detergent in each set-up, while keeping all other variables constant.



He recorded his results in the table.

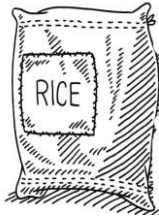
	X	Y
Number of duckweeds at first	15	15
Number of duckweeds after a week	12	8

Steven was trying to find out if _____ .

- (1) the amount of detergent affects the growth of duckweeds
- (2) duckweeds grow better on the surface of water
- (3) duckweeds absorb water through its roots

()

10. Ali used a shopping bag to carry the following items:



shutterstock.com • 740660881

What are the properties of the shopping bag that helped Ali to carry the items?

- (1) strong
- (2) transparent
- (3) ability to float

()

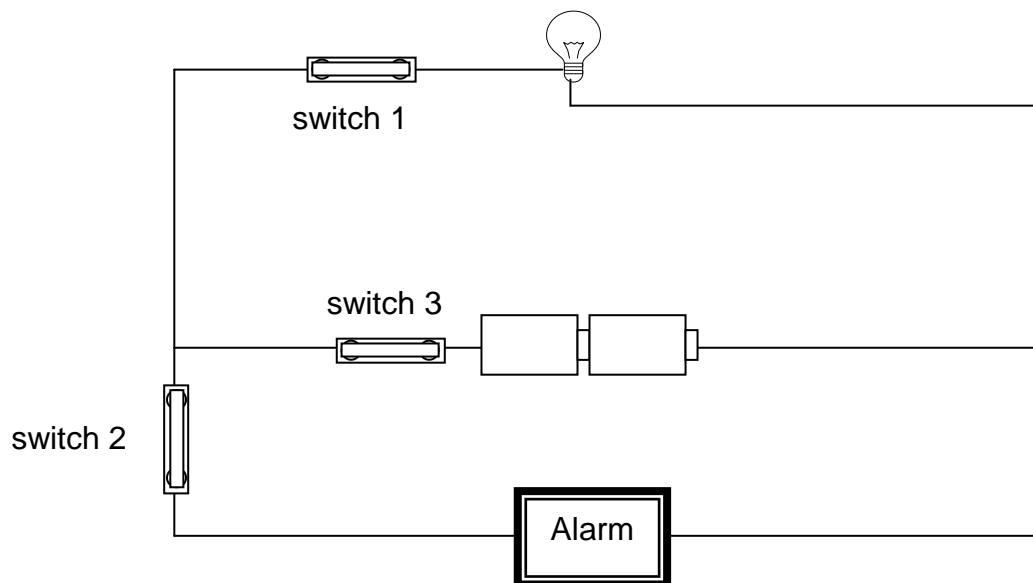
11. Which of the following are sources of light?

- A** Sun
- B** Mirror
- C** Flame of a candle

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

()

12. Susan set up the circuit as shown below. When she closed the three switches, she observed that the light bulb lit up and the alarm rang.

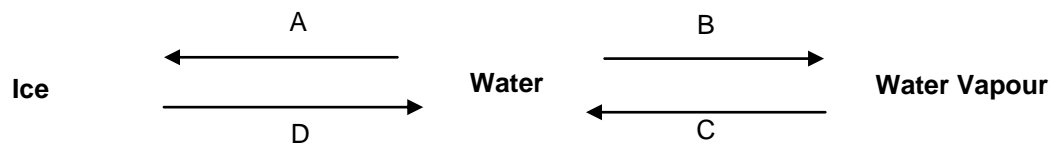


Which switch should she open such that the alarm is turned off while the light bulb remains lit?

- (1) Switch 1
- (2) Switch 2
- (3) Switch 3

()

13. The diagram below shows the changes in states of water.

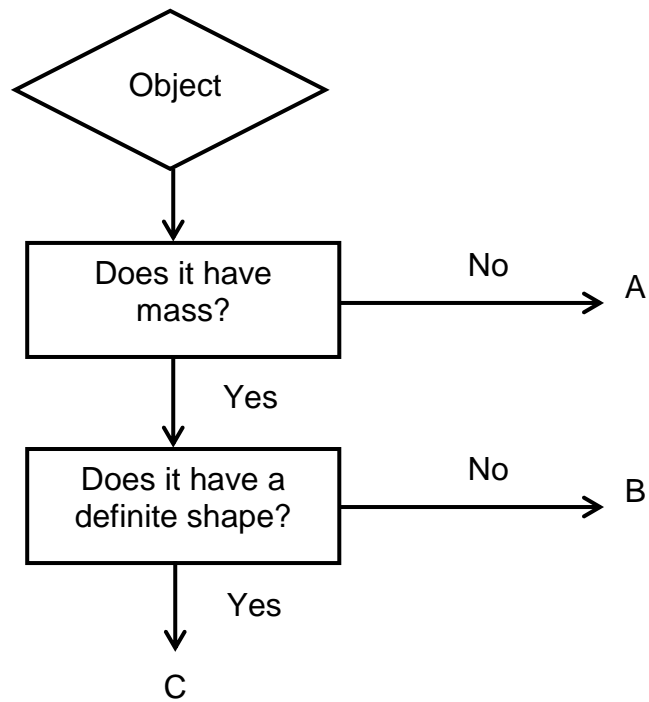


Based on the above diagram, heat gain take place at _____.

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

()

14. Study the flow chart carefully.



Which of the following describes a non-matter and a solid?

	Non-matter	Solid
(1)	A	C
(2)	A	B
(3)	B	A

()

15. Paula had three magnets A, B and C. To compare the strength of the magnets, she brought each of them near a pile of pins and recorded the number of pins attracted by each magnets.

Magnet	Distance between magnets and pins (cm)	Number of pins attracted
A	3	5
B	6	4
C	9	5

Which magnet is the strongest?

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

()

16. The diagram below shows three objects.

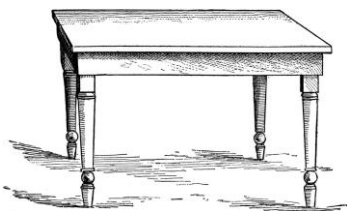


table on floor



kite in the sky



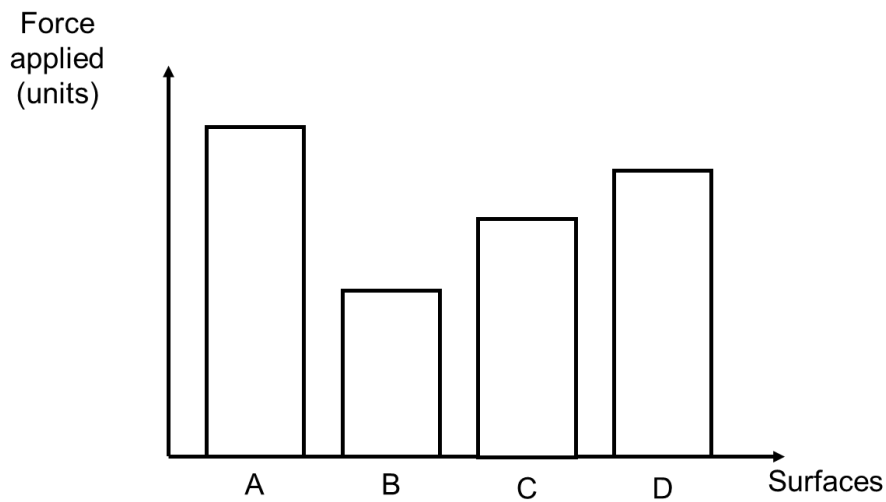
canoe on water

Which object(s) is the force of gravity acting on?

- (1) Table only
- (2) Table and kite only
- (3) Table, kite and canoe

()

17. Alex pushed a heavy box over 3 different surfaces; polished glass, wooden surface and rough cemented pavement. The graph below shows the forces Alex applied as he pushed the box.

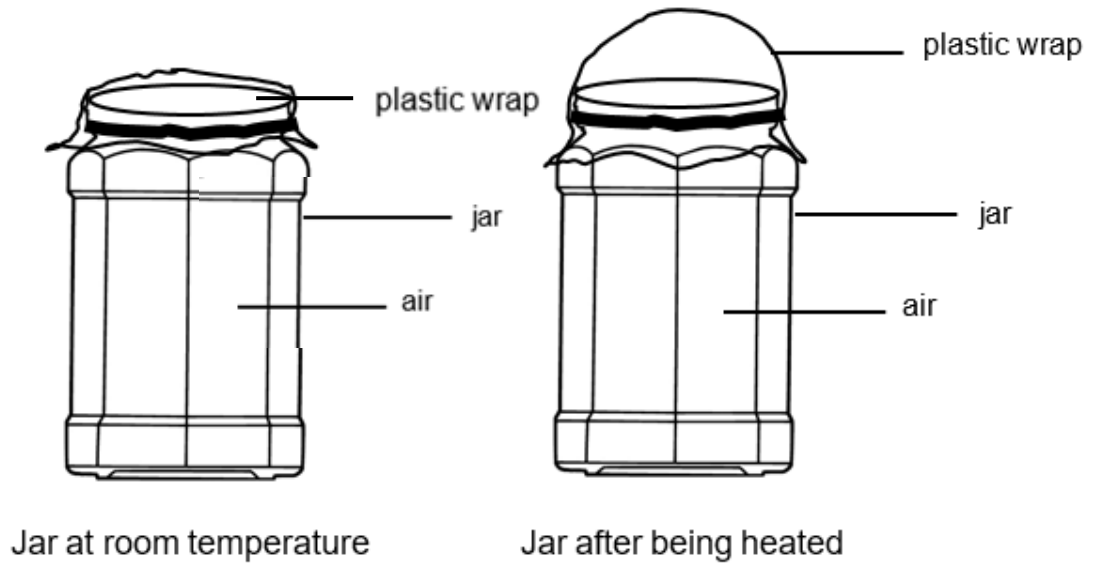


Which one of the following correctly identifies the polished glass surface and the cemented pavement?

	Polished glass	Rough cemented pavement
(1)	B	A
(2)	B	C
(3)	A	B

()

18. Benjamin covered a jar tightly with a piece of plastic wrap so that air could not enter the jar. The diagrams below show the jar after Benjamin heated it.



Which of the following statements is true?

- (1) The mass of the air in the jar increased.
- (2) The air in the jar loses heat and expands.
- (3) The volume of the air in the jar increases as it gains heat.

()

SECTION B: (34 MARKS)

Write your answers in the blank spaces provided.

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

19. Look at the picture below and fill in the blanks.

[2]



The eagle has a streamlined body to help it fly _____ and _____ claws to catch its prey.

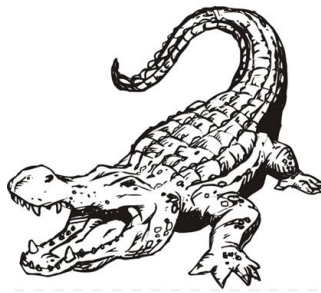
20. Tick in the boxes that best describes a non-flowering plant.

[2]

Statements	True	False
A non-flowering plant can produce fruits.		
A non- flowering plant can make its own food.		

21. Circle the words that describes the animal below.

[2]



Outer covering: fur / scales / moist skin

Reproduce by: laying eggs / giving birth

22. Study the fruits below.



Fruit A



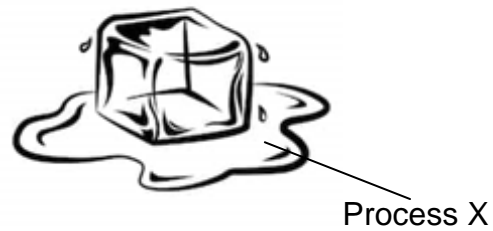
Fruit B

Write down the letters A and B in the correct boxes to identify the method of dispersal of each fruit.

[2]

Dispersal method	Fruit
by animal	
by wind	

23. The diagram below shows a block of ice.



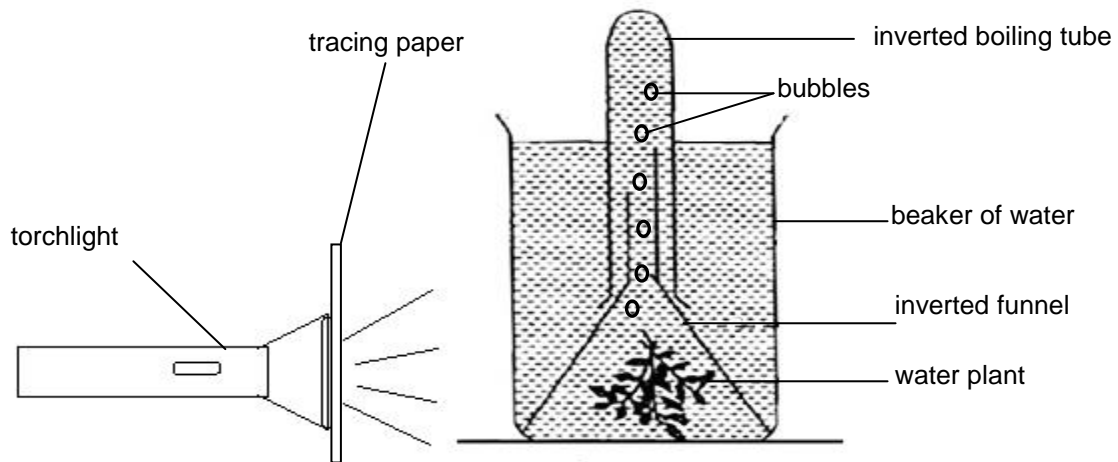
- a) The temperature of the ice is at _____ °C [1]
- b) Process X is called _____ . [1]
- c) Heat is (gained / lost) during Process X [1]

24. A candle is lit in the middle of a dark room.



- a) The candle flame can be seen by our eyes because it _____ . [1]
- b) Other than light energy, the flame gives off _____ energy. [1]
- c) Shadows are formed when light _____ . [1]

25. Bijay wanted to find out if the type of material placed in front of the torchlight will affect the rate of photosynthesis. He conducted the experiment in a dark room.



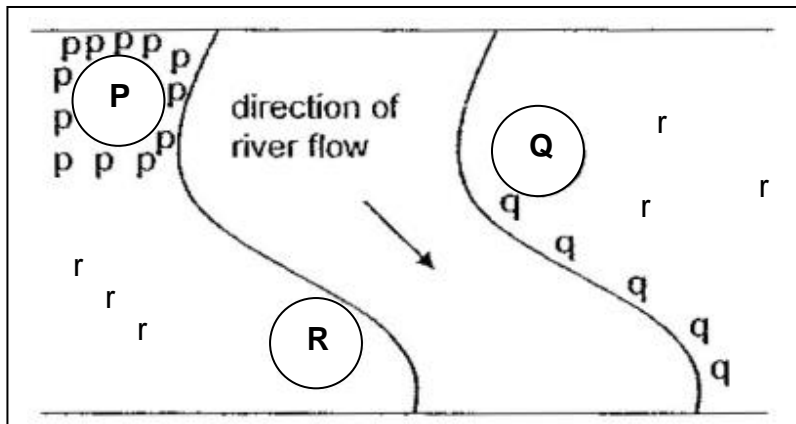
a) Bubbles are produced. Name the gas. [1]

b) He changed the tracing paper to a metal plate of the same shape and size. What would he notice about the bubbles after 10 min? [1]

c) Which material should he choose to increase the number of bubbles? [1]

Circle the correct answer. (glass / wood / silk)

26. Three adult plants, P, Q and R are found along a river bank and their young plants are found in locations p, q and r respectively.

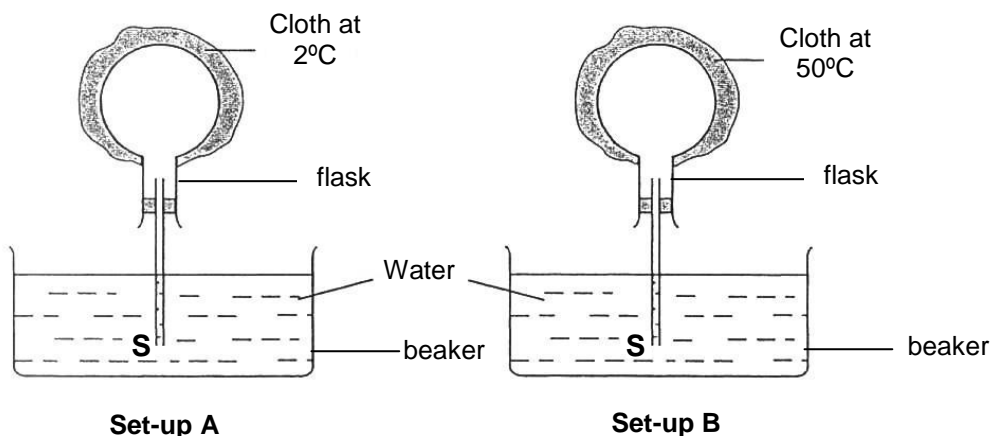


- a) Match the plants P, Q and R to their methods of seed dispersal below. [2]

<u>Plant</u>	<u>Method of seed dispersal</u>
P •	• By water
Q •	• By explosive action
R •	• By animals

- b) What is the advantage for plants which disperse their seeds or fruits as far away as possible from parent plants? [1]

27. Maz set up the experiment as shown below.

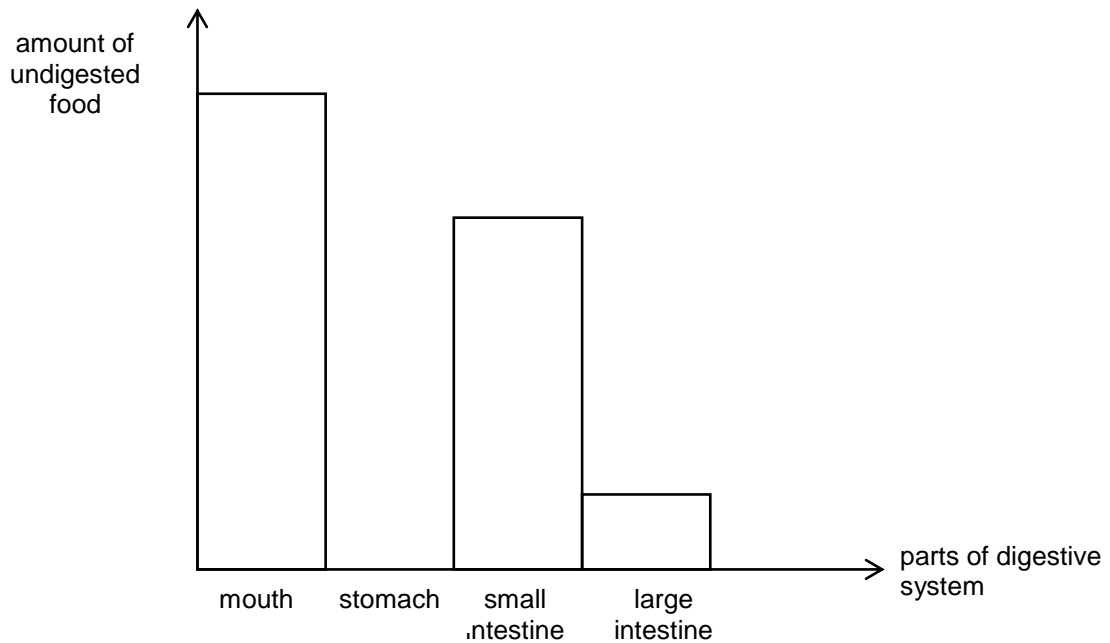


a) Circle what Maz would observe in setup B after 5 minutes. [1]

(Bubbles escaped from tube S. / Water level in tube S rises. / Nothing happens.)

b) Describe what would Maz see in Set-up A after 5 minutes. Explain. [2]

28. The diagram below shows the amount of undigested food as it enters parts of the digestive system.



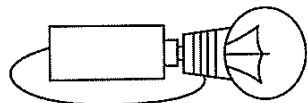
(a) Complete the bar graph to show the amount of undigested food at the stomach. [1]

(b) Based on the graph, where does the most digestion take place? [1]

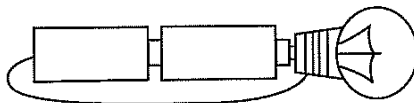
(c) Draw lines to connect the organ to its correct function. [2]

Organ	Function
small intestine ●	● to absorb excess water from undigested food
large intestine ●	● to absorb digested food into the blood vessel

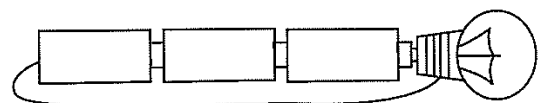
29. Zhi Xuan set-up different electrical circuits as shown below.



Set-up 1



Set-up 2



St-up 3

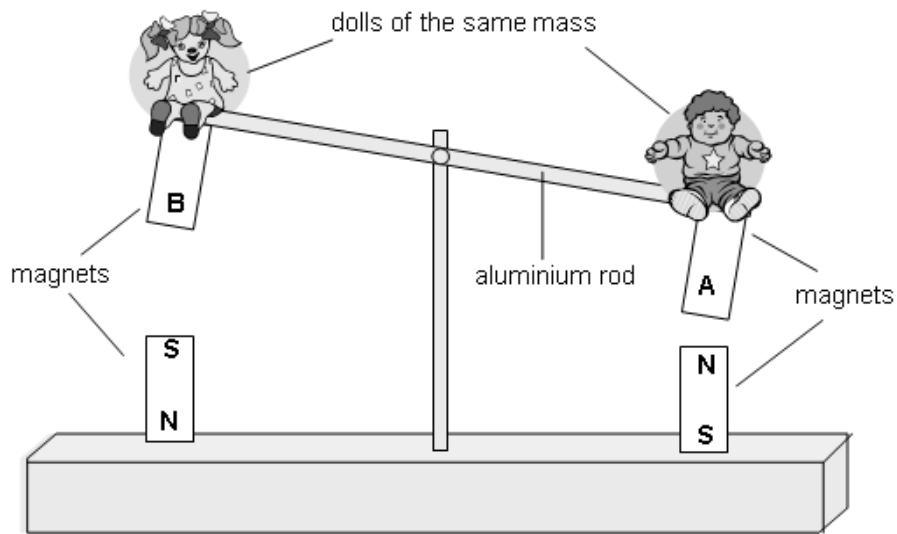
a) What was Zhi Xuan trying to find out from the experiment? [1]

b) He found that the bulb in Set-up 3 did not light up, but the bulbs in Set-ups 1 and 2 did. Explain two possible reasons for this to happen. [2]

Reason 1: _____

Reason 2: _____

30. Bala bought a toy see-saw which has dolls that move continuously up and down using magnets.



a) Identify the poles A and B. [2]

A: _____ pole B: _____ pole

b) What can Bala do to make the dolls move up and down faster? [1]

c) Will the toy work if **one** of the magnets was flipped? Explain. [1]
