AGrader LEARNING CENTRE
Discover the Ace in You

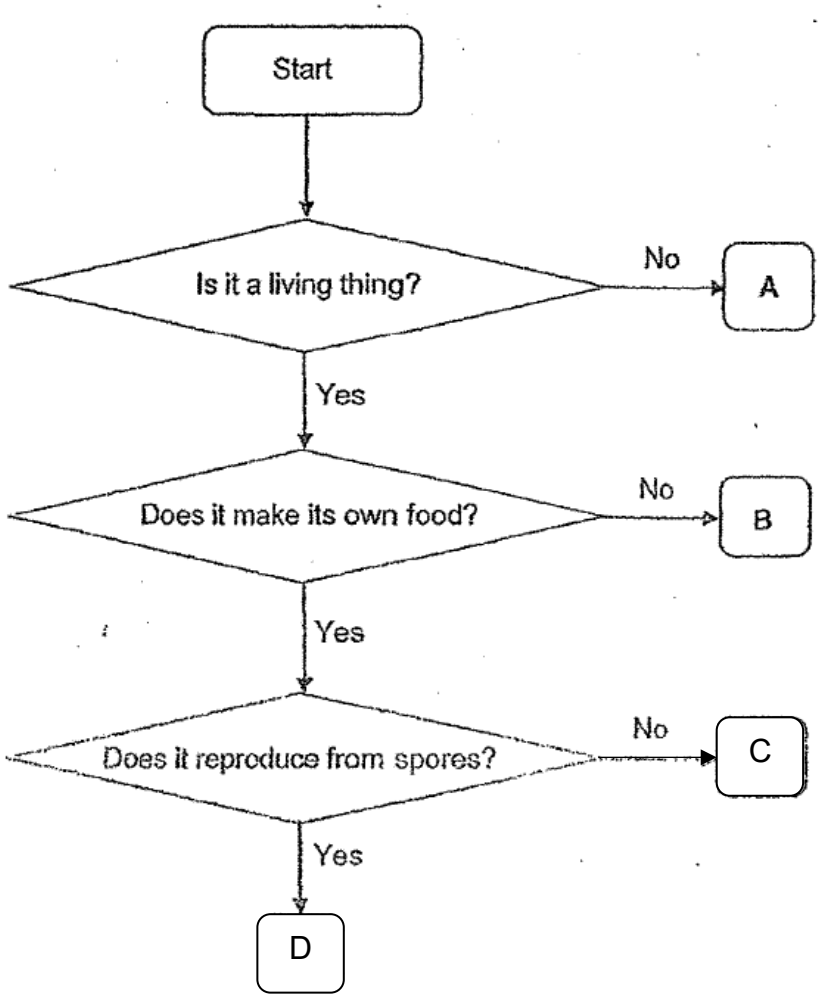
Term 2 Revision

P6 SCIENCE

Booklet A: Multiple Questions

Choose the most suitable answer and write its number in the brackets.

1. Study the chart below.

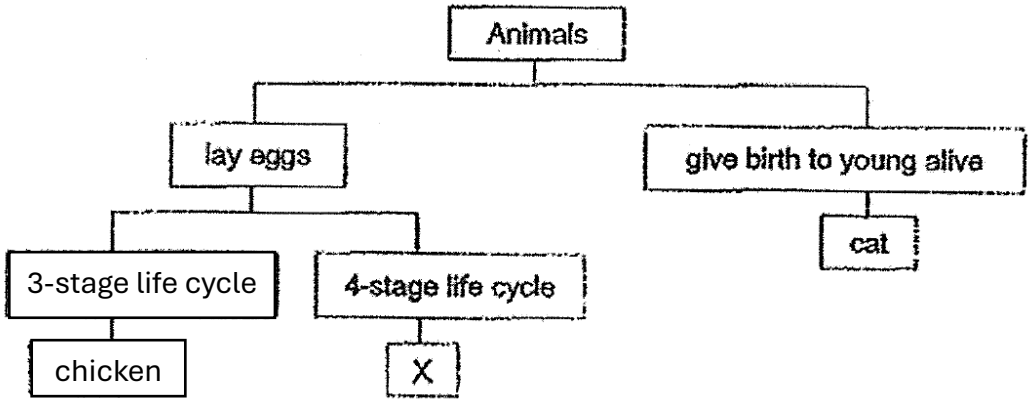


Based on the chart above, which of the following correctly represents a fem?

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

( )

2. Study the classification chart below.



Which of the following animals can X be?

(1) Frog

(2) Beetle

(3) Cockroach

(4) Grasshopper

( )

3. Lucas took substance Z out of the freezer and left it at room temperature before heating it to 85°C. The diagram below shows what he observed at 5°C and 85°C.

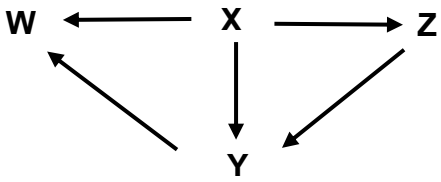
100ml of substance Z at 5°C 100ml of substance Z at 85°C

Based on Lucas' observations, which of the following is possible?

	Freezing Point of Z (°C)	Boiling Point of Z (°C)
(1)	10	120
(2)	3	100
(3)	15	70
(4)	0	105

( )

4. The diagram below shows a food web in a community.



Which one of the following correctly identifies organisms W, X, Y and Z?

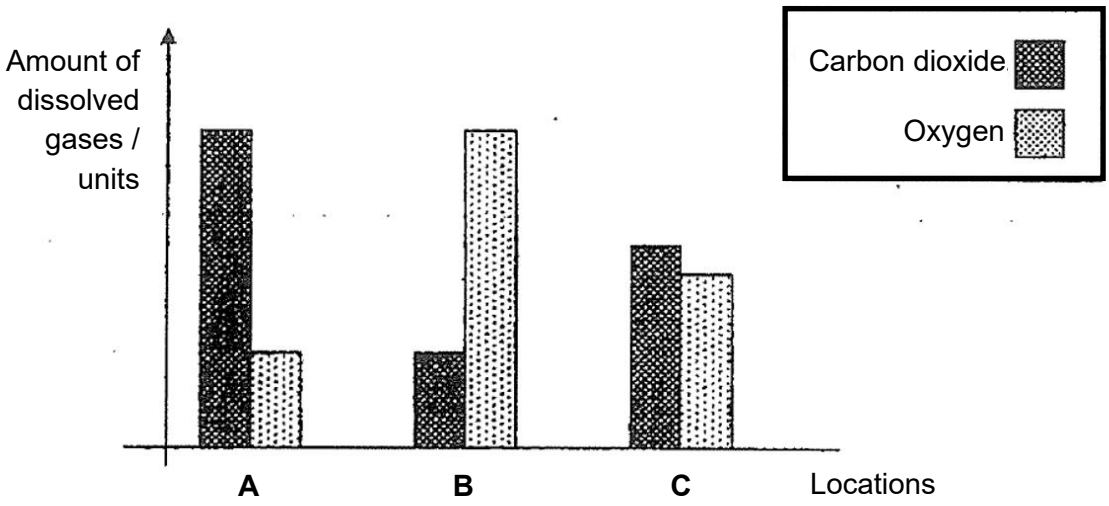
	Producer	Prey	Prey and predator	Predator
(1)	X	Z	Y	W
(2)	X	Y	Z	W
(3)	W	X	Y	Z
(4)	W	Y	Z	X

( )

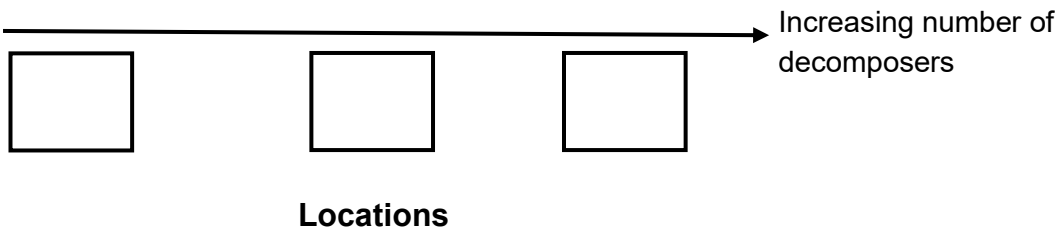
Section B

Write your answers in the spaces provided.

5. Melissa wanted to find out which part of a river has the most decomposers. She collected equal volumes of water samples from different locations, A, B and C, along a river. She measured the amount of dissolved oxygen and carbon dioxide in each water sample and showed the results in the following graph.



(a) Arrange the water samples from locations, A, B and C, in increasing number of decomposers in the boxes below. [1]



(b) What kind of environmental condition would speed up the rate of decomposition of dead matter in the river? [1]

_____

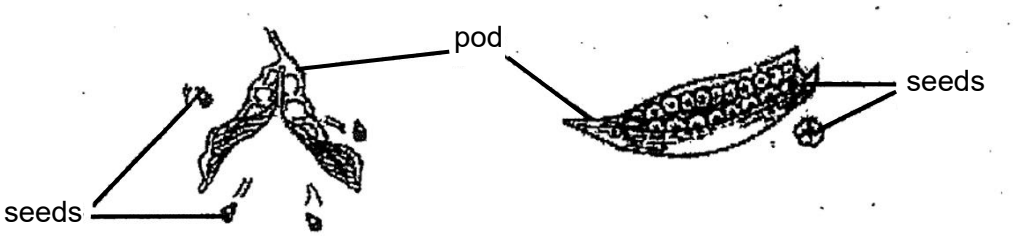
_____

(c) Melissa wanted to introduce a large number of floating water plants into the river to increase the amount of dissolved oxygen in the water. Explain why this suggestion may not work. [1m]

_____

_____

6. The diagram below shows two fruits, Q and R.



Fruit Q Fruit R

Bala made some observations about the seeds from both fruits and recorded them in the table below.

Seeds from fruit Q	Seeds from fruit R
Small and hard	Light with transparent wings

(a) Based on the information above, explain how fruit R dispersed its seeds. [2]

_____

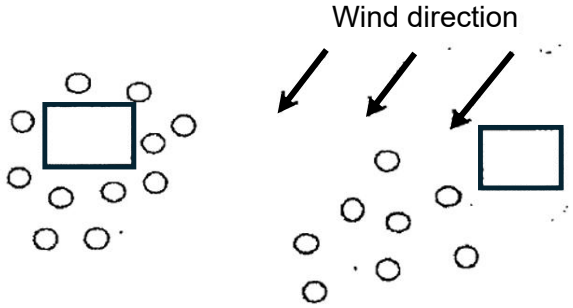
_____

_____

_____

(b) (i) After the seeds from fruits Q and R had been dispersed, the positions of their seedlings are indicated in the diagram below.

Place a tick (✓) in one box to identify the correct position of the parent plant of fruit Q. [1]

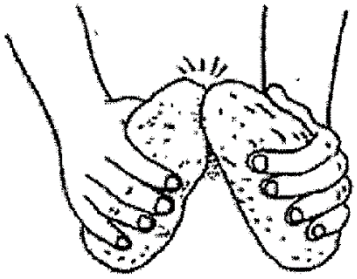


(ii) Explain your choice in (b)(i). [1]

_____

_____

7. Sarah carried out an investigation using two rocks. She rubbed the two rocks against each other as shown below.



After five minutes, Sarah felt that the surface of the rocks were hot. She measured the temperature of the surface of the rocks. The results are shown below.

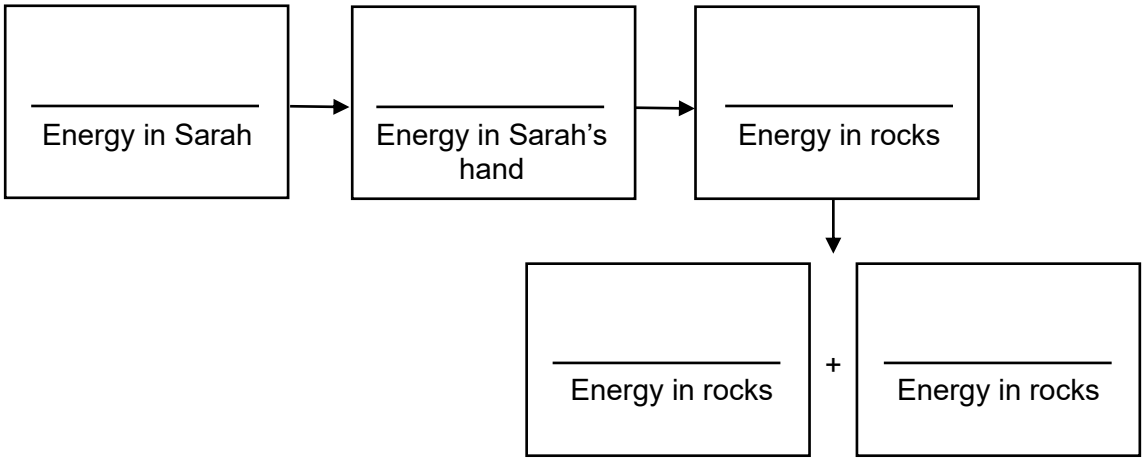
Attempts	Temperature of surface of rocks (°C)	
	Before rubbing	After rubbing
1	20	35
2	20	34
3	20	36

(a) Explain why Sarah repeated her experiment three times. (1m)

_____

_____

(b) Fill in the blanks below to show the energy conversion. (2m)



Sarah decided to rub the two rocks at a faster rate. After 5 minutes, the temperature of the surface of the rocks was 50°C.

(c) Explain, in terms of energy conversion, why the temperature of the rocks was higher when Sarah rubbed the rocks faster. (2m)

_____

_____

_____