



NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 2
PRIMARY FIVE
SCIENCE

Name : _____

Class : Primary 5 _____

Date : 21 August 2008

Duration : 1 hr 30 min

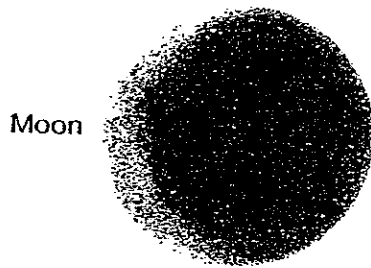
MARKS	
Sect A:	/ 40
Sect B:	/ 40
Total :	/ 80

Parent's Signature : _____

Section A: (20 x 2marks = 60marks)

For each question from 1 to 20, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. The two objects shown below are found in space.



A



B

Which one of the following sentences is true?

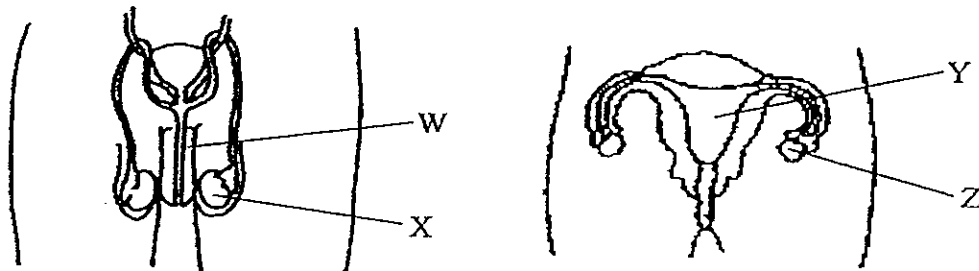
- (1) Objects A and B are satellites.
- (2) Objects A and B are of the same size.
- (3) Objects A and B do not revolve around the Earth.
- (4) Object A can reflect light but object B cannot reflect light.

2. Four pupils observed some cells on a slide with a microscope. They recorded the parts of the cell they could identify in the table below.

Name of Pupils	Cell Parts Identified
Ali	Cell membrane, nucleus
Benedict	Nucleus, cytoplasm
Caiming	Chloroplast, nucleus
Dawn	Cell wall, chloroplast, nucleus

Which of them could have observed animal cells?

- (1) Ali and Caiming
 (2) Ali and Benedict
 (3) Benedict and Dawn
 (4) Benedict and Caiming
3. The diagrams below show the male and female reproductive organs. Each of the organs performs a specific function.

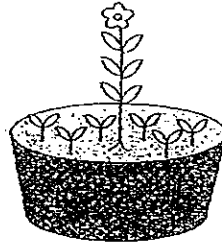


Which of the following descriptions about Parts W, X, Y and Z is/are true?

- A: Part W produces the sperm while Part Y produces the egg.
 B: Part Z releases the egg while Part Y is where the fertilised egg develops into a baby.
 C: Part W produces the sperm while Part Z receives the sperm.

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

4. The rose plant in the diagram is surrounded by weeds.
The weeds will cause the rose plant to have insufficient _____.



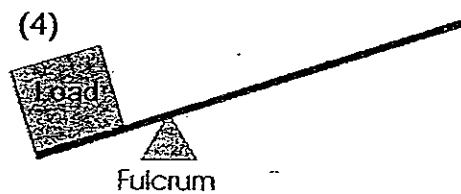
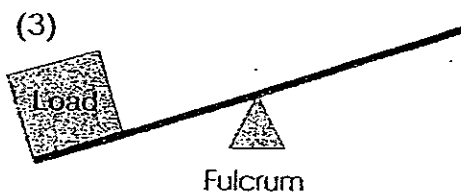
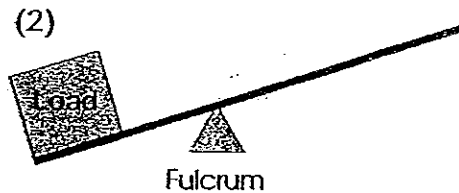
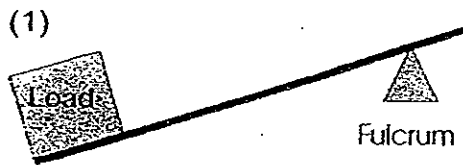
- A: Water
- B: Space
- C: Sunlight
- D: Nutrients

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

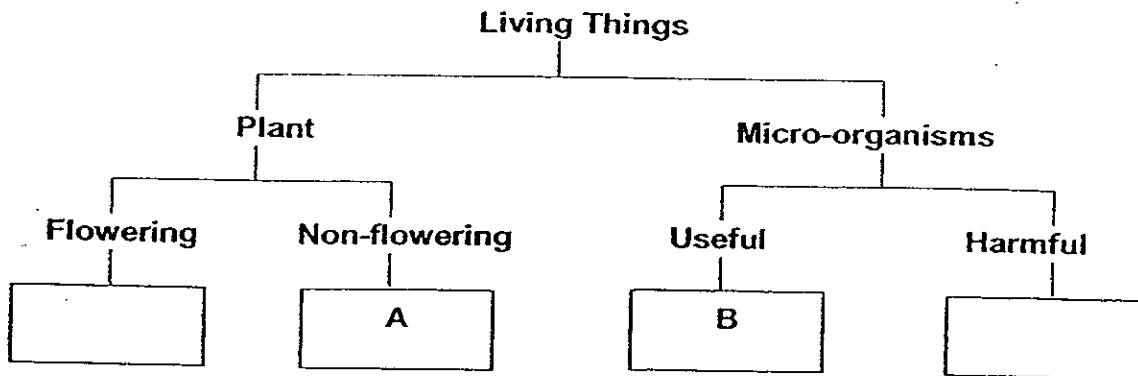
5. Which one of the following statements about forces is true?

- (1) A force is a form of matter.
- (2) A force is a push or a pull.
- (3) A force can be seen and cannot be felt.
- (4) Energy is not required to exert a force.

6. Which one of the arrangements below enables a similar load to be lifted up most easily?



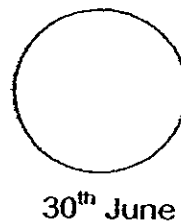
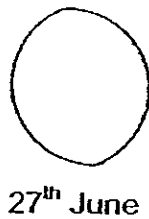
7. Study the classification table below.



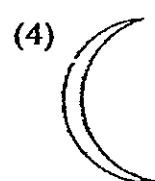
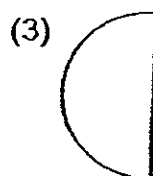
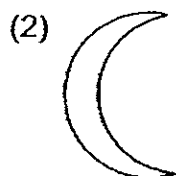
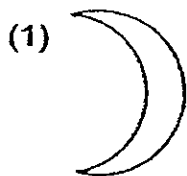
Which of the following could A and B be?

- | | <u>A</u> | <u>B</u> |
|-----|------------|-------------|
| (1) | fem | penicillium |
| (2) | toadstool | moss |
| (3) | water lily | mould |
| (4) | bacteria | mushroom |

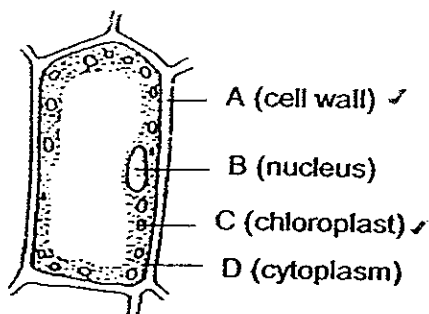
8. The pictures below show the shapes of the Moon on different dates.



What is the shape of the moon on 18th July?



9. Study the plant cell below carefully.



Which of the cell parts are not found in animal cells?

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

10. Which of the following can be a result of both heredity as well as the environment?

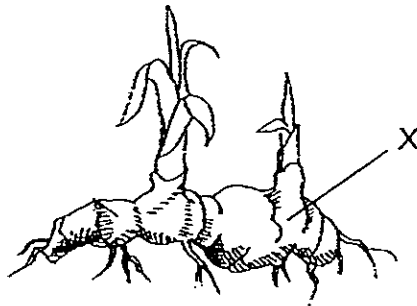
- A: Obesity
- B: Colour of eyes
- C: Short-sightedness
- D: Detached ear lobes

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

11. Which of the following is common to spores and seeds?

- (1) Both are found in spore bags.
- (2) Both are dispersed by wind only.
- (3) Both are involved in the reproduction of plants.
- (4) Both are formed from the ovules of flowers.

12. The diagram below shows part of a ginger plant.



What is the function of the part marked 'X' on the plant?

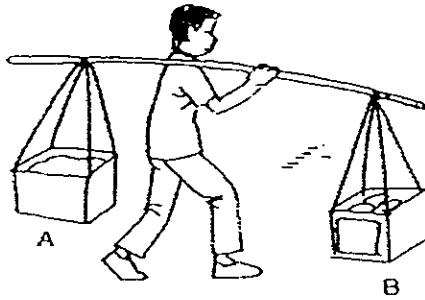
- A: It stores food.
- B: It makes food for the plant.
- C: It takes in carbon dioxide.
- D: It helps the plant to reproduce.

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

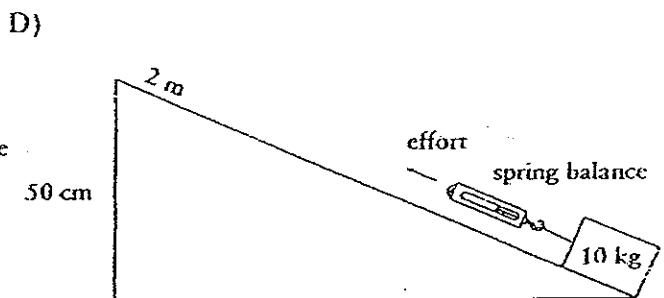
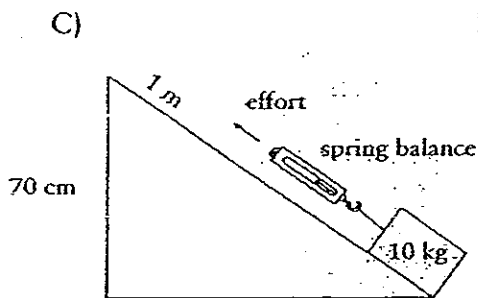
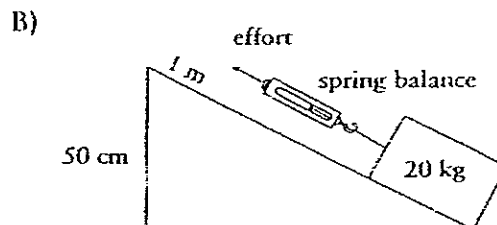
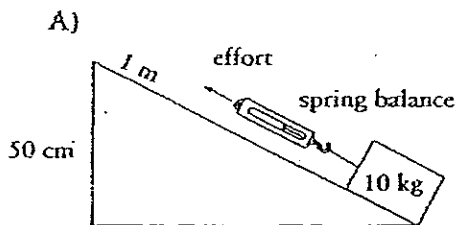
13. Judy classified some plants according to how they reproduce. Which one of the following sets is classified correctly?

	Seeds	Suckers	Underground stems
(1)	Watermelon	Begonia	Carrot
(2)	Fern	Heliconia	Sweet potato
(3)	Garlic	Onion	Papaya
(4)	Orange	Banana	Onion

14. If Load A is heavier than Load B, the man in the diagram below should put _____ in order to balance Load A and Load B.

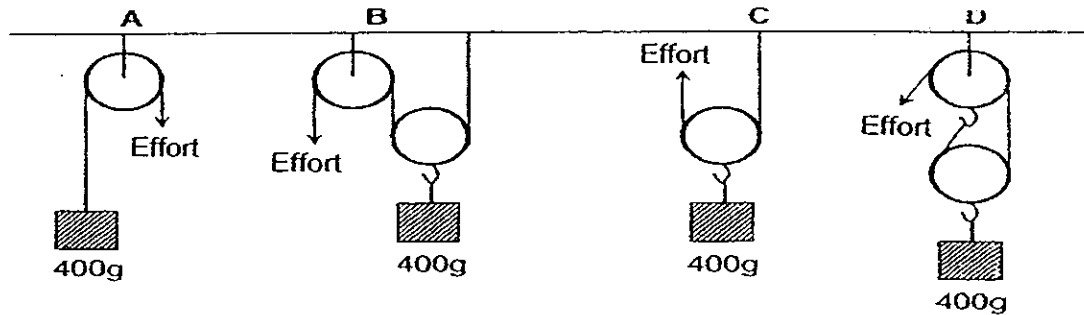


- (1) Load A to the end of the pole
 (2) Load A nearer to his shoulder
 (3) Load B nearer to his shoulder
 (4) Both loads the same distance from his body
15. Heath wants to investigate if the length of an inclined plane affects the effort required to pull up a load.
 Which two set-ups should he use to carry out a fair test?



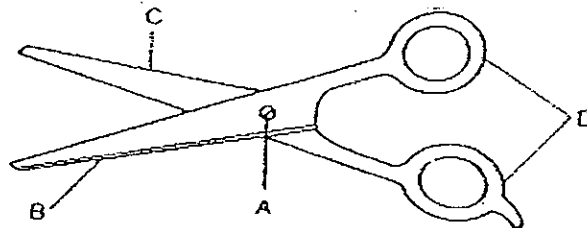
- (1) A and B
 (2) A and D
 (3) B and C
 (4) C and D

16. Study the different pulley setups shown below. A load of 400g is attached to each machine.



- If an effort of 300g is applied, which of the above machines **will not be able to lift** the load?

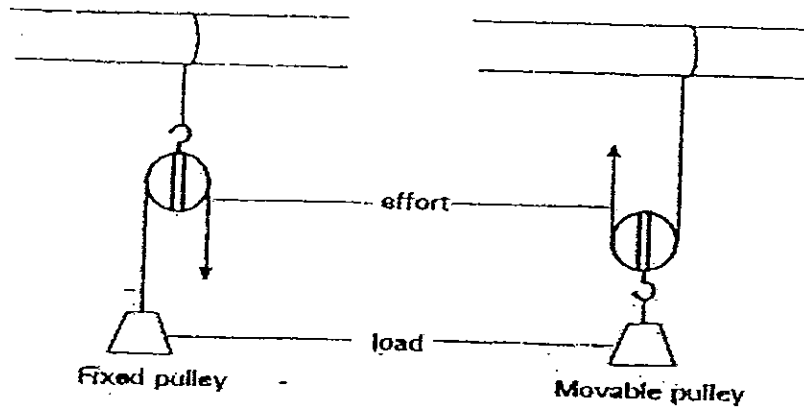
- (1) A only
 - (2) B and C only
 - (3) B and D only
 - (4) B, C and D only
17. Jane's Science teacher handed her a pair of scissors like the one shown below and asked her to observe how it worked.



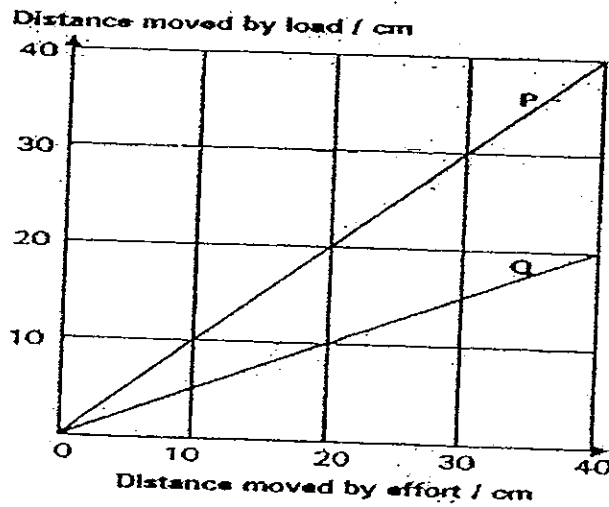
Jane has to label the fulcrum of the scissors. In the diagram, the fulcrum is at _____.

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

18. The diagram shows two types of pulley systems, a fixed pulley and a movable pulley.



The graphs, P and Q, show the relationship between the distance moved by the effort and the distance moved by the load.



Which types of pulley systems, fixed or movable pulley, do P and Q represent?

	P	Q
(1)	Fixed Pulley	Fixed Pulley
(2)	Fixed Pulley	Movable Pulley
(3)	Movable Pulley	Fixed Pulley
(4)	Movable Pulley	Movable Pulley

19. Study the two groups of animals listed below. What are the correct headings for Group A and Group B?

Group A	Group B
Pig	Platypus
Bat	Ostrich
Dolphin	Eagle

	Group A	Group B
(1)	Mammals	Birds
(2)	Unable to fly	Able to fly
(3)	Give birth to young alive	Lay eggs
(4)	Internal fertilisation	External fertilisation

20. Material X has the following properties.

- A: It breaks when dropped from a height.
- B: It lets light pass through easily.
- C: It cannot bend easily.

Which of the following objects is most likely made from Material X?

- (1) A balloon
- (2) A plastic bag
- (3) A wooden toy
- (4) A glass bottle



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Name : _____

Class : Primary 5 / _____

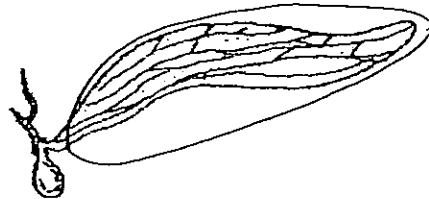
MARKS	
40	

Section B: (40marks)

Write your answers to question 21 to 36.

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

21. The diagram below shows a sycamore seed.



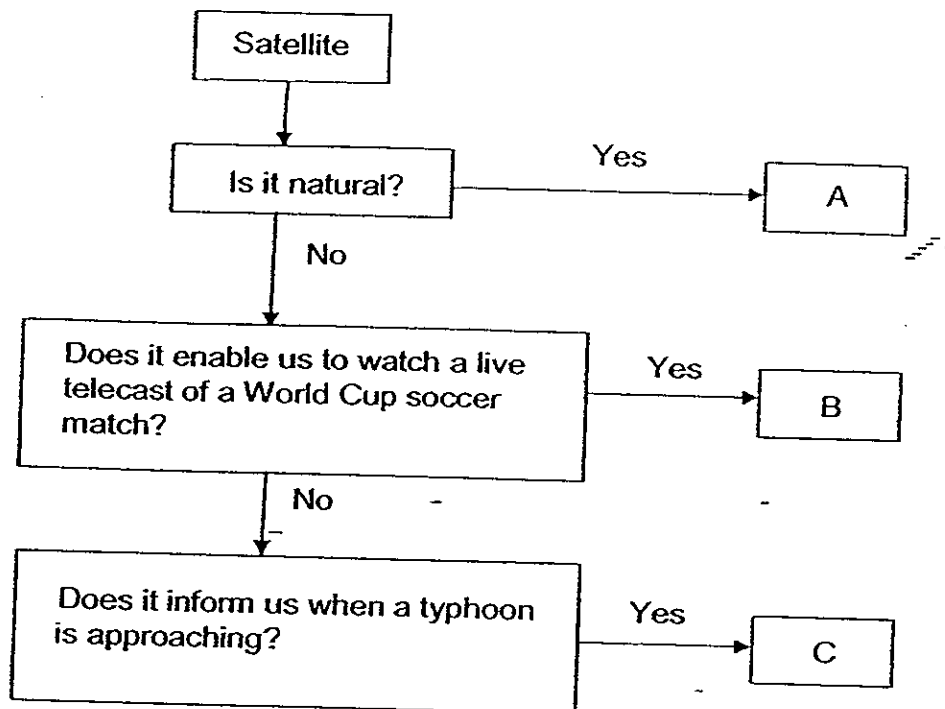
- (a) How is the sycamore seed dispersed? [1]

- (b) On the diagram above, circle the part that helps in the dispersal of the seed. [1]

- (c) Explain how the part circled in (b) helps in the seed dispersal. [1]

Score	3
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22. In the flow chart shown below, A, B and C represent objects found in space.



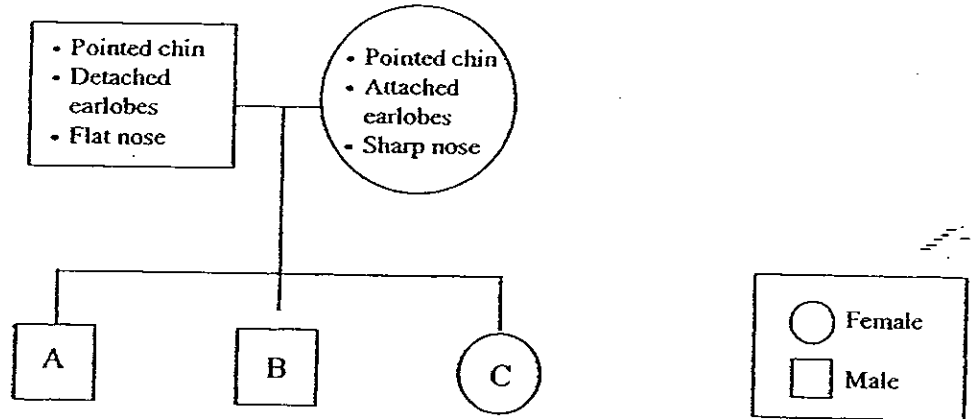
Match the objects which best represents A, B and C using the helping words given:

[3]

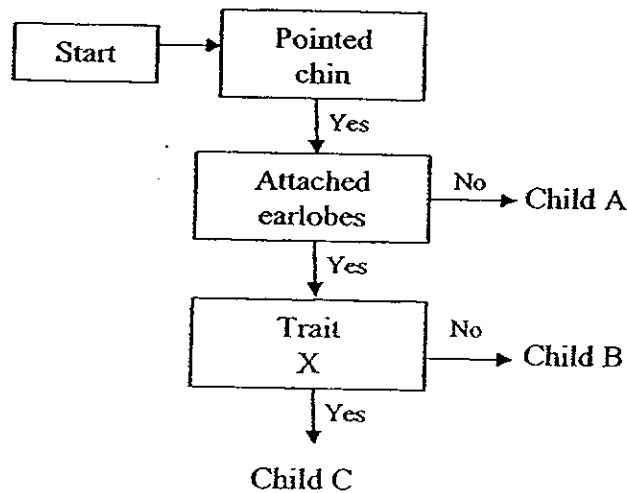
Communication satellite	Moon	Weather satellite
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A : _____
B : _____
C : _____

23. Mr and Mrs Chan have the following traits as shown.



The Chans have two sons and a daughter. The flowchart below shows the traits of their three children.



(a) What is the trait that all children of Mr and Mrs Chan have in common?

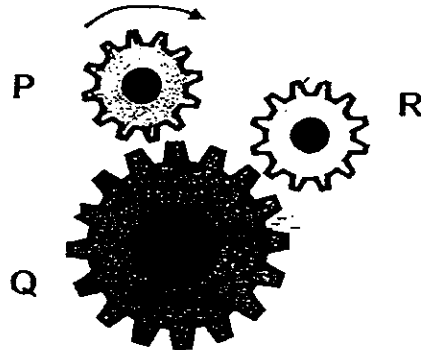
[1]

(b) Based on the given information, if Child C inherited all the traits from Mrs Chan, what is Trait X?

[1]

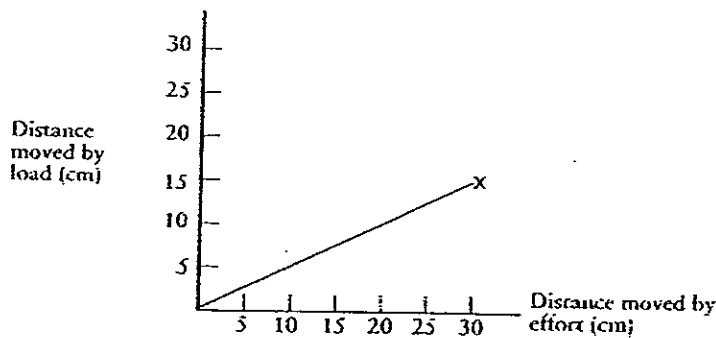
Score	2
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24. The diagram below shows three interlocking gears.



- (a) If Gear P turns in the direction as shown, draw arrows (in the diagram above) to show how Gear Q and Gear R turn. [1]
- (b) If Gear Q makes three complete turns, how many turns will Gear P make? [1]

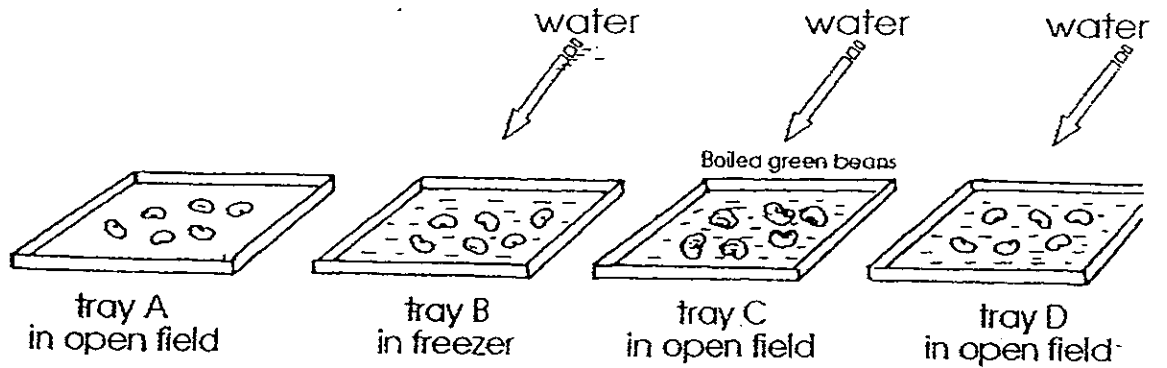
25. The graph below shows the relationship between the distance moved by the effort and the load in a pulley system.



- (a) Based on the graph above, does X represent a fixed pulley or a movable pulley? [1]
- (b) Is the effort needed to lift the load bigger or smaller than the load? [1]

Score	4
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26. There are six green beans on each tray. Trays B, C and D contained some water but not Tray A. The green beans on Tray C are first boiled before they are put on the tray. Tray B is left in the freezer while the rest of the trays are left in the open field for three days.



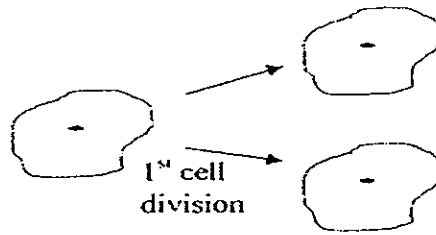
- (a) On which tray would you see the beans germinating after three days? [1]

- (b) Why do the green beans in the other three trays not grow into young plants? [3]

Trays	Reasons for not germinating
Tray _____	
Tray _____	
Tray _____	

Score	4
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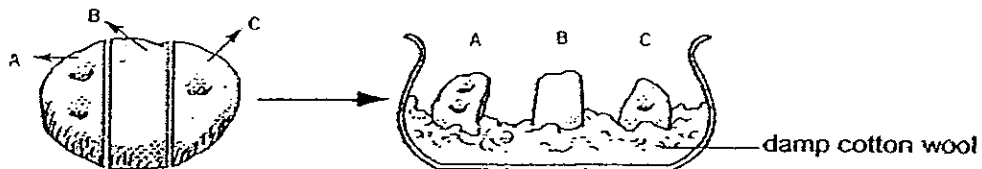
27. The diagram below shows a single cell organism undergoing cell division.



- (a) How many cells are there after the 3rd cell division? [1]

- (b) Cell division occurs in both plants and animals. Why is it important for cells to reproduce? [1]

28. The diagram below shows a potato that has been sectioned into three parts A, B and C. Each part is then placed in a large container containing damp cotton wool and allowed to grow.

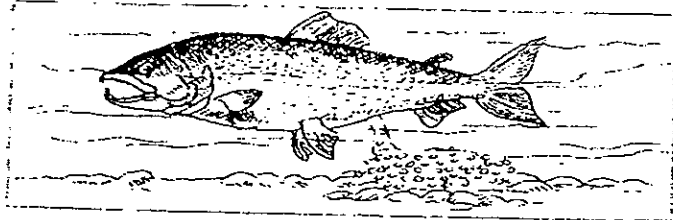


- (a) Based on what is shown in the diagram, which part, A, B or C, will not produce new plants? [1]

- (b) Explain your answer in (a). [1]

Score	/
	4

29. The picture below shows a male fish fertilizing the female's eggs by squirting a milky substance over them.



- (a) What does the milky substance contain? [1]

- (b) What kind of fertilization is taking place? [1]

- (c) Give an advantage for laying a large number of eggs by the female fish. [1]

Score	
	3

30. Rani set up 2 experiments as shown below.



She pulled the same load up a ramp 50cm in length. Then she measured and recorded the amount of effort needed to pull the load up the ramp.

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

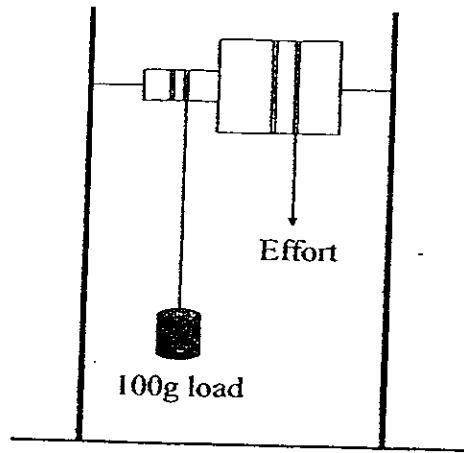
(b) In order for Rani to carry out a fair test for the above experiment, she had to consider some variables and decide whether they had to be changed or not. Tick (✓) the appropriate boxes in the table below to show her decision for each variable so as to conduct a fair test.

[11]

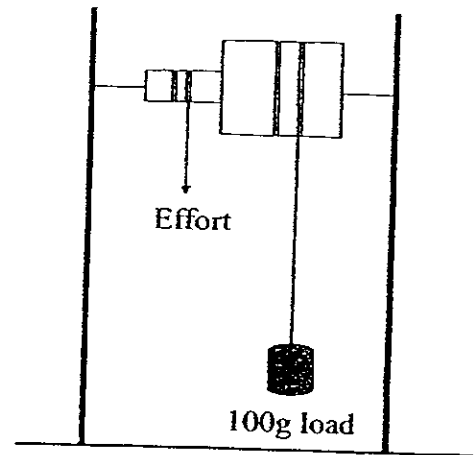
Variables	Changed	Unchanged
Mass of the load		
Length of the ramp		
Surface of the ramp		
Height of the ramp		

Score	✓
	2

31. Study the diagrams shown below. The efforts applied in both setups A and B are enough to lift the 100g load.



Setup A



Setup B

- (a) In which set-up will the effort be less than the load?

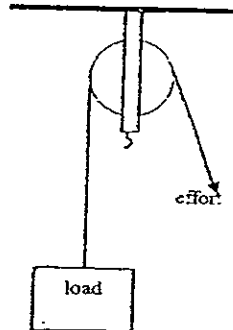
[1]

- (b) Explain your answer in (a).

[1]

Score	2
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32. The diagram below shows a single fixed pulley.

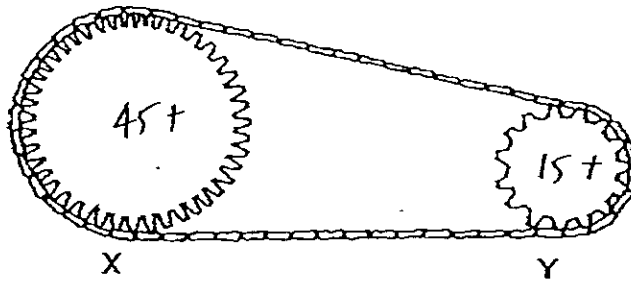


(a) What is the advantage of using the single fixed pulley? [1]

(b) The effort is slightly greater than the load when the single fixed pulley is used. Why is the effort slightly greater than the load? [1]

Score	2
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33. Peter's bicycle has two gears, X and Y, as shown below. Gear X has 45 teeth and Gear Y has 15 teeth.

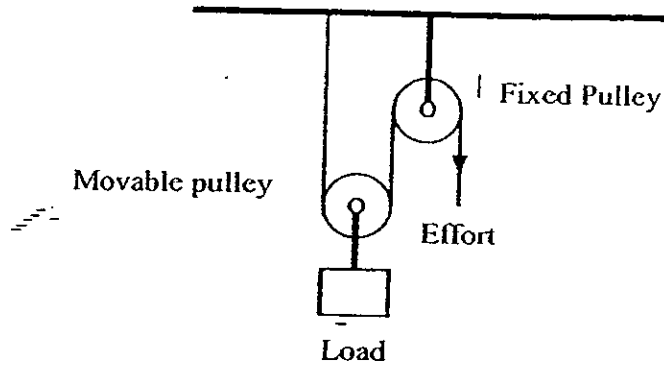


- (a) If Gear X turns in the clockwise direction, in which direction will Gear Y turn? [1]

- (b) When Gear X turns 2 rounds, how many rounds will Gear Y turn? [1]

Score	/
	2

34. Mabel set up a pulley system made up of a single fixed and a single movable pulley.



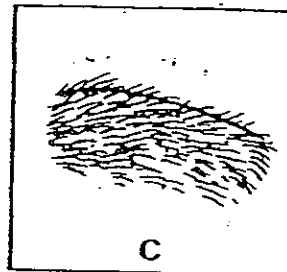
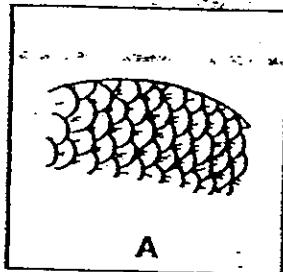
State two advantages in using the above pulley system. [2]

- (i) _____

- (ii) _____

35. The pictures below show three different types of outer body coverings of animals. Match the animal groupings given in the box below with their body coverings. [3]

mammals	fish	birds
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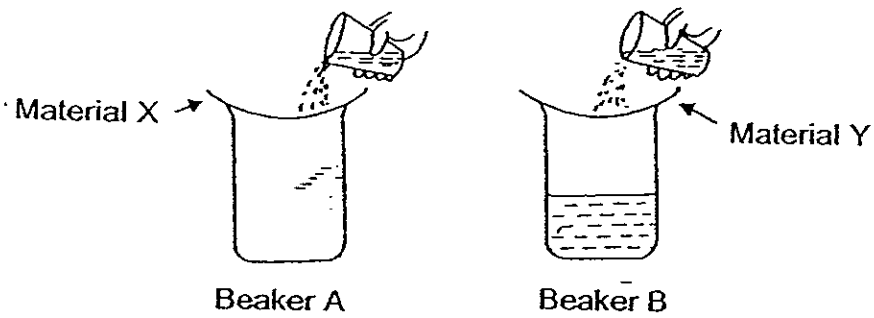


A: _____

B: _____

C: _____

36. Mr Lim wanted to find out whether Material X or Material Y is waterproof. He carried out the experiment as follows:



He poured some water over Material X and Material Y. After 5 minutes, he found water in Beaker B but Beaker A remained dry.

- (a) What could he conclude about the properties of Material X and Material Y? [2]

Material X : _____

Material Y : _____

- (b) Name one possible material for X and Y. [2]

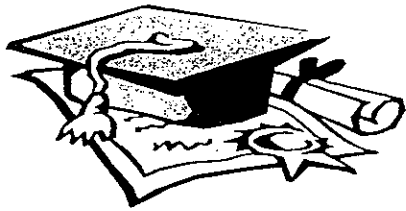
Material X : _____

Material Y : _____

END OF PAPER

Score	
	4





ANSWER SHEET

EXAM PAPER 2008

SCHOOL : NAN HUA PRIMARY SCHOOL

SUBJECT : PRIMARY 5 SCIENCE

TERM : CA 2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
1	2	2	4	2	4	1	1	1	1	3	2	4	2	2	1	1

Q18	Q19	Q20
2	3	4

21)a) By wind.

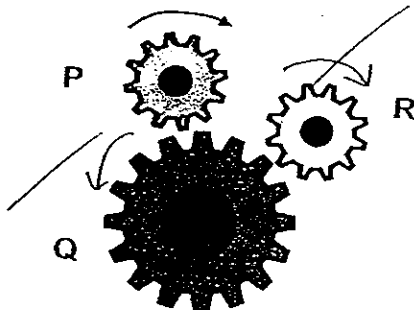
b) It has wing-like/ parachute-like structure to help it stay afloat in the air longer and hence it can travel further away.

22) A: Moon B: Communication satellite C: Weather satellite

23)a) Pointed chin.

b) Sharp nose.

24)a)



b) 4 turns.

- 25)a) Movable pulley.
b) Smaller.

- 26)a) Tray D.
b) Tray A: It does not have any water to germinate.
Tray B: The temperature is too cold and it could not germinate.
Tray C: Boiling killed the green bean cells.

- 27)a) 8 cell division.
b) For growth.

- 28)a) Part B.
b) Part B does not have buds which will grow into new plants.

- 29)a) It contains sperm to fertilise the egg.
b) External fertilization.
c) Most eggs may be eaten, hence large number of eggs ensure a higher chance of survival.

- 30)a) To find out if the angle of the ramp affects the effort needed to pull a load up.
b) Unchanged
Unchanged
Unchanged
Changed

- 31)a) Set-up A.
b) The effort travels a longer distance and thus requires a smaller effort.

- 32)a) It changes the direction of the applied force.
b) There is friction between the rope and the pulley.

- 33)a) Clockwise direction.
b) 6 turns.

34)i) Lesser effort is needed to over the load.

ii) Less effort is required to lift the load.

35)A: fish B: birds C: mammals

36)a)X: It is a waterproof does not allow water to pass through.

Y: It is not waterproof allows water to pass through.

b)X: Metal/Glass

Y: cloth/paper