



NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 2008
PRIMARY FIVE
SCIENCE

Name : _____ ()

Class : Primary 5 / _____

Date : 28 February 2008

Duration : 1 hr 45 min

MARKS	
Sect A:	/ 60
Sect B:	/ 40
Total :	/ 100

Parent's Signature : _____

Section A : (30 X 2) marks

For each question from 1 to 30, 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. Which of the following statements are true of the Earth?
- A: The Earth rotates constantly about its own axis as it revolves around the Sun
 - B: The Earth is the only known planet in the solar system that supports life
 - C: The atmosphere is a mixture of gases that surrounds the Earth
 - D: The same half of the Earth always experiences daytime
- (1) A and B only
 - (2) B and C only
 - (3) A, B and C only
 - (4) A, B, C and D

2. Although the Moon does not give off its own light, why can a Full Moon sometimes be seen in the night sky?

- (1) The whole Moon is lighted by the Sun.
- (2) One half of the Moon is lighted by the Sun and the whole portion of the lighted half is visible from the Earth.
- (3) One half of the Moon is lighted by the Sun but the lighted half is not visible from the Earth.
- (4) One half of the Moon is lighted by the Sun but only a small portion of the lighted half is visible from the Earth.

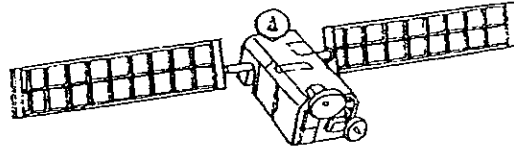
3. The table below shows the approximate distance between the Sun and selected planets in the Solar System.

Planet	Mercury	Venus	Earth	Jupiter	Uranus
Distance from the Sun (million km)	58	108	150	778	2870

Based on the above information only, why is Uranus unable to support life?

- (1) Uranus has shorter days and longer nights compared to Earth.
- (2) Uranus receives too little heat from the Sun.
- (3) Uranus does not experience four seasons like Earth.
- (4) Uranus takes a longer time than the Earth to make one rotation about its own axis.

4. Observe the object in the diagram below.



Which of the statements below are true of the object?

- A: It is found naturally in space
 - B: It is used to send a satellite into space
 - C: It orbits around the Earth
 - D: It relays radio, television and telephone signals around the world
- (1) A and C only
 - (2) A, C and D only
 - (3) C and D only
 - (4) B, C and D only

5. The semi-permeable cell membrane of a cell _____.

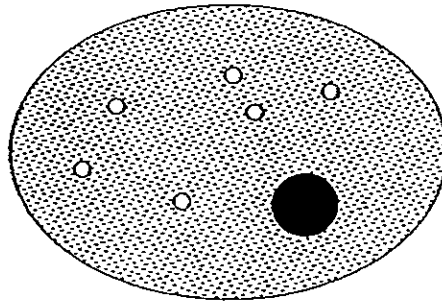
- (1) allows substances to move in but does not allow substances to move out
- (2) allows all substances to move in and out at regular intervals
- (3) allows only water and oxygen to move in and out
- (4) allows some substances to move in and out but not others

6. James examined ^{four} three cells under a microscope and recorded his observations in the table below.

Parts of a cell	Cell A	Cell B	Cell C	Cell D
Nucleus	Present	Present	Present	Absent
Cell Wall	Present	Present	Absent	Absent
Cytoplasm	Present	Present	Present	Present
Chloroplast	Absent	Present	Absent	Absent
Cell membrane	Present	Present	Present	Present

Which cell is likely to be taken from our cheeks?

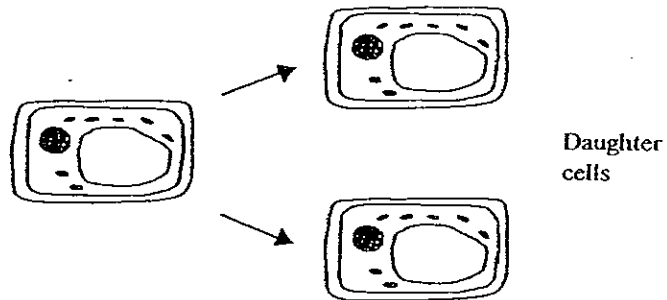
- (1) Cell A
 - (2) Cell B
 - (3) Cell C
 - (4) Cell D
7. The diagram below shows an animal cell.



Which one of the following sentences is true?

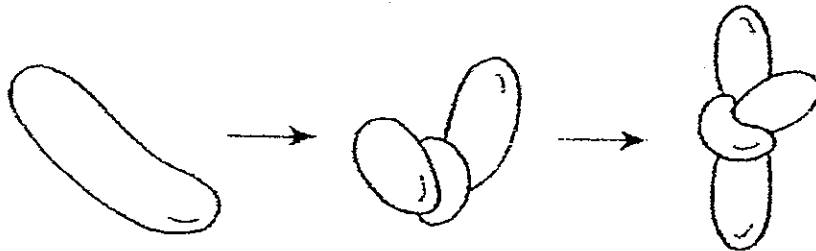
- (1) It has a cell wall.
- (2) It will turn iodine solution from brown to dark blue.
- (3) It can only be seen with a microscope.
- (4) It will still be alive if the nucleus is removed.

8. A cell went through cell division and produced two daughter cells.



If both daughter cells went through another cell division, how many cells will there be then?

- (1) 2
 - (2) 4
 - (3) 6
 - (4) 7
9. A circus clown is performing a magic trick. He twists and changes the shape of a balloon.

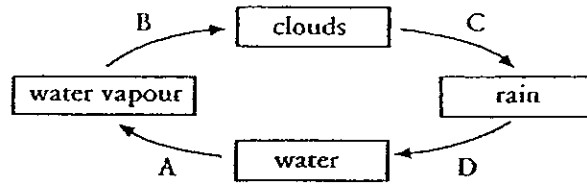


Which of the following statements best explain why the shape of the balloon can be changed?

- A: Air has no mass.
- B: Air can be compressed.
- C: Air has no definite shape.
- D: The material used to make the balloon is elastic.

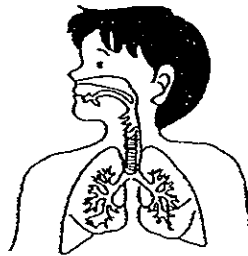
- (1) A and B only
- (2) A and C only
- (3) B, C and D only
- (4) A, B, C and D

10. At which stages of the water cycle are there changes in the state of water?



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

11. Which part of the human body does the diagram below show?



- (1) Circulatory system
- (2) Digestive system
- (3) Nervous system
- (4) Respiratory system

12. Why do we only feel the heat from the Sun and not from the other stars in the universe?

- (1) The other stars do not give off heat.
- (2) The Sun is the hottest star in the universe
- (3) The other stars are very far away from the Earth.
- (4) The other stars only appear at night while the Sun appears in the day.

13. Which of the following natural phenomena is/are due to the rotation of the Earth about its own axis?

- A: Day and night cycle
- B: Formation of the water cycle
- C: Phases of the Moon

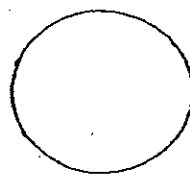
- (1) A only
- (2) C only
- (3) A and C only
- (4) B and C only

14. A New Moon occurred on 1st March. Janice observed the moon every night until 7th March. Which one of the following diagrams shows the moon observed on 7th March?

(1)



(2)



(3)



(4)



15. The table below provides some information about ^{Planet} Planet X, Planet Y and Planet Z.

	Planet X	Planet Y	Planet Z
Distance from the Sun (million km)	150	2497	4582
Number of moons	1	20	10
Composition of air	78% nitrogen 21% oxygen 1% other gases	58% nitrogen 40% hydrogen 2% oxygen	70% hydrogen 28% carbon dioxide 2% other gases
Presence of water	Yes	Yes	No

Based on the information given above, which of the following statements are correct?

- A: Planet Z is closer to Planet X than Planet Y
 - B: Planet Z is more unlikely to support life than Planet X
 - C: Planet Y has less number of natural satellites than Planet Z
 - D: Planet X will take a shorter time to make one revolution round the Sun than Planet Y
- (1) A and B only
(2) B and D only
(3) B, C and D only
(4) A, B, C and D
16. Which of the following statements are true of man-made satellites?
- A: They revolve around the Sun
 - B: They enable us to watch "live" broadcasts
 - C: They are sent to space by rockets
- (1) A and B only
(2) B and C only
(3) A and C only
(4) A, B and C

17. Which of the following are single-celled organisms?

- A: Yeast
- B: Amoeba
- C: Paramecium
- D: Cheek cell

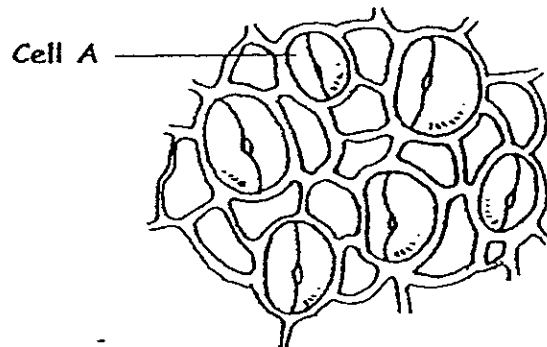
- (1) A and C only
- (2) B and D only
- (3) A, B and C only
- (4) A, B, C and D

18. Which of the following statement(s) is/are true?

- A: All plant cells have chloroplast
- B: The cell membrane protects the cell wall
- C: The nucleus gives the plant cell a regular shape
- D: Chloroplasts contain chlorophyll which is needed for photosynthesis

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

19. Study the diagram below. It shows the underside of a green leaf seen under a microscope.



What is the **main** function of Cell A?

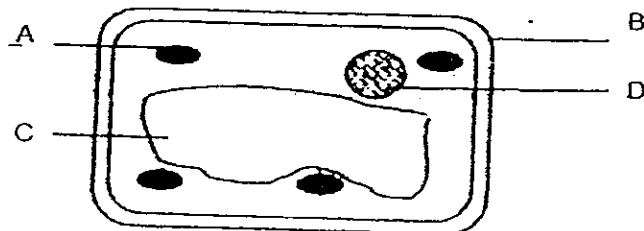
- (1) To store food
 - (2) To aid in the exchange of gases
 - (3) To take in water for the plant
 - (4) To carry food from the leaves to the root of the plant
20. What is the function of the cell wall of a plant cell?
- (1) It supports the plant cell and gives it a regular shape.
 - (2) It controls the movement of materials in and out of the cell.
 - (3) It controls all the activities of the cell.
 - (4) It contains chlorophyll which is needed for photosynthesis.

21. Which of the following can be found in the cells of the living thing shown below?



- A: cell membrane
 - B: cytoplasm
 - C: chloroplast
 - D: cell wall
- (1) A and B only
 - (2) A, B and C only
 - (3) B, C and D only
 - (4) A, B, C and D

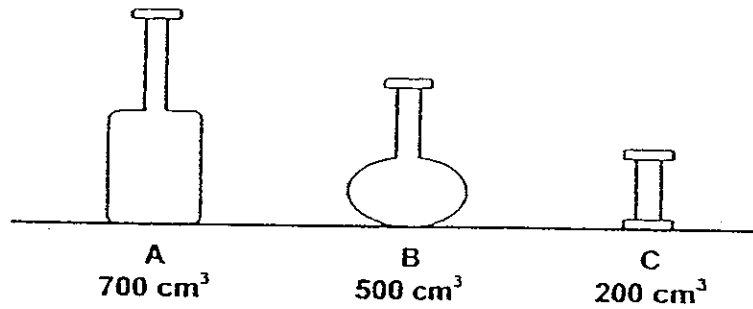
22. The diagram below shows a plant cell.



Which one of the following parts of the cell is able to capture light energy?

- (1) A
 - (2) B
 - (3) C
 - (4) D
23. Which one of the following statements best describes matter?
- (1) It cannot be seen
 - (2) It has mass and occupies space
 - (3) It can expand but cannot contract
 - (4) It has a fixed volume but not a fixed shape

24. Jenny pumped 300 cm^3 of air into each of the containers A, B and C as shown below. What is the volume of air in each container after she pumped in the air?



	A	B	C
(1)	300 cm^3	300 cm^3	300 cm^3
(2)	700 cm^3	500 cm^3	200 cm^3
(3)	1000 cm^3	800 cm^3	500 cm^3
(4)	300 cm^3	300 cm^3	200 cm^3

25. What happens when water changes to ice?

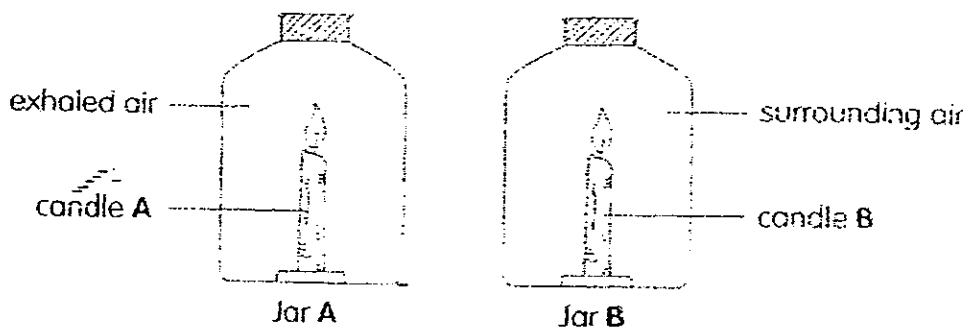
- A: It loses heat
 B: It gains heat
 C: Its state changes
 D: Its volume increases

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

26. Water can exist in 3 states. Which of the following is in the same state as water vapour?
- A: Rain
 B: Snow
 C: Steam
 D: Dew
- (1) C only
 (2) C and D only
 (3) A and B only
 (4) A, C and D only
27. Which one of the following is the best way to reuse water?
- (1) Use water that is drained out from the washing machine to wash the toilet
 (2) Use soapy water that is drained out from the washing machine to water plants
 (3) Use water collected from rain for drinking
 (4) Collect water from tap leaks to cook rice
28. Several people were trapped in a lift for an hour. There was no fresh air entering the lift. Which of the following shows how the amount of gases in the lift changed after an hour?

	Oxygen	Carbon dioxide	Water vapour	Nitrogen
(1)	increase	decrease	increase	no change
(2)	increase	decrease	no change	increase
(3)	decrease	increase	increase	no change
(4)	decrease	increase	no change	increase

Study the experiment set-up below and answer Questions 29 and 30.



29. What would be observed after sometime?

- (1) The flames of both candles will extinguish at the same time.
- (2) The flame of the candle in jar A will extinguish first.
- (3) The flame of the candle in jar B will extinguish first.
- (4) The flames of both candles will not extinguish.

30. The above experiment shows that exhaled air contains less

-
- (1) nitrogen than inhaled air
 - (2) oxygen than inhaled air
 - (3) carbon dioxide than inhaled air
 - (4) water vapour than inhaled air



NAN HUA PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 2008
PRIMARY FIVE
SCIENCE

Name : _____ ()

Class : Primary 5 _____

MARKS
40

Section B : 40 marks

Write your answers to questions 31 to 46. The number of marks available is shown in brackets () at the end of each question or part question.

31. State 2 ways in which the Sun is useful to living things on Earth.

(a) _____ (1 m)

(b) _____ (1 m)

32. Put a "T" for statements that are true and "F" for statements that are false. (2 m)

(a)	The cell wall controls the movement of materials in and out of the cell.	
(b)	The cell membrane supports the plant cell and gives it a regular shape.	
(c)	The nucleus controls all the activities of the cell	
(d)	Chloroplasts contain chlorophyll which is needed for photosynthesis.	

Score	4
-------	---

33.

(a) Why is cell division important to living things?

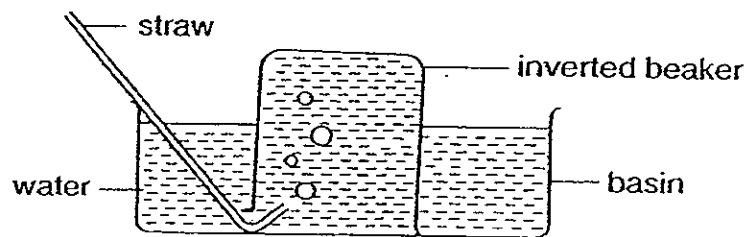
(i) _____ (1 m)

(ii) _____ (1 m)

(b) List two cell parts that can be found in a leaf cell but not in a cheek cell.

_____ (1 m)

34. Tammy blows air through a straw into an inverted beaker that is placed in a basin full of water.



(a) What happens to the water level in the beaker as Tammy blows air through the straw into the inverted beaker?

_____ (1 m)

(b) Explain your answer in (a).

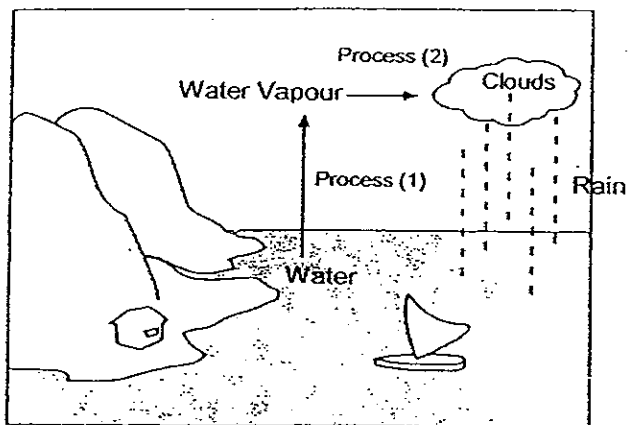
_____ (1 m)

(c) What can you conclude from the experiment?

_____ (1 m)

Score	6
-------	---

35. Study the diagram shown below.



(a) Name the 2 processes that occur in the water cycle shown above. (1 m)

Process (1): _____

Process (2): _____

(b) Why is the water cycle important to us?

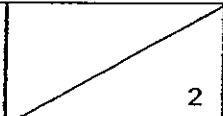
_____ (1 m)

Score	
-------	--

36. Give two reasons why the Earth is able to support a diversity of life. (2 m)

(i)

(ii)

Score	
-------	---

37. Based on the information in the table below, answer the following questions.

Planet	Distance from the Sun (million km)	Time taken to make one rotation (hours)	Time taken to make one revolution around the Sun
Mercury	58	1367	88 days
Venus	108	5833	225 days
Earth	150	24	365 days
Mars	228	9	687 days
Jupiter	778	10	12 years
Saturn	1427	18	29 years
Uranus	2870	19	84 years
Neptune	4497	6	165 years

- (a) State the relationship between the distance the planet is from the Sun and the time taken for the planet to orbit the Sun.

_____ (1m)

- (b) How many revolutions would Jupiter make around the Sun when Uranus makes one revolution around the Sun?

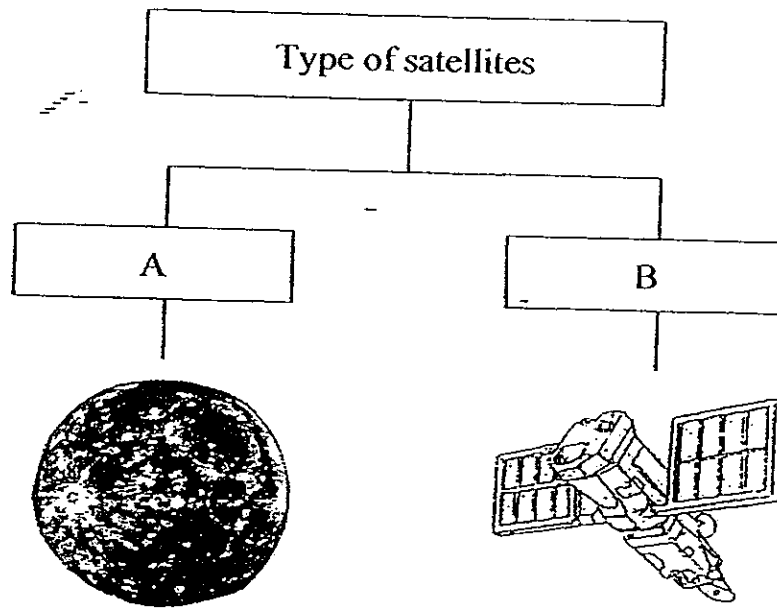
_____ (1m)

- (c) Based on the data given in the table above, which planet has the shortest day and night cycle?

_____ (1m)

Score	3
-------	---

38. Study the classification table below. Fill in the blanks with the appropriate sub-headings.



- (a) What are the sub-headings for A and B?

[2]

A : _____

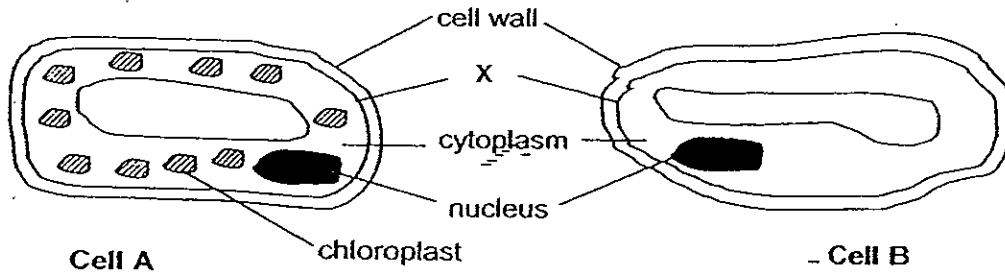
B : _____

- (b) State one use of a Type B satellite.

[1]

Score	3
-------	---

39. Jane observed two different types of cells, A and B, from the same plant, as shown in the diagram below.



- (a) What is the function of part X? (1 m)

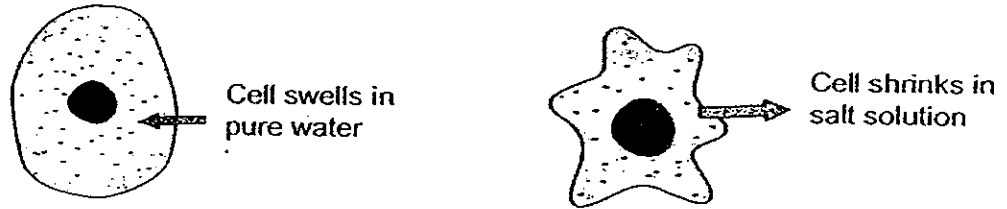
- (b) Which part of the cell makes food for the plant? (1 m)

- (c) In which part of the plant are you likely to find cell B? Give a reason for your answer. (1 m)

Score	3
-------	---

40.

- (a) Andy observed that when a cell taken from organism X is placed in pure water; it swells. However, when it is placed in salt solution, it shrinks.



- What conclusion can Andy draw about the cell membrane from the above information? (1 m)

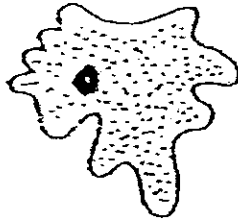
- (b) Andy carried out an experiment with a plant cell and an animal cell. He placed both cells in pure water and examined them. One of the cells burst. The other cell became swollen and firm but did not burst.

Which cell did not burst? Explain your answer. (1 m)

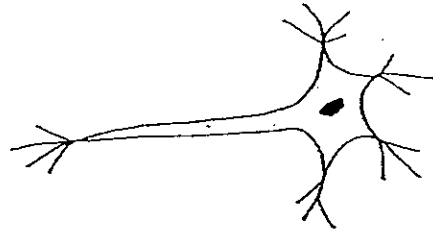
Score	2
-------	---

41.

(a) The diagrams below shows 2 cells, X and Y, taken from an animal.



Cell X

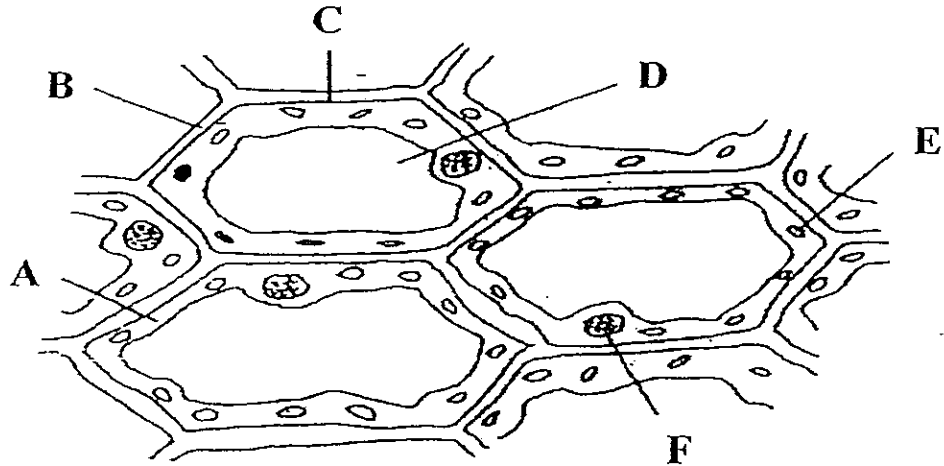


Cell Y

State one similarity between the two cells.
(Do not compare shape and size)

(1 m)

(b) Jane looked at some cells on a slide using a microscope. The cells are shown in the diagram below.

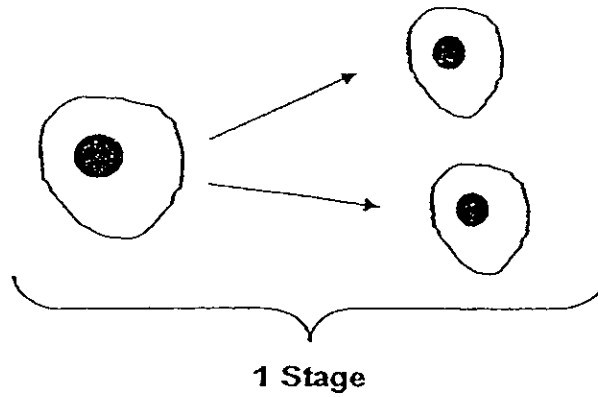


Complete the table below. Write the correct alphabet from the diagram next to each cell function. (2 m)

	Cell Function	Alphabet
i)	This cell part controls the activities of the cell.	
ii)	This cell part controls the movement of substances in and out of the cell.	
iii)	This cell part gives the cell its shape.	
iv)	New substances are formed in this cell part.	

Score	3
-------	---

42. The diagram below shows a process that the human cell undergoes.



(a) Name the above process.

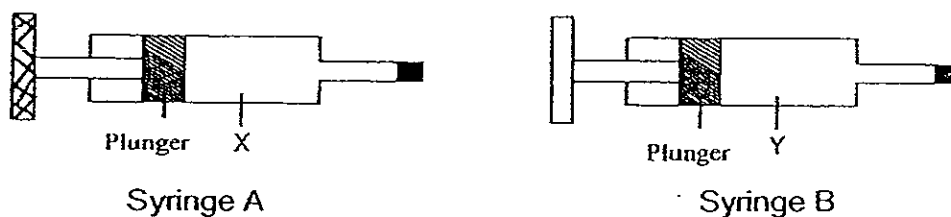
_____ (1 m)

(b) How many stages of the above process must the cells undergo so that there will be 32 cells after some time?

_____ (1 m)

Score	2
-------	---

43. Two syringes, A and B, contain Substances X and Y respectively. One end of each syringe is sealed. The plunger in Syringe A could not be pushed in while the plunger in Syringe B could be pushed in slightly.



- (a) What can we conclude about the properties of Substances X and Y?

_____ (2 m)

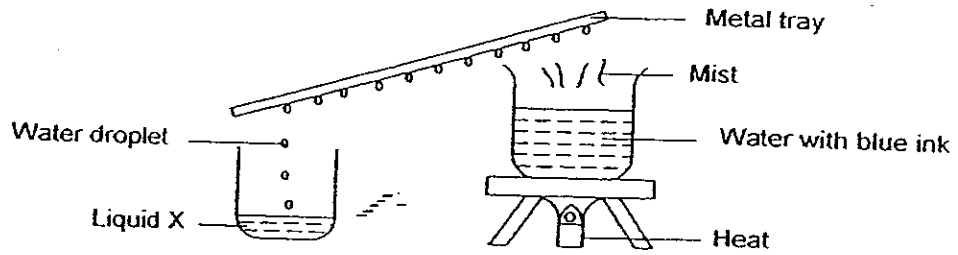
- (b) Give an example each of Substance X and Y. (1 m)

Substance X : _____

Substance Y: _____

Score	3
-------	---

44. Mandy set up the experiment shown below.



(a) At first, water droplets formed on the metal tray quickly. After some time, fewer water droplets were formed. Explain this observation. -

_____ (1 m)

(b) Mandy saw a cloud of mist forming as the water with blue ink boiled. What is this mist?

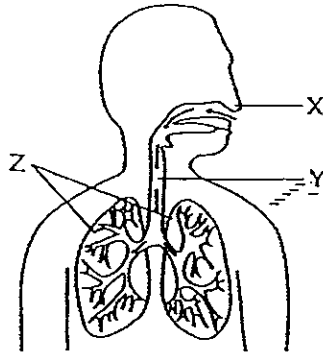
_____ (1 m)

(c) What is the colour of liquid X?

_____ (1 m)

Score	
	3

45. Study the diagram below.

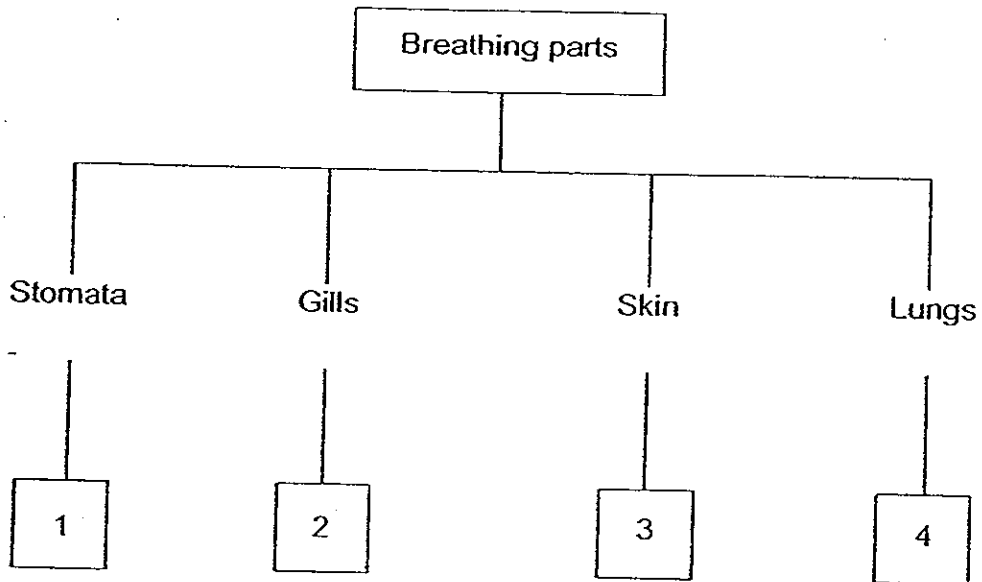


Put a tick (✓) in the correct boxes to indicate if the statements below are true or false. (2 m)

	Statements	True	False
(a)	Part X is the only part that lets air in and out of the body.		
(b)	Part Y is the main air tube that branches into smaller air tubes.		
(c)	Oxygen is absorbed into the bloodstream and carbon dioxide is removed from the blood in Part Z.		
(d)	Part Z contains millions of air sacs that are surrounded by many tiny blood vessels.		

Score	2
-------	---

46. Study the classification chart below.



Where would you place the following organisms in the chart?

Fill in the blanks with the corresponding numbers.

(2m)

(a) Fish : _____

(b) Earthworm : _____

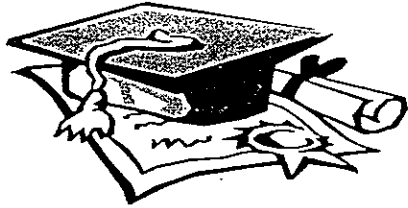
(c) Rose Plant : _____

(d) Whale : _____

END-OF-PAPER

Setter: Mr Leong SY

Score	2
-------	---



ANSWER SHEET

EXAM PAPER 2008

SCHOOL : NAN HUA PRIMARY SCHOOL
SUBJECT : PRIMARY 5 SCIENCE

TERM : CA 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
3	2	3	2	4	3	3	2	3	1	4	3	1	1	2	2	3
Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30				
1	2	1	1	1	2	2	3	1	1	3	2	2				

- 31) a) It gives out heat for the water cycle on Earth.
b) It gives out light and it enable the plants to make food.

- 32) a) F b) F c) T d) T

- 33) a) i) For growth
ii) To replace old and damaged cells.
b) Cell wall and chloroplast.

- 34) a) The water level will go down.
b) Air takes the space occupied by water in the inverted beaker, hence the water level drop.
c) Air occupies space.

- 35) a) 1) Evaporation 2) Condensation
b) The water cycle ensures a continuous supply of fresh water for all living things on land.

36)i)Earth's position from the sun enables it to have the right amount of heat and water to exist in the liquid state.

ii)It had an atmosphere that had a mixture of air including oxygen for living things and carbon dioxide for plant make food.

37)a)The further away a planet is from the sun, the longer it take to orbit around the sun.

b)7 revolutions.

c)Neptune.

38)a)A: natural satellite B: Man-made satellite

b)It can be used for weather forecasting.

39)a)It partially permeable for some materials to enter in and out.

b)Chloroplast

c)Under ground stem/Roots/Bark.

There do not have chloroplasts as they do not need to make food for the plant.

40)a)The cell membrane allows water to move in and out of the cell.

b)Plant cell did not burst. It has a cell wall to support it.

41)a)Both have a nucleus cell membrane and cytoplasm.

b)i)F ii)C iii)B iv)A

42)a)Cell division.

b)There will be 32 cells after 5 stages.

43)a)Substance X cannot be compressed but substance Y can be compressed.

b)X: water Y: air

44)a)The temperature of the metal tray in creased hence the rate of condensation decreased.

b)water droplets.

c)Liquid X was colour less.

45)a)F b)T c)T d)T

46)a)2 b)3 c)1 d)4

