

**AI TONG SCHOOL****2005 CONTINUAL ASSESSMENT (1)****PRIMARY FIVE SCIENCE****DURATION : 1hr 45 min****DATE: 3 MARCH 2005****INSTRUCTIONS**

**Do not open the booklet until you are told to do so.
Follow all instructions.
Answer all questions.**

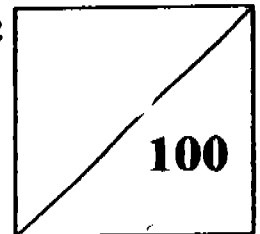
Name : _____ ()

Class : Primary _____

Parent's Signature : _____

Date : _____

Marks :



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. How is the solar system similar to the circulatory system in our body?

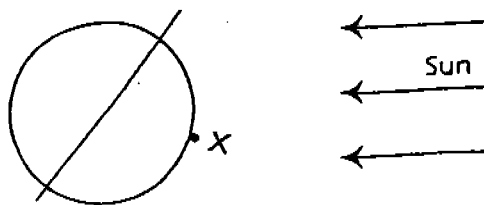
- A Both systems occur naturally.
- B Both systems are made up of a number of parts.
- C Both systems are formed by non-living things
- D Both systems are formed by living things.

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

2. The earth rotates on its own axis from _____

- (1) east to west
- (2) west to east
- (3) north to south
- (4) south to north

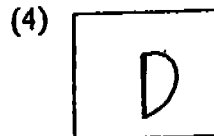
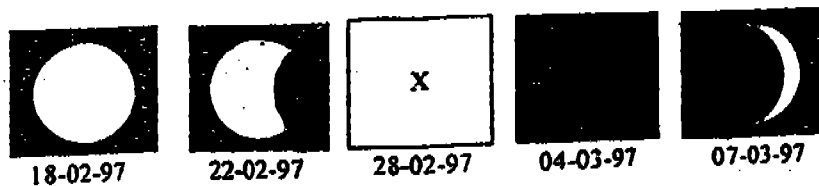
3. Study the diagram below



A person at point X will see the Sun in exactly the same position in the sky after about _____ hours.

- (1) six
- (2) twelve
- (3) twenty-four
- (4) thirty-six

4. The pictures below show the different shapes of the moon on different nights. Which one of the following is "X" ?



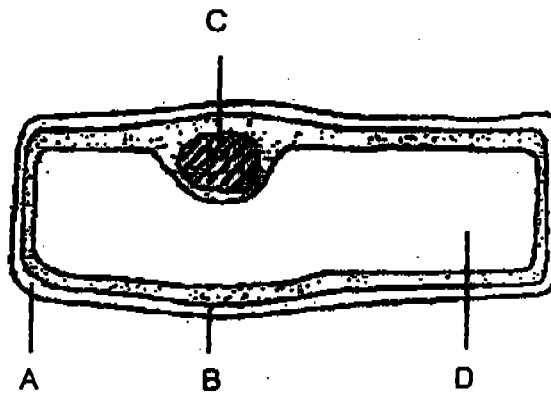
5. Which one of the statements is true?

- (1) The Moon revolves round the Earth.
- (2) The Earth revolves round the Moon.
- (3) The shape of the Moon changes once a year.
- (4) Every part of the Earth gets an equal amount of sunlight at any one time.

6. The table below shows the parts of cells. Which one shows an animal cell?

	cell membrane	cell wall	chloroplasts	cytoplasm
(1)	X	√	√	√
(2)	√	X	X	√
(3)	√	X	√	X
(4)	√	√	X	√

7. The diagram shows a cell from the outer covering of an onion. Which part, A, B, C or D, allows some but not all substances to pass in and out of the cell?



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

8. Which one of the following statements about cells is **not** true?

- (1) All living things are made of cells.
- (2) The size of an animal cell depends on the size of the animal.
- (3) The nucleus of a parent cell divides into two during cell division.
- (4) Cells are produced from existing cells.

9. Study the classification table below.

A	B
Fern	Amoeba
Balsam	Bacterium
Moss	Yeast

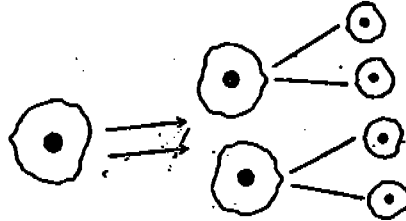
Which of the following shows the correct headings for the two groups of organisms?

A	B
(1) Living things	Non-living things
(2) Fungi	Plants
(3) Non-flowering plants	Flowering things
(4) Many cells	One cell

10. Cells in the stomata of plants _____

- (1) take in water.
- (2) take in carbon dioxide
- (3) control the sizes of the stomata
- (4) change the shapes of the stomata

11.



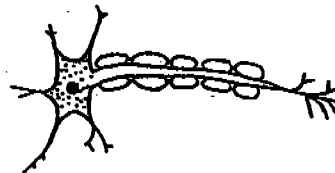
The diagram shows a cell growing through _____.

- (1) cell division
- (2) cell break-up
- (3) budding
- (4) moulting

12. In which part of the cell can genes be found?

- (1) Nucleus
- (2) Cytoplasm
- (3) Chloroplast
- (4) Cell membrane

13.



The picture shows an animal brain cell.

Its function is to _____.

- (1) control substances that enter the cell
- (2) give the cell its shape
- (3) communicate with the other cells
- (4) allow substances to move round the cell.

14. Which one of the following characteristics can be passed on from parents to their offspring?
- A Colour of skin
 - B Length of hair
 - C Detached ear lobes
 - D Thickness of eyebrows
- (1) A only
(2) B and C only
(3) A, C and D only
(4) A, B, C and D only
15. Which one of the female animals reproduce by laying eggs?
- A lizard
 - B Spiny anteater
 - C platypus
 - D guppy
- (1) A only
(2) B only
(3) A, B and C only
(4) A, B, C and D only
16. Mary observed a tomato plant and made the following statements. Which of the statements is correct?
- A The tomato flower appears before the fruit.
 - B The anther produces the seeds.
 - C The tomato plant does not have to be pollinated.
 - D The tomato plant has male and female parts
- (1) A only
(2) B only
(3) C and D only
(4) A and D only

17. Which one of the following plants have male and female flowers in separate plants?

- (1) Rambutan
- (2) Hibiscus
- (3) ~~Lily~~
- (4) Coconut

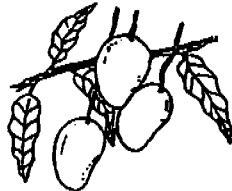
18. The fusion of the male cell and female cell is called _____.

- (1) fertilisation
- (2) budding
- (3) pollination
- (4) germination

19. Pollination is the transfer of pollen grains from the _____ to the _____ of the flower.

- (1) anther, stigma
- (2) stigma, anther
- (3) anther, ovary
- (4) stigma, style

20. These are the fruits of the mango tree. Which part of the plant do they develop from?



- (1) Leaves
- (2) Flowers
- (3) Seeds
- (4) Branches

21. Which one of the following is **not** matter?

- (1) Cotton
- (2) Gold
- (3) Light
- (4) Wind

22. Water will experience a change of state if _____.

- (1) impurities are removed
- (2) heat is gained or lost
- (3) placed in a small container
- (4) it is in a liquid state

23. Although water is continuously evaporated from the sea, it does not become more salty. Why is this so?

- (1) Salt is evaporated with water during evaporation.
- (2) Living things in the sea take in salt and maintain the balance.
- (3) Evaporation increases the amount of water in the sea.
- (4) Water lost through evaporation is returned to the sea in the form of rain.

24. Which one of the following include a solid, a liquid and a gas?

- (1) Honey, water and steam
- (2) Carbon dioxide, helium and mercury
- (3) Ice, honey and hydrogen
- (4) Steam, helium and carbon dioxide

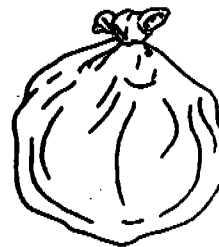
25.



A



B



C

Air was trapped inside three plastic bags, A, B and C. Which of the statements about the bags of air are true?

- A The mass of air in Bag A is more than the mass of air in Bag C.
- B The volume of air in Bag B is smaller than the volume of air in Bag C.
- C Bag C has the smallest mass and volume.
- D Bags A and B have the same mass but different volumes.

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

26.

Why is air considered as matter?

- A It has weight.
- B It occupies space.
- C It cannot be seen.
- D It is a mixture of gases

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

27. Which one of the following processes is correctly matched to the change of state that takes place in water?

Process	Change of State
(1) Freezing	Gas to liquid
(2) Condensation	Solid to liquid
(3) Evaporation	Liquid to gas
(4) Melting	Liquid to solid

28. Why does a mirror turn misty when you breathe on it?

- (1) The air that we breathe out is very hot.
- (2) Droplets of saliva fall onto the mirror.
- (3) The water vapour in our exhaled air condenses when it comes into contact with the mirror.
- (4) The water in our exhaled air evaporates and droplets of water form on the mirror.

29. Peter put a plastic bag of water into a freezer. A few hours later, he took out a plastic bag of ice. What had happened to the plastic bag of water?

- (1) It has changed its shape.
- (2) It has changed its colour.
- (3) It has changed its composition.
- (4) It has changed its state.

30. Sawdust is put over blocks of ice to prevent them from melting too quickly. The sawdust _____

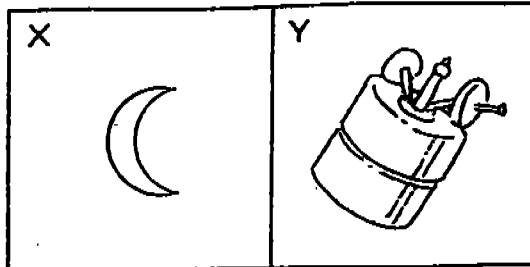
- (1) increases the melting point of ice
- (2) decreases the melting point of ice
- (3) prevents the surrounding heat from reaching the ice
- (4) traps the cold air and prevents it from escaping

Name _____ ()

Section B

Write your answer in the spaces provided

31. The following diagram shows two objects, X and Y that are found in space.



(a) State one similarity in the function between X and Y. [1]

(b) State one difference between X and Y? [1]

(c) State one function of Y.

32. The position of the Earth from the Sun enable the Earth to support life.
What would happen if the Earth is:

(a) nearer to the Sun? [1]

(b) further away from the sun? [1]

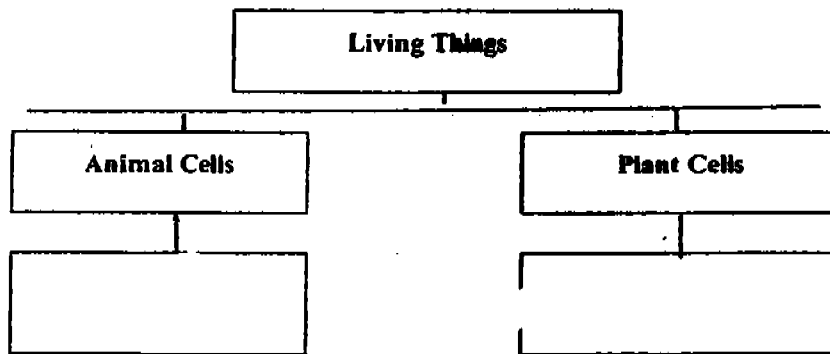
(c) Beside the Earth's distance from the Sun, state another important factor that enables the Earth to support life. [1]

33. Study the table below showing the parts present in cells

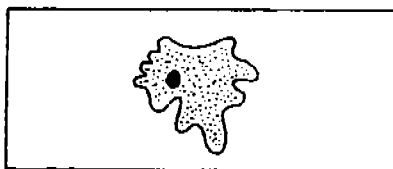
[3]

Part of a cell	Cell A	Cell B	Cell C
Nucleus	√	√	√
Cell Wall	X	√	√
Cytoplasm	√	√	√
Chloroplast	X	√	X
Cell membrane	√	√	√

Based on the table, group the cells correctly in the classification chart. by writing the letters, A, B and C in the correct boxes below.



34. The diagram shows a single-cell organism.

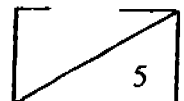


(a) Does the cell belong to an animal or plant?

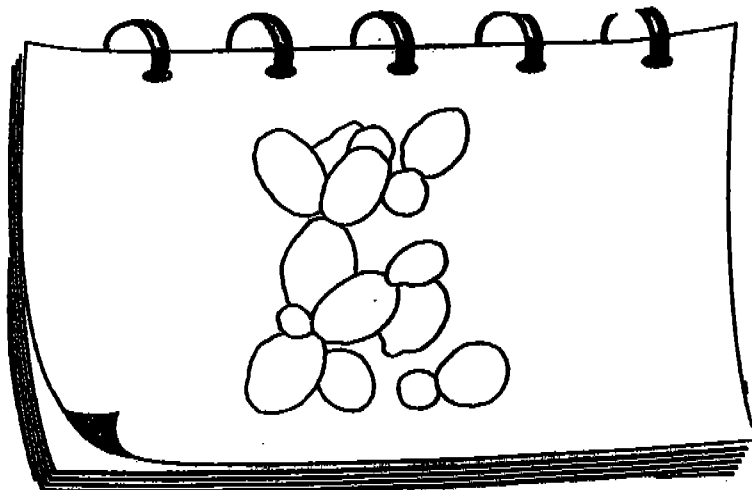
[1]

(b) Explain your answer in (a)

[1]



35. Mary observed some yeast cells under a microscope. He drew a diagram of what he saw.



(a) Which process were the yeast cells going through? [1]

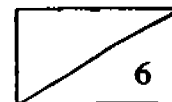
(b) What is the purpose of this life process? [2]

36. Name 3 conditions for seeds to germinate. [3]

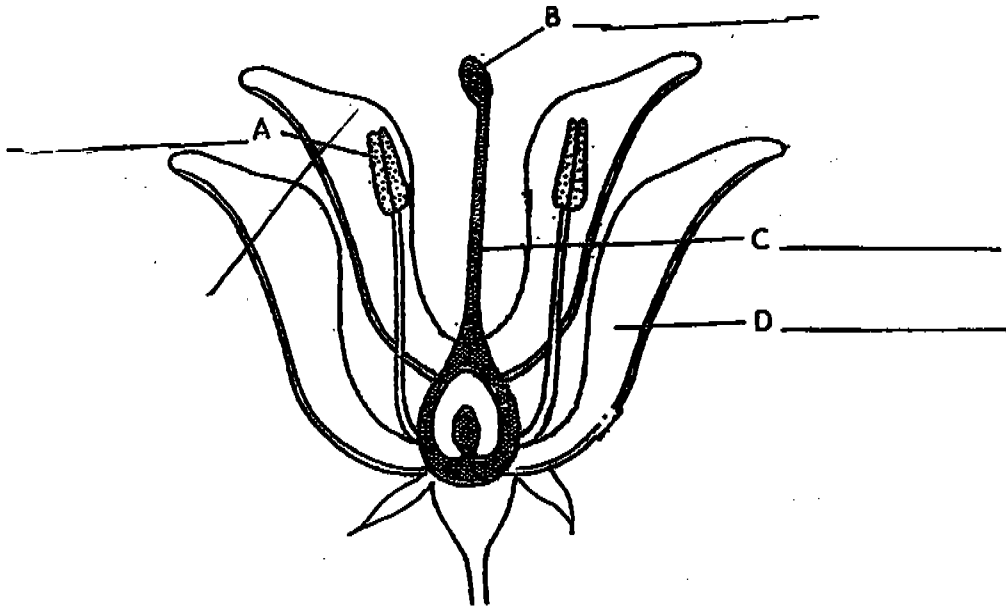
(a) _____

(b) _____

(c) _____



37.



(a) Name the parts of the flower shown above. [2]

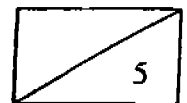
(b) What is the function of B?

_____ [1]

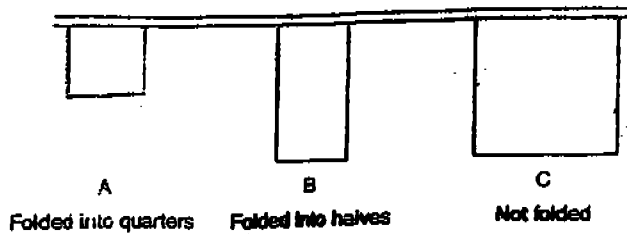
38 Write true or false in the blanks provided. [2]

(a) Both sponge and oil have a definite volume . _____

(b) Both water vapour and rubber stopper can be compressed. _____



39 After washing 3 similar handkerchief, Mrs Lim hang them on a clothes line in her garden to dry as shown below.

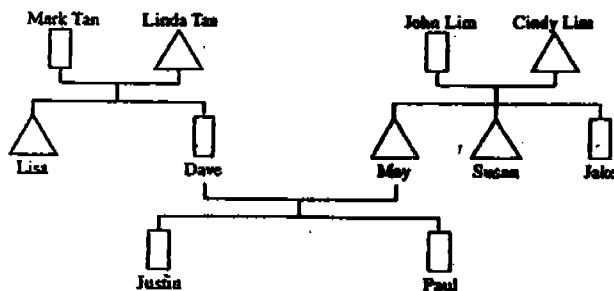


(a) Which one of the above handkerchiefs dried the slowest? [1]

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

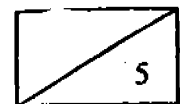
(c) Name two other factors that would speed up the rate of evaporation of the water in the handkerchief.

40. Study Paul's family tree and answer the questions below.

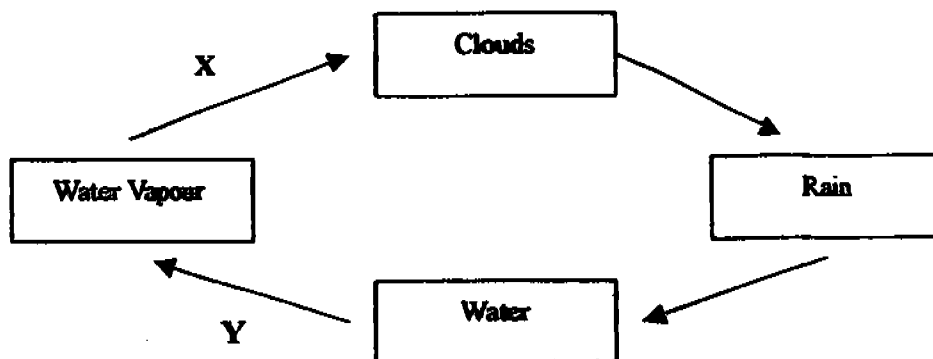


(a) Who are Paul's parents? [1]

(b) How many brothers and sisters does Paul have? [1]



41.



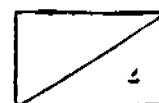
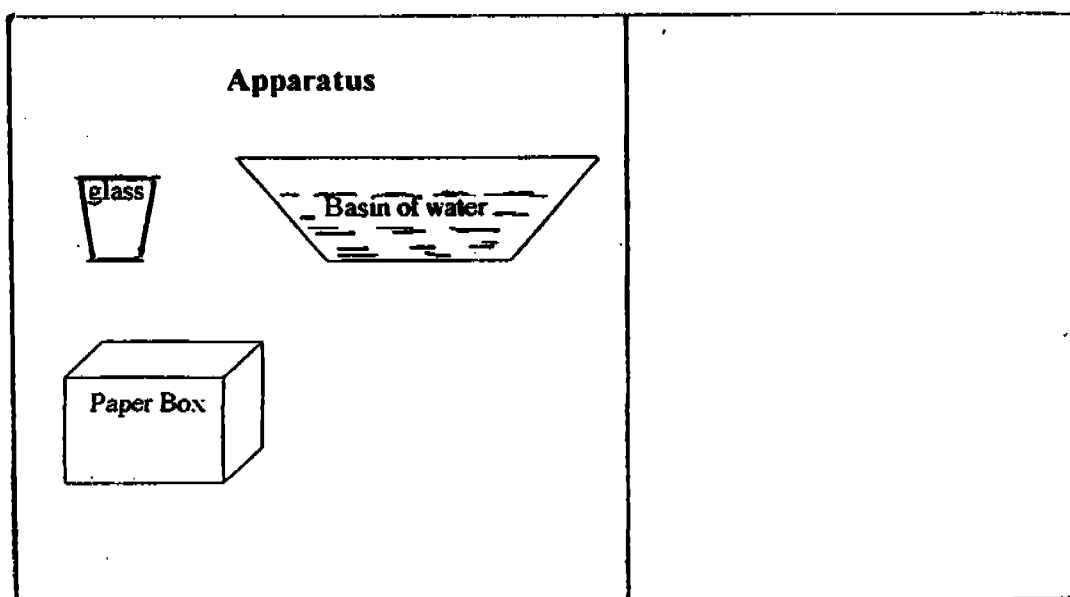
(a) The diagram above shows the _____ [1]

(b) Fill in the 2 processes that take place at X and Y.

X - _____

Y - _____ [1]

42 Explain with the help of a diagram, how you would set up an experiment to show that air occupies space. Select the necessary apparatus to carry out the experiment. [2]



43. John and his three friends observed a kettle of water boiling and each of them made an inference.

Rex: The temperature of the water is 100°C

Tom: There is more water vapour in the air now.

John

~~Mark:~~ The temperature of the boiling water is rising.

Felix: The mist coming out the sprout is a gas.

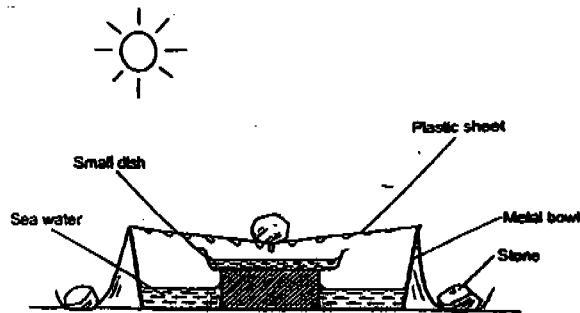
- (a) Which two boys made the correct inferences? [1]

- (b) Explain why the other two inferences were wrong. [2]

(i) _____

(ii) _____

44.



Study the above set-up of apparatus.

- (a) What happens when sea water is evaporated by the sun? [1]

- (b) What is formed on the plastic sheet? [1]

45. Each of the activities ,W, X, Y and Z below involves a change of state of water.

Activity W	Ironing a damp shirt.
Activity X	Leaving a piece of ice on a plate
Activity Y	Water being heated to 100°C in a kettle.
Activity Z	Water being solidified to 0° C in a refrigerator.







Mark the activity to the correct process given below.

[2]

(a) Boiling Activity _____

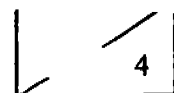
(b) Melting Activity _____

46. Roger carried out an experiment where he put some ice in a glass and measured the temperature every five minutes. His results are shown below.

Time (min)	Observation	Temperature (°C)
0		0
5		0
10		0
15		1
20		4
25		8

Explain briefly what Roger's results tells you.

[2]



-----End of paper-----

Ai Tong Primary School
Primary 5 Science CA1 (2005)

Exam Series

Answer Sheets

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

- 31a. They both move round the Earth.
 31b. X is a natural satellite but Y is a man-made satellite.
 31c. It transmits messages around the world.
- 32a. It would be hotter and living things may not survive.
 32b. It would be colder and living things may not be able to get enough heat from the sun and may die.
 32c. It has water.
33. A, B C
- 34a. Animal
 34b. It does not have chloroplasts and cell wall.
- 35a. Reproduction
 35b. To ensure the continuity of their own kind.
- 36a. It must have air
 36b. It must have water
 36c. It must have warmth/sunlight.

- 37a. A : Anther
B ; Stigma
C : Style
D : Petal
- 37b. To trap pollen grains.
- 38a. True
38b. False
- 39a. Handkerchief A
39b. It has the smallest area of exposed surface therefore the rate of evaporation is slowest.
- 39c. Temperature and wind.
- 40a. Dave and May.
40b. Paul has one brother.
- 41a. Water cycle
41b. X : condensation
Y : evaporation
42. Glass / Basin of water
I would need the help of a glass and a basin of water.

I would place the glass upside down into the basin of water. The water would not fill up the whole glass as air is present in the glass and occupied some space.
- 43a. Rex and Tom
- 43b. (i) Once the water is boiled, the temperature will always remain at 100°C and will not rise unless salt is added to it.
(ii) It is not the mist that comes out of the sprout but the steam.
- 44a. The salt is left behind in the metal bowl.
44b. Water droplets.
- 45a. Y
45b. X
46. When ice melts, its temperature will still remain at 0°C until it fully changes to liquid state.