

**Primary Five
Science
Semester I Assessment Two**

Questions 1 to 30 carry 2 marks each.

For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write it in the space provided.

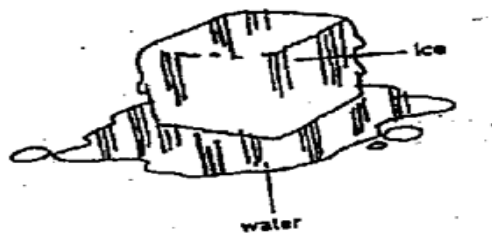
1.

A	B
moulding some plasticine	sharpening a pencil
pressing a lump of dough	cooking a pot of rice
dissolving salt in water	cutting down a tree
inflating a balloon	frying an egg

Sue has classified the above changes into two groups A and B. How has she classified them?

	A	B
(1)	Slow changes	Fast changes
(2)	Visible changes	Invisible changes
(3)	Reversible changes	Irreversible changes
(4)	Changes that follow a pattern	Changes that do not follow a pattern

2. Jack left an ice cube on a table. He soon observed a change in the _____.



- A. State
- B. shape
- C. weight

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

3. Which of the following does **not** follow a pattern?

- (1) the shape of the moon over a period of time
- (2) the movement of clouds in the sky
- (3) a mango tree producing fruits
- (4) the nymph of a grasshopper growing into an adult

4. Which of the following describe the ways the Earth moves?

- A. The Earth rotates on its own axis.
- B. The Earth revolves round the Sun.
- C. The Moon revolves round the Earth.
- D. The Moon takes 28 days to revolve round the Earth.

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

5. Which of the following processes does **not** occur at 0°C?

- (1) boiling of water
- (2) melting of ice
- (3) evaporating of water
- (4) freezing of water

6. Which of the following statement is **not** true?

- (1) Clouds are made up of tiny water droplets.
- (2) Salt helps to increase the melting point of ice.
- (3) Clothes hanging on a line take a longer time to dry on a humid day.
- (4) Water in a big dish evaporates faster than the same amount of water in a small dish.

7. Which of the following statements about forces are true?

- A. A force is a push or pull.
- B. A force can be seen and felt.
- C. A force can be used to do work.
- D. A force can change the direction or speed of a moving object.

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

8. The caterpillar feeds voraciously on leaves and _____ as it increases in size.

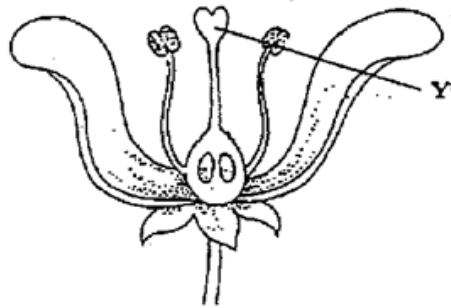
- (1) sucks a lot of nectar
- (2) becomes a butterfly
- (3) moults a several times
- (4) spins a cocoon

9. Which of the following statements about frogs are true?

- (A) Their eggs are laid in strings.
- (B) A few hundreds eggs are laid in water each time.
- (C) Each egg is protected by a jelly-like substance.
- (D) It takes about a month for an egg to develop into a tadpole.

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

10. The picture below shows the cross-section of a flower. What is the function of the part marked 'Y'?



A Flower

- (1) It produces pollen grains.
- (2) It receives pollen grains.
- (3) It attracts insects.
- (4) It produces seeds.

11. A group of pupils carried out four sets of experiments to find if the temperature of water affects the rate at which sugar dissolves in it. All the pupils were told to use sugar grains of the same size for the experiment. No stirring was allowed during the experiment.

The table below shows the result of their experiments?

Set	Amount of water used	Temperature of water	Amount of sugar	Time taken for sugar to dissolve
A	60ml	60°C	3g	130s
B	90ml	50°C	3g	110s
C	90ml	60°C	5g	130s
D	60ml	40°C	3g	160s

Which two sets of experiments can be fairly compared?

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

12. Which of the following liquids can evaporate easily?

- (A) alcohol
- (B) petrol
- (C) perfume
- (D) thinner

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

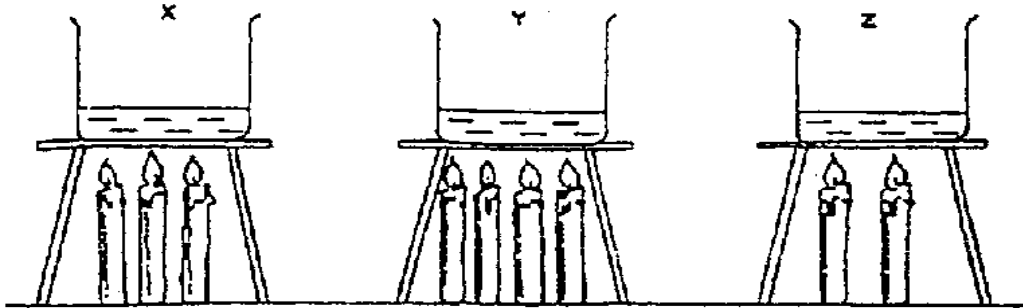
13. Which of the following statements are true of man clearing a large area of forest to build a house?

- (A) The land area becomes smaller.
- (B) The habitats of plants and animals in the forest will be affected.
- (C) The animals living in the forest will not be affected as only the plants are cleared.
- (D) The average temperature in the area will be higher than before the forest was cleared.

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

14. The water in beakers X, Y and Z is heated until it boils. Which of the following statements is correct about the experiment below?

- (1) The water in each of the three beakers boils at the same temperature.
- (2) The water in X boils at a higher temperature than the water in Z.
- (3) The water in Z has the lowest temperature.
- (4) The water in Y has the highest temperature.



15. Which one of the following children did the most work?

- (1) Muthu tried to push a bus but it would not move.
- (2) Ali dreamt that he was lifting an aeroplane.
- (3) Sam raised the school flag.
- (4) Meili read a book in bed.

16.



A and B are two ball bearings. They move equally fast but in opposite directions. Which of the following changes are likely to occur if the two ball bearings collide with each other?

- (A) change in shape
- (B) change in speed
- (C) change in size
- (D) change in direction

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

17. Which of the following is caused by a decrease in friction?

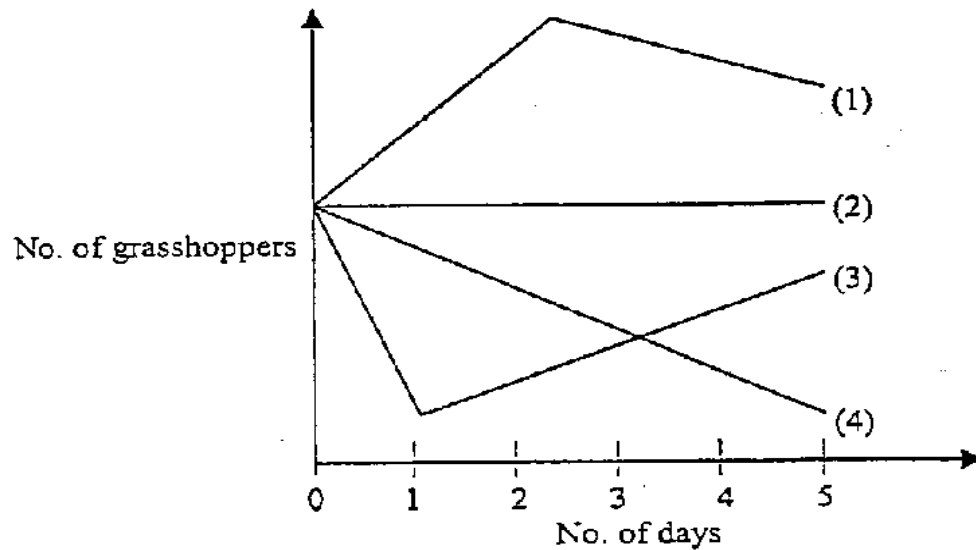
- (1) a lorry skidding on a wet floor
- (2) a leaf falling from a tree
- (3) a paper clip is being attracted by a magnet
- (4) a cyclist going uphill

18. Which of the following are required for a seed to germinate?

- A. water
- B. nutrients
- C. sunlight
- D. warmth

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

19. A boy put a plate of water, some maize plants, some grasshopper and a frog in a tank and then covered the tank with a wire mesh. Which line in the graph below shows the change in the grasshopper population over the next five days?



20. The fruits below are classified into 3 groups.

A	B	C
shorea	coconut	love grass
vernonia	mangrove	buah ceri
angsana	nipah	guava

Which of the following is classified according to the above?

	A	B	C
(1)	lalang	sea almond	mango
(2)	attap	lalang	papaya

(3)	papaya	attap	cupid's brush	shaving
(4)	cupid's brush	shaving	mango	sea almond

21. Clara was given 4 cards: A, B, C and D. The names of animals were written on each card. Which of the cards consists of animals that lay eggs?

(1)

**housefly
guppy
snake**

(2)

**hamster
cockroach
beetle**

(3)

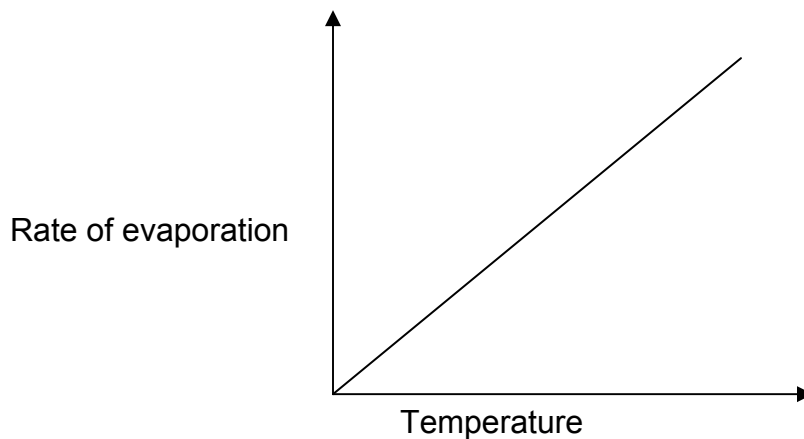
**turtle
platypus
crocodile**

(4)

**sparrow
eagle
cat**

22. The graph below shows that _____.

- (1) temperature does not affect the rate of evaporation
- (2) temperature remains the same as the rate of evaporation increases
- (3) the rate of evaporation increases as the temperature increases
- (4) the rate of evaporation decreases as the temperature increases



23.



Naomi wants to find out whether the fruit above is scattered in the same way as the pong pong. She plans to do the following.

- (A) place it in water
- (B) weigh it
- (C) open it to see if it contains water
- (D) examine it to see if it has a fibrous husk

Which of the above actions are useful for her purpose?

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

24. In which of the following does condensation of water vapour take place?

- A. heating a beaker of water
- B. leaving a glass of ice on the table
- C. leaving a cup of water by the window
- D. breathing out onto a mirror

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

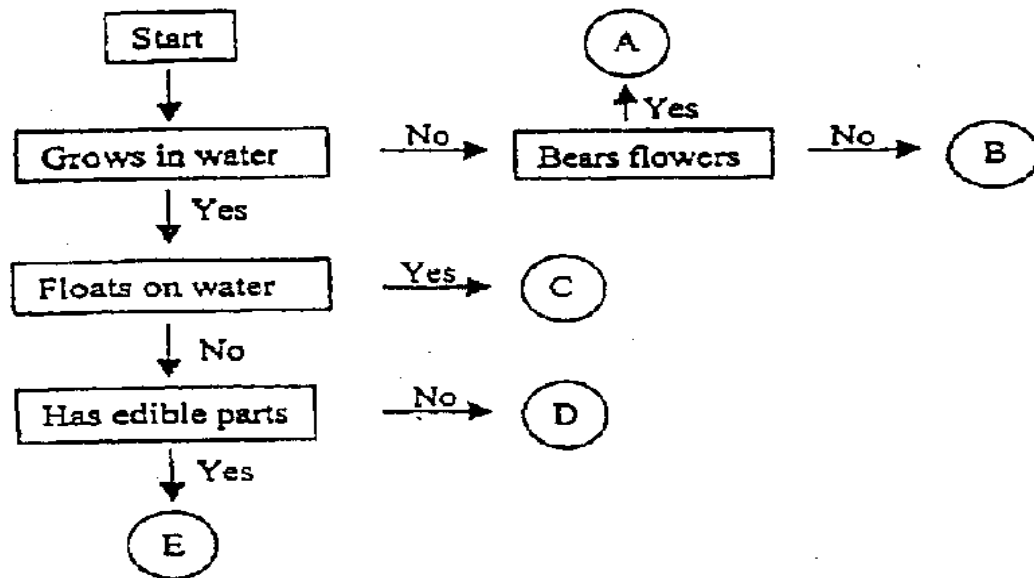
25. What observation(s) is/are true when wax is heated?

- (A) Wax melts at 100°C.
- (B) There is a change in substance.
- (C) There is a change in the state of the wax.
- (D) The wax remains a solid.

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

26. Study the flow chart carefully.

A, B, C, D and E represents 5 different plants.



Which of the following matches the letters to the correct plants?

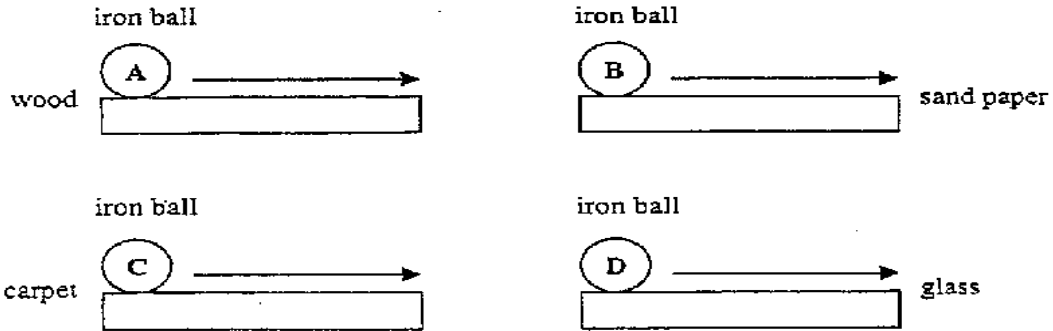
	Lotus	Hydrilla	Ixora	Water lettuce	Bird's Nest Fern
(1)	D	E	A	C	B
(2)	C	B	D	A	E
(3)	A	C	D	E	B
(4)	E	D	A	C	B

27. _____ can be use to reduce friction.

- (A) Wheels
- (B) Rollers
- (C) Oil
- (D) Ball bearings

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

28. The iron balls shown in the diagrams below are of the same size. They are moved through the same distance, along different surfaces. Which one requires the least effort to move?

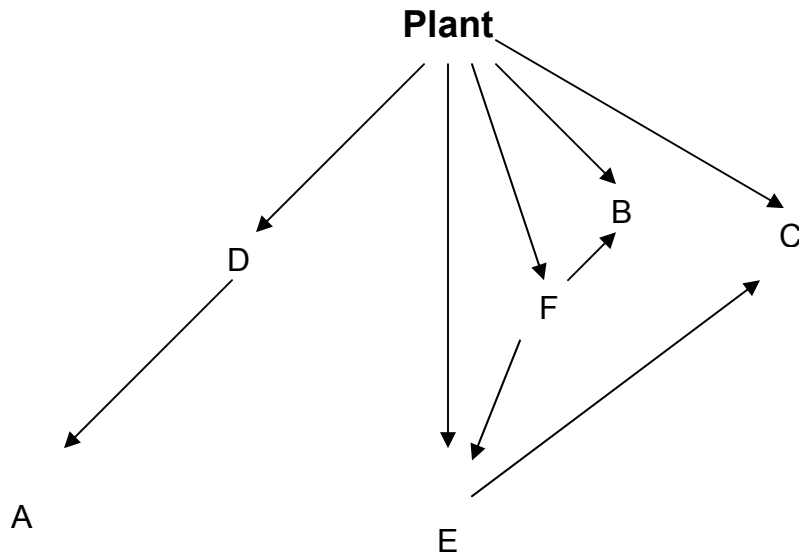


- (1) A
 (2) B
 (3) C
 (4) D

29. Four boys Alex, Bob, Chris and Dick wanted to find out whether overcrowding can affect the plants grow. Each of them prepared two similar pots and planted some seeds in each pot. They placed the two pots side by side in the open and watered each pot with the same amount of water daily. The table below shows how they controlled the other variables. Which of the boys conducted a fair test?

	Number of seeds	Kind of seeds	Amount of soil
(1) Alex	different	different	Same
(2) Bob	different	same	Same
(3) Chris	same	different	Same
(4) Dick	same	same	Different

30. In the food web below, A, B, C, D, E and F are animals.



Which is true of the animals in the food web above?

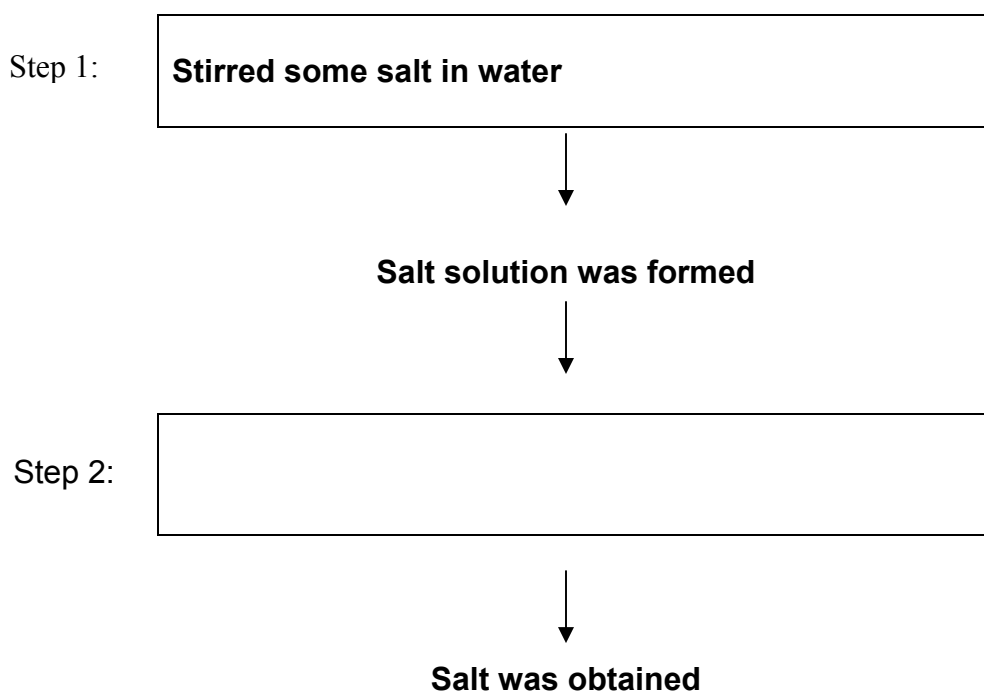
	Plant eater	Animal eater	Plant and animal eater
(1)	F	A	B
(2)	C	A	E
(3)	D	F	C
(4)	d	B	E

For question 31 to 46, write your answers in the space provided

31. Tick in the boxes the correct change(s) that take(s) place during the activities listed below. (3m)

	Activity	Change in		
		state	colour	Substance
1.	Heating a spoonful of sugar till it burns			
2.	Burning a piece of paper			
3.	Melting a block of butter			

32. Henry carried out Steps 1 and 2 as shown in the following experiment. (2m)



Describe the process that was carried out in Step 2.

33. Plants respond to the change from day to night in different ways. Describe how the following plants respond to this change. (2m)

(a) The rain tree:

(b) The passion flower:

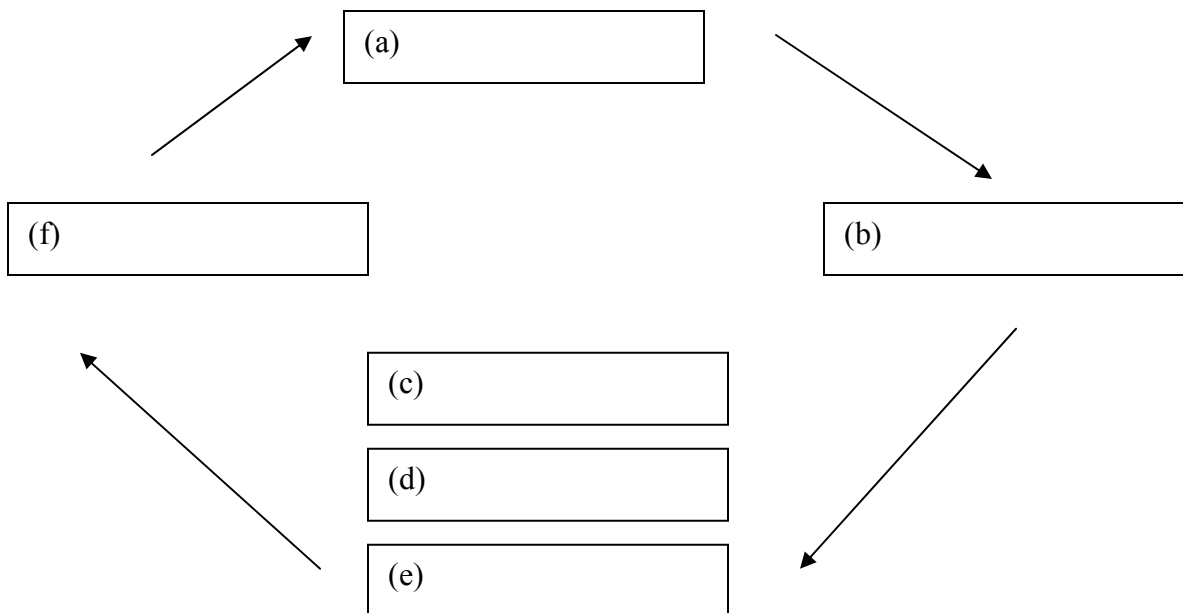
34. What happens when some ice cubes are dropped into a beaker of hot water. Put a tick (✓) against the correct statement. (2m)

The water gains heat	
The temperature of the water falls	
The temperature of the water rises	
There will be an increase in the volume of water	

35. Complete the diagram below using the words given in the box.

rain	Cloud	plant
water vapour	Animal	sea

The water cycle

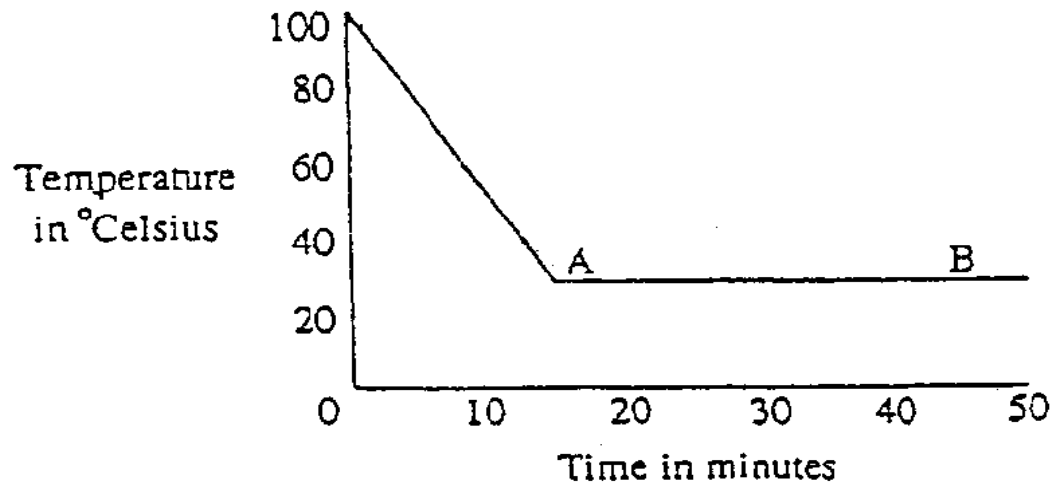


36. Mary set up a test to find out if wind affects the rate of evaporation. She hung out two wet towels in her garden at 10am. What else must she do to ensure a fair test? (2m)

(a)

(b)

37. The graph below shows the changes in temperature of a beaker boiling water that was left in the classroom.



The part AB tells us that

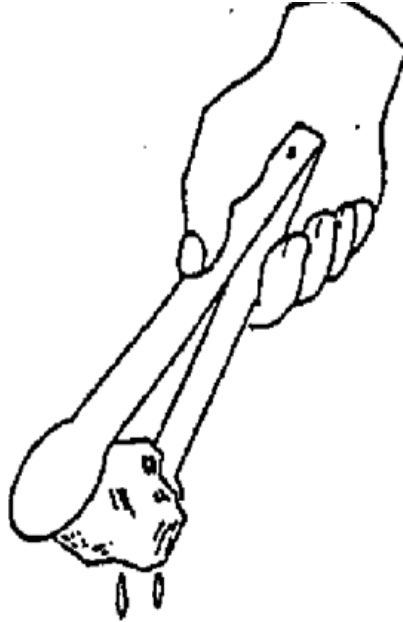
(2m)

38. Name two forces which can act as a distance.

(a)magnesium

(b)gravity

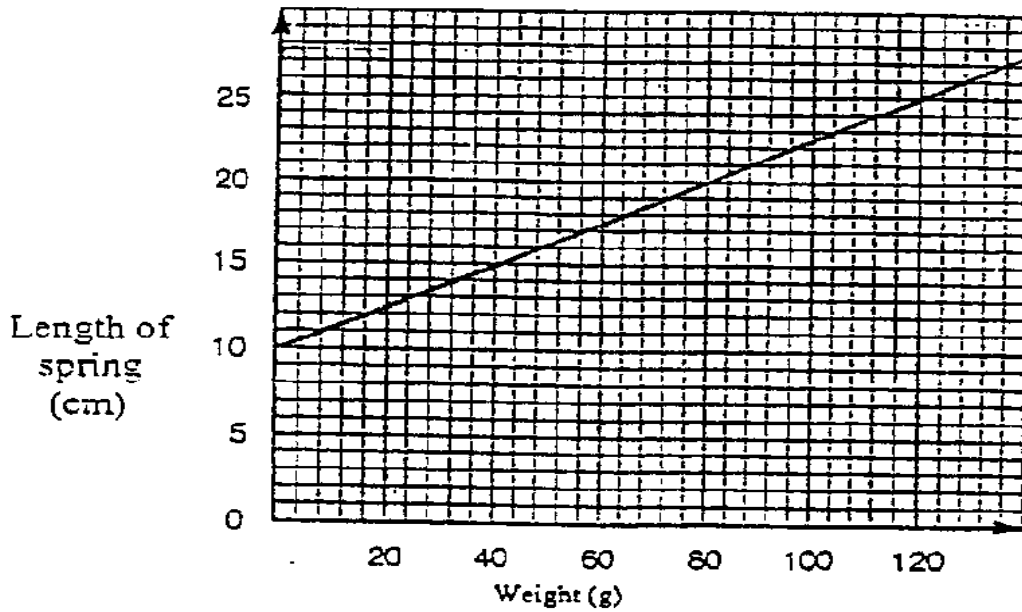
39. The diagram below shows a person holding an ice cube using a pair of steel tongs.



Which force/s is/are present in this activity? Put a tick (✓) in the correct box. (2m)

Force of friction	
Force of gravity	
Magnetic force	
Pushing force	

40. The following graph shows the length of a spring when different weights are attached to it. Study the graph and answer the questions that follow.

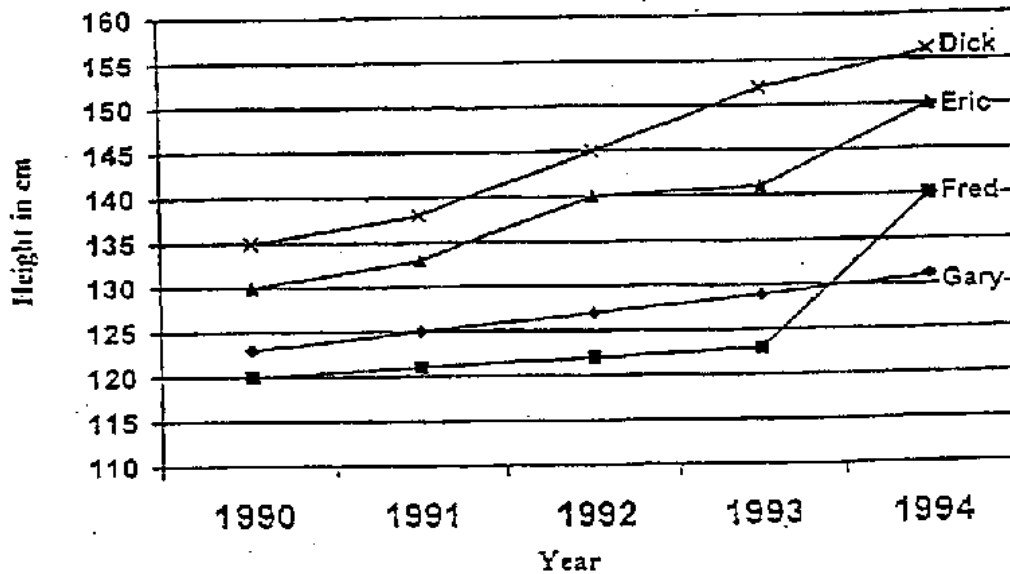


(a) When the spring was 17.5cm, its weight was _____ (1m)

(b) The extension of spring was _____ when a weight of 120g was attached to it. (1m)

41. To describe the weather, we need to know about sunshine, clouds, rain,
and _____ (2m)

42. The following graph shows the change in height of 4 boys in a P5 class. Study the graph and answer the questions that follow.



- (a) Which one of the boys grew the most between 1993 and 1994? (1m)

- (b) Which two boys grew 10cm between 1990 and 1992? (1m)

43. Study the classification table below. The plants are classified according to their method of propagation. Two plants are wrongly classified. Identify them place them in their correct groups in the table below. (4m)

Group A	Group B	Group C
sansevieria	money plant	mushroom
begonia	African violet	bread mould
rose	tapioca	bracket fungus
bryophyllum	bougainvillea	bird's nest fern

	Plants that are wrongly classified	Correct classification
(1)		Group _____
(2)		Group _____

44. Peter and Jane made a count of the number of trees in their school compound. Their observations are recorded in the table below.

Types of trees	Yellow Flame	Papaya	Mango	Angsana	Others
Number of trees	7	5	4	2	4

Which of the following statements about the trees in the school compound are correct? Put a tick (✓) in the correct box. (4m)

		True	False	Not possible to tell
1.	There is a total of 22 trees with edible fruit			
2.	There are at least 2 types of trees with inedible fruit			
3.	The population of angsana trees is the smallest			
4.	There are altogether 8 types of trees.			

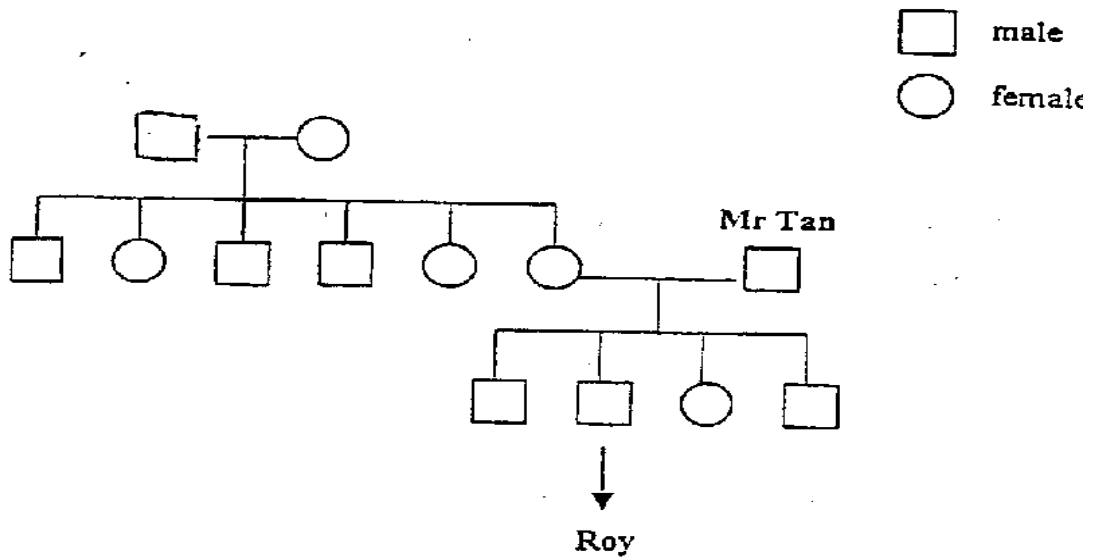
45. The amount of food, air and water affect the living condition in a habitat. Three other factors that also affect the living conditions are: (3m)

(a)

(b)

(c)

46. Study the following family tree of Roy Tan's carefully.



(a) How many children do Roy's parents have? (1m)

(b) How many brothers has Roy's mother? (1m)

(c) On the diagram, shade the circle or box that stands for Roy's grandfather. (1m)