Pei Chun Public School
Continual Assessment – 2013
Science
Primary 3

Name : _____ (   ) Date : 30 August 2013

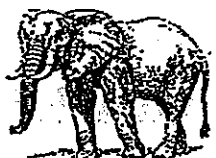Class : Pr. 3

Science Teacher _____ Time : 1h 30 min

Section A (25 × 2 marks)

For questions 1 to 25, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. Study the classification table below.

Animals	
Group A	**Group B**

Which of the following correctly shows how the above animals are classified?

	Group A	Group B
(1)	have no legs	have legs
(2)	animal-eaters	plant-eaters
(3)	move by crawling	move by flying
(4)	have an outer covering of scales	have an outer covering of hair

(   )

2. The table below shows the characteristics of A, B, C and D.

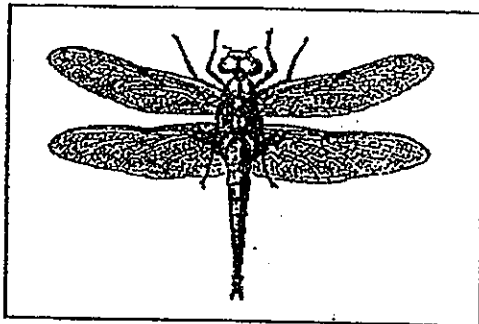| Characteristics	A	B	C	D
Has four legs	✓			
Can make its own food		✓		
Needs air, food and water		✓	✓	
Can move from place to place on its own	✓		✓	✓

Which of the following, A, B, C or D, is a living thing?

(1) A and D only
(2) B and C only
(3) A, C and D only
(4) All of the above   (   )

3. The diagrams below show Organisms X and Y.
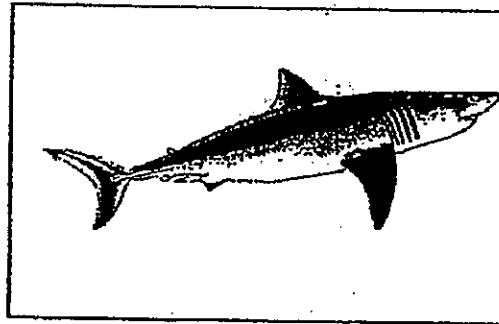
Organism X   Organism Y

In what ways are Organisms X and Y similar?

A   Both live in water.
B   Both reproduce by laying eggs.
C   Both move around to look for food.
D   Both have the same outer covering.

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

4. Elise conducted several tests on three materials, S, T and U. She recorded her observations in the table below.

	S	T	U
bends easily	yes	no	yes
absorbs water	yes	no	no
breaks when dropped	no	yes	no

Which of the following shows what materials S, T and U are likely to be?

	S	T	U
(1)	rubber	glass	metal
(2)	metal	rubber	ceramic
(3)	ceramic	metal	fabric
(4)	fabric	ceramic	rubber

(   )

5. Study the classification diagram.
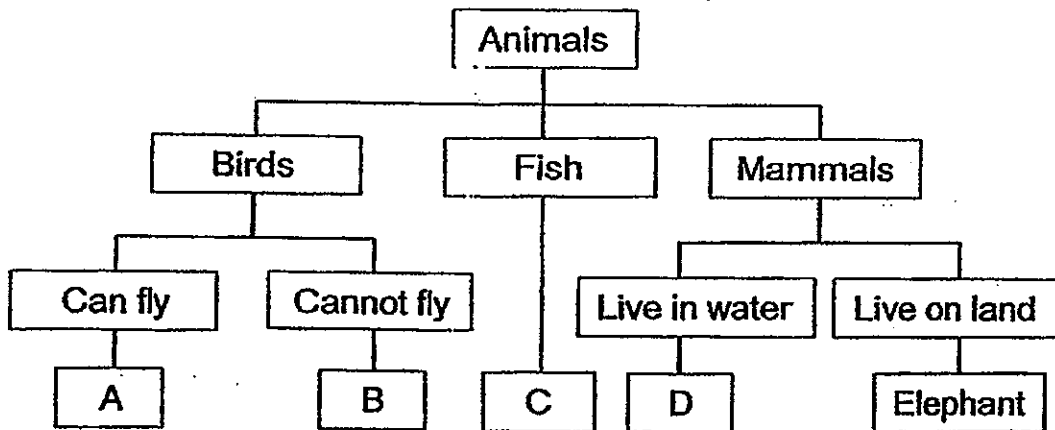
Which of the following letters, A, B, C or D, represents a whale in the classification diagram?

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

(   )

6. Ali grouped the following animals together according to how they reproduce. Based on the grouping, which one of the animals does **not** fit into the group?

(1) Platypus

(2) Ostrich

(3) Porcupine

(4) Butterfly

(   )

7. Hashim is learning about living things. He makes the following observations.

- A boy shivers when he feels cold.
- A mouse runs away when chased by a cat.
- A dog pants and hangs its tongue out after running in the sun.

His observations show that living things _____.

(1) need warmth to survive
(2) respond to changes around them
(3) change in their behaviour as they grow
(4) can move from place to place on their own

(   )

8. Linda saw a strange creature with its young clinging to it in the jungle. Both their bodies were covered with soft brown hair. The young was feeding on its mother's milk.

Which group of animals does the creature belong to?

(1) fish
(2) birds
(3) insects
(4) mammals ( )

9. Ann, Belle, Carl and Dan compared the characteristics of bread mould and bird's nest fern as shown below.

bread mould
seen under a microscope

bird's nest fern
seen with the naked eye

They made the following statements.

Ann : Both are plants.
Belle : Both reproduce from spores.
Carl : Bread mould cannot make its own food but bird's nest fern can.
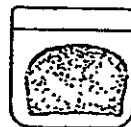Dan : Both need air, food and water to survive.

Whose statements are correct?

(1) Ann and Belle only
(2) Belle and Carl only
(3) Ann, Belle and Carl only
(4) Belle, Carl and Dan only ( )

10. Dinesh set up an experiment to find out the best conditions to grow bread mould as shown below. The slices of bread were placed in sealed bags in all four set ups.

Set-up A
toasted bread
kept in a warm place

Set-up B
toasted bread
kept in a refrigerator

Set-up C
bread not toasted
kept in a warm place

Set-up D
bread not toasted
kept in a refrigerator

He observed that bread mould started appearing on the bread at different times. In which of the above set-ups, A, B, C or D, will bread mould most likely appear first?

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

( )

11. Study the classification table below.

Fruits			
Smooth skin		Rough skin	
One seed	Many seeds	One seed	Many seeds
mango cherry P	apple watermelon Q	lychee rambutan R	durian rock melon S
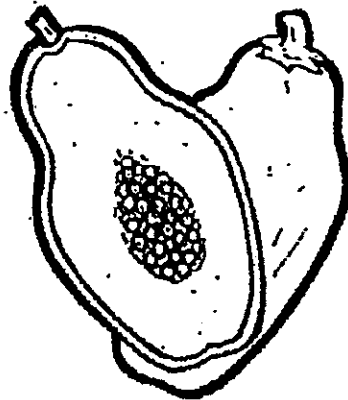
Papaya

Which fruit, P, Q, R or S, can be represented by the above fruit, Papaya?

(1) P
(2) Q
(3) R
(4) S   (   )

12. Study the flow chart and diagrams of the plants below.

stick
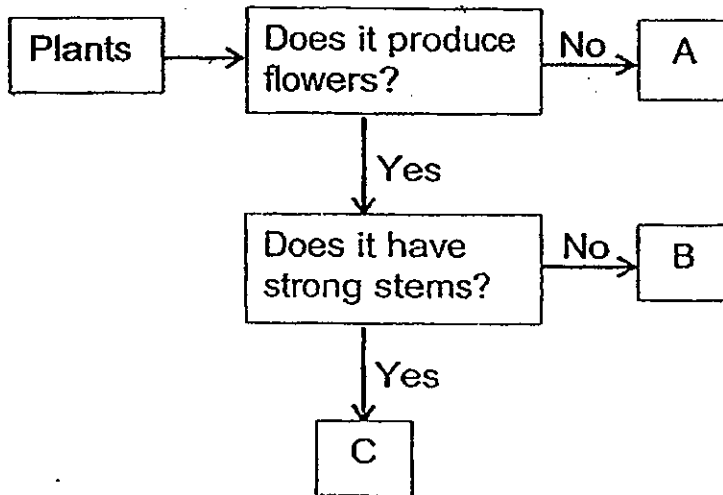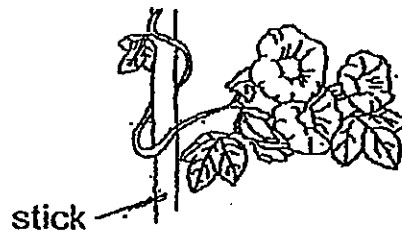
Balsam   Morning glory   Bird's nest fern

Which of the following matches the above plants to the letters A, B and C?

	A	B	C
(1)	Balsam	Morning glory	Bird's Nest Fern
(2)	Bird's Nest Fern	Balsam	Morning glory
(3)	Morning glory	Bird's Nest Fern	Balsam
(4)	Bird's Nest Fern	Morning glory	Balsam

(   )

13. Which of the following statements is true about bacteria?

(1) All bacteria are harmful.
(2) Bacteria are not living things.
(3) Bacteria reproduce by spores.
(4) Bacteria can respond to changes. ( )

14. Li Ming used an iron nail to make scratches on Material A and Material B as shown below.
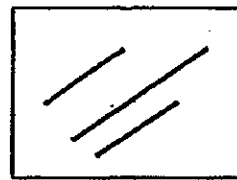
Material A   Material B

Based on the information provided, which of the following is true about materials A and B?

(1) Material A is harder than Material B.
(2) Material A is stronger than Material B.
(3) Material B is stronger than Material A.
(4) Material B is more flexible than Material A. ( )

15. The diagram below shows an iron.
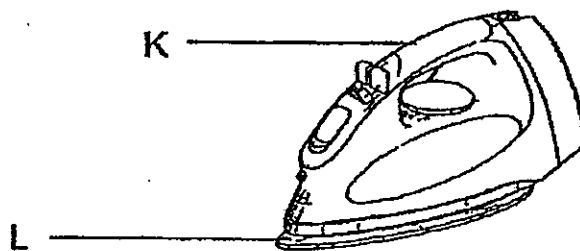
Which materials are used to make parts K and L?

	K	L
(1)	plastic	metal
(2)	glass	plastic
(3)	plastic	glass
(4)	metal	glass

( )

16. Jenny placed a bar magnet on a piece of styrofoam. The magnet was left to turn freely in a basin of water while floating on the styrofoam as shown below.

styrofoam

water

N

basin
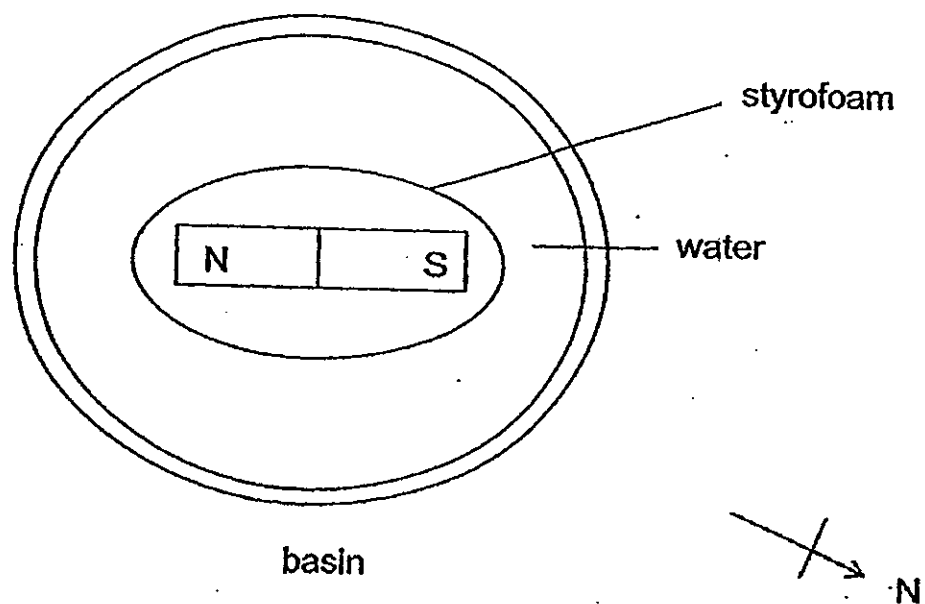
Which of the following shows the correct position of the magnet after some time?

(1)

(2)

(3)

(4)

(   )

17. Study the classification table below.

```
                    +-----------+
                    | Materials |
                    +-----------+
                          |
        +-----------------+-----------------+
        |                 |                 |
+---------------+ +---------------+ +-----------------+
| From plants   | | From animals  | | From the ground |
|               | |               | |                 |
|      X        | |      Y        | |       Z         |
+---------------+ +---------------+ +-----------------+
```

Which of the following represents X, Y and Z?

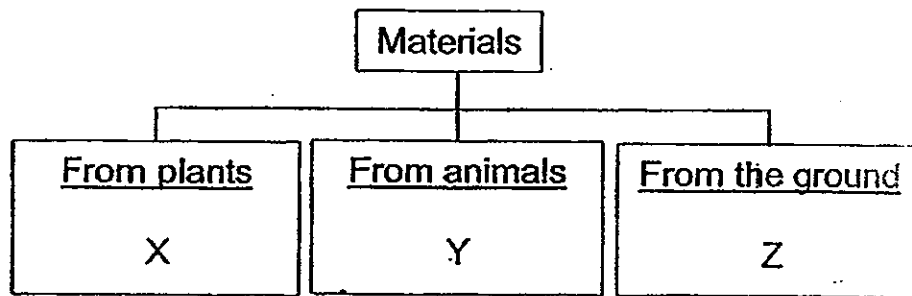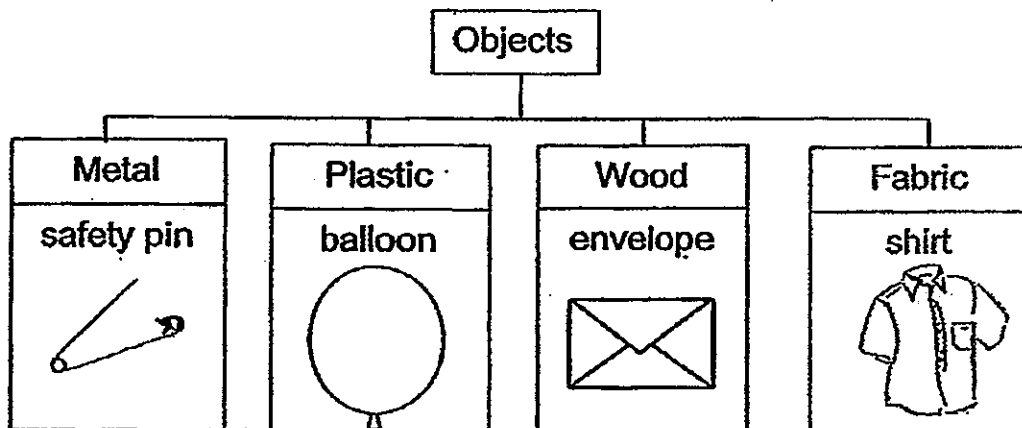|	X	Y	Z
(1)	rubber	silk	iron
(2)	plastic	rubber	silver
(3)	silk	wood	rubber
(4)	wood	plastic	silk

(   )

18. Which one of the objects is wrongly classified?

```
                    +---------+
                    | Objects |
                    +---------+
                         |
    +----------------+---------+-----------------+
    |                |         |                 |
+-----------+ +-----------+ +-----------+ +-----------+
| Metal     | | Plastic   | | Wood      | | Fabric    |
|           | |           | |           | |           |
| safety pin| | balloon   | | envelope  | | shirt     |
+-----------+ +-----------+ +-----------+ +-----------+
```

(1) shirt
(2) balloon
(3) envelope
(4) safety pin

(   )

19. The diagram below shows a pair of swimming goggles. Parts X and Y are made of different materials.
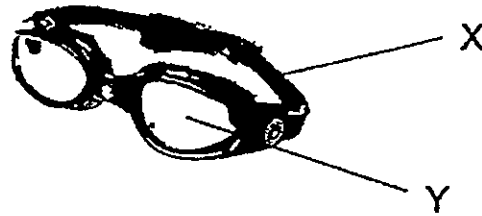
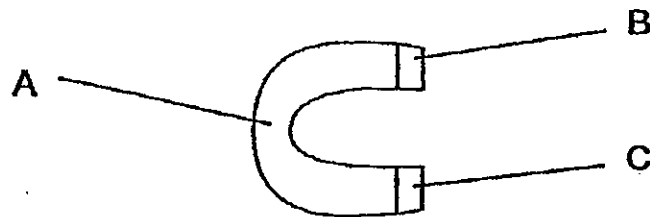The materials used to make parts X and Y are both waterproof. Which of the following shows another property that X and Y each must have?

	X	Y
(1)	allows light to pass through	hard
(2)	be able to float	be able to float
(3)	flexible	allows light to pass through
(4)	hard	flexible

(   )

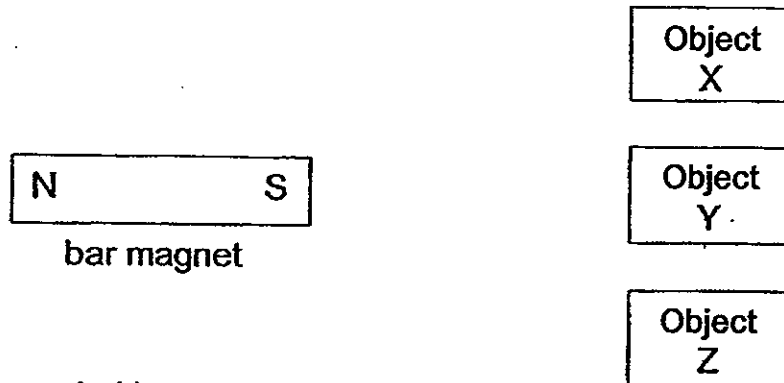20. Miki wanted to find out which parts of the U-shape magnet attracted the most paper clips.

Which of the following shows the most likely number of paper clips attracted to Parts A, B and C?

	Number of paper clips attracted		
	A	B	C
(1)	0	5	5
(2)	5	0	0
(3)	5	5	5
(4)	10	5	5

(   )

21. Mei Mei brought one end of a bar magnet near objects X, Y and Z one at a time.

Object
X

Object
Y

Object
Z

N   S

bar magnet

She recorded her observations below.
- Object X is repelled.
- Object Y is attracted.
- Object Z does not move.

Based on her observations, which of the following is/are definitely a magnet/ magnets?

(1) Object X only
(2) Object Z only
(3) Object X and Y only
(4) Object Y and Z only   (   )

22. Study the table of things below.

Group R	Group S
bacteria	water
seed	kite

Which of the following can be added to Group R and Group S?

	Group R	Group S
(1)	table	snake
(2)	ant	wind
(3)	fan	algae
(4)	fire	candle

(   )

23. Aisha made electromagnets using Set-ups A, B and C. The batteries, iron rods and wires used were identical.
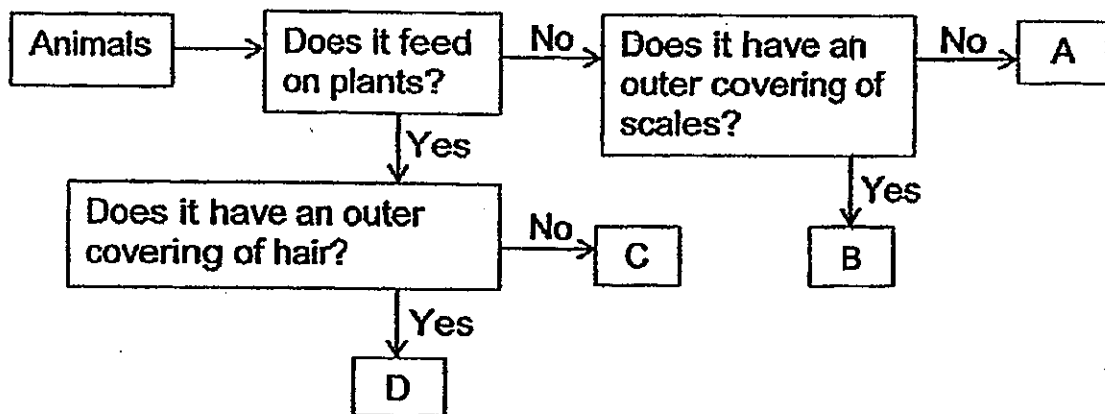

Set-up A　　　　　Set-up B　　　　　Set-up C
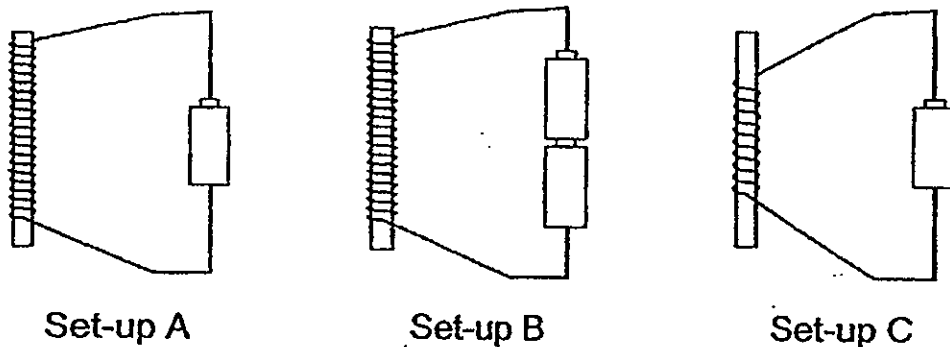
She then arranged the Set-ups A, B and C from the one that attracts the **least** number of paper clips to the one that attracts the **most**. Which of the following shows the correct order?

least ⟶ most

| (1) | A, | B, | C |
(2)	B,	A,	C
(3)	C,	A,	B
(4)	C,	B,	A

( )

24. Study the classification diagram below.

Lucy was given a pet animal with hair on its body. It feeds on plants. Based on the classification diagram, which of the following, A, B, C or D, represents Lucy's pet animal?

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

( )

25. Raja has four magnets, A, B, C and D. He carried out an experiment to find out which magnet was the strongest. The diagram below shows the number of paper clips attracted by each magnet.
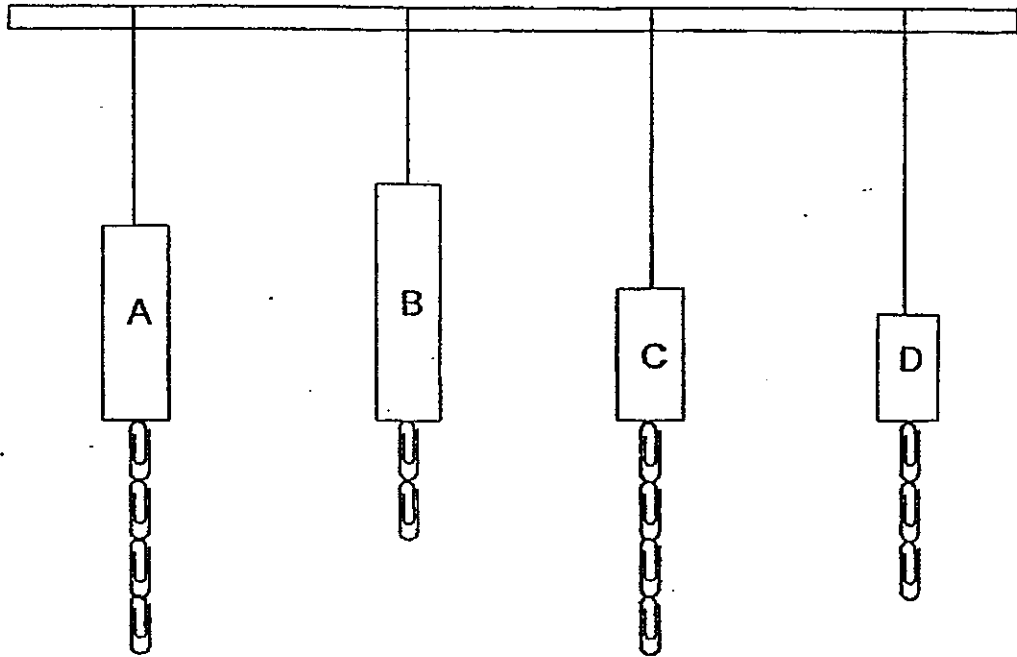
Based on the diagram, which of the following statements is true?

(1) Magnet A is stronger than Magnet C.
(2) Magnet B is weaker than Magnet D.
(3) Magnet B is the strongest.
(4) Magnet D is the weakest.   (   )

For Questions 26 to 30, please refer to Booklet K.

End of Section A

Pei Chun Public School
Continual Assessment – 2013
Science
Primary 3

Name: _____ ( )

Class: Pr. 3 _____

Date: 30 August 2013

Time: 1 h 30 min

Science Teacher: _____

Parent's signature

Section A (includes Booklet K MCQs)		60
Section B		30
Booklet K (excludes MCQs)		10
Total		100

Section B (30 marks)

For questions 31 to 40, write your answers in the spaces provided.

31. Study the classification diagram below.
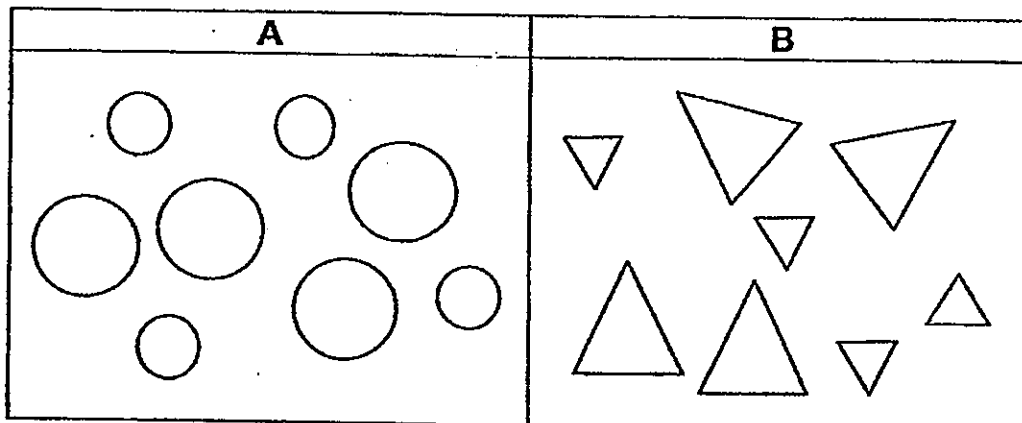
a) What characteristic is used to group the objects? (1 m)

_____

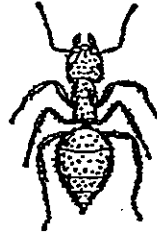b) What characteristic can you use to group the objects in another way? (1 m)

_____

32. Mindy learnt about the following animals on a television programme.

dolphin ant emu
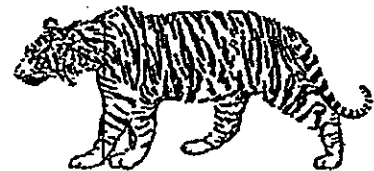
grasshopper chicken tiger

Classify the above animals into three equal groups, P Q and R, in the table below. (3 m)

Animals		
P	Q	R

33.   Alice and Ahmad observed the height of A and B over a period of four weeks. They recorded their observations in the table below.

	Height of A (cm)	Height of B (cm)
Week 1	1	5
Week 2	3	5
Week 3	5	5
Week 4	7	5

(a)   One of them is a living thing while the other is a non-living thing. Which is most likely a living thing, A or B?   (1 m)

_____

(b)   From their observations in the table, state a characteristic of a living thing.   (1 m)

_____

34.   The diagram below shows an adult balsam plant.
Write the correct names of the plant parts in the boxes, (i), (ii), (iii) and (iv).   (2 m)
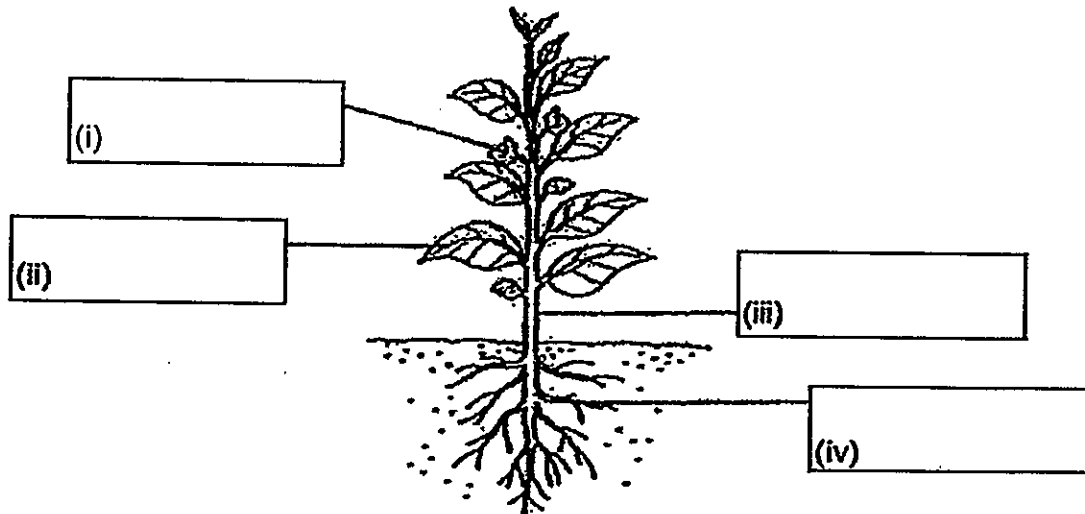
35. Janet placed two identical ring magnets through a wooden rod as shown in the diagram below.
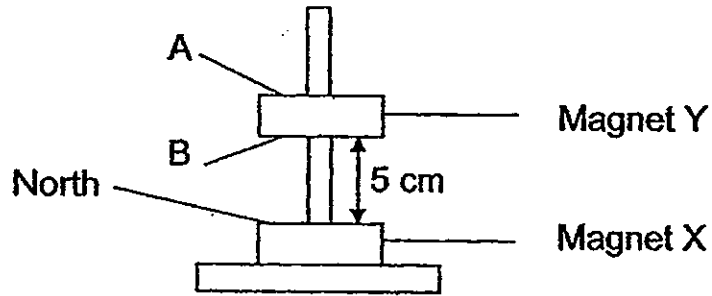
(a) What magnetic poles are A and B? (1 m)

(i) A: _____

(ii) B: _____

(b) She observed that Magnet Y was floating above Magnet X. Explain why Magnet Y was floating above Magnet X. (1 m)

_____

_____

_____

_____

(c) Janet removed Magnet Y from the wooden rod and dropped it on the floor several times. When she placed Magnet Y back through the wooden rod, she observed that the distance between the two magnets decreased.
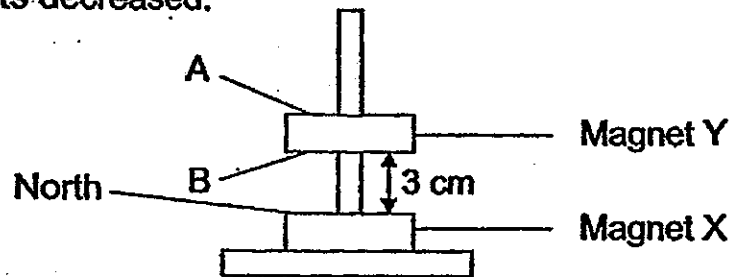
State how dropping the magnet affects the strength of its magnetism. (1 m)

_____

_____

36. Tom carried out an experiment. He placed ten worms in the middle of a dish. Then he covered half the dish with dark paper and shone a bright light on the dish.
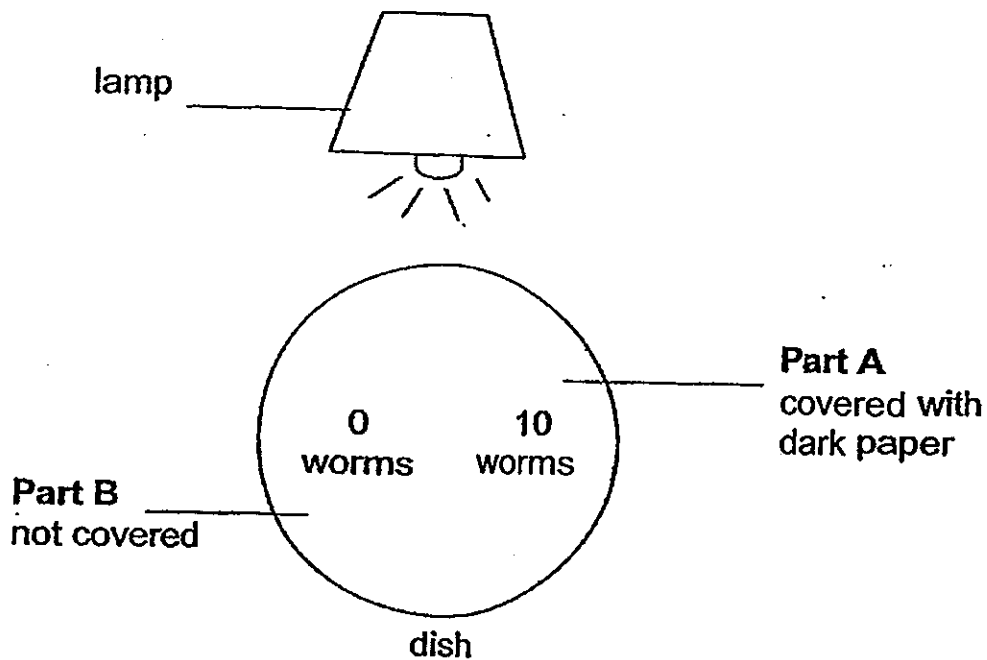
Twenty minutes later, Tom observed that all the worms were found in Part A of the dish.

(a) Based on Tom's observations, state two characteristics of living things. (2 m)

(i) _____

(ii) _____

Tom covered the dish with a clear plastic wrap with holes in it. He observed that the worms died after a few days.

(b) Give two reasons why the worms died. (2 m)

(i) Reason 1: _____

_____

(ii) Reason 2: _____

_____
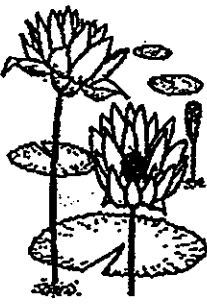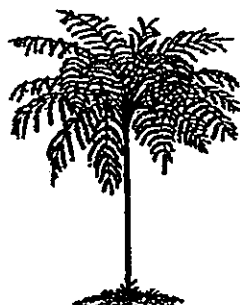
37. The table below shows the characteristics of four plants, P, Q, R and S.

Characteristics	P	Q	R	S
Bears fruit		✓		✓
Grows on land			✓	✓
Grows in water	✓	✓		

(a) Classify the four plants in the chart below by writing P, Q, R and S in the correct boxes, (i), (ii), (iii) and (iv). (2 m)

```
                        Plants
          ┌───────────────┴───────────────┐
      Flowering                      Non-flowering
     ┌─────┴─────┐                  ┌──────┴──────┐
 Grows on    Grows in          Grows on      Grows in
   land        water             land          water
    │            │                 │             │
  (i)          (ii)             (iii)          (iv)
```
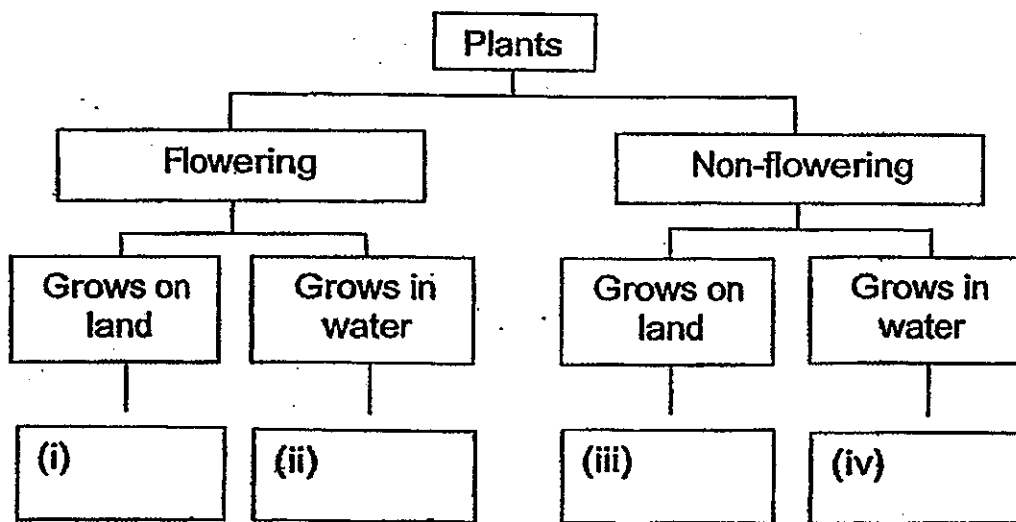
(b) Match the four plants below to Plants P, Q, R and S by writing P, Q, R and S in the correct boxes. (2 m)

Water Lily	Milkweed	Tree Fern	Floating Moss Fern
(i)	(ii)	(iii)	(iv)

38. Study the list of objects below.

shoe lace	telephone wire	rubber hose
leather belt	wooden pencil	flag pole

(a) Group the objects under the correct headings in the table below.
(3 m)

Objects	
Flexible	**Stiff**

(b) Study the graph below. It shows the number of bricks that bags A, B, C and D can hold before breaking.
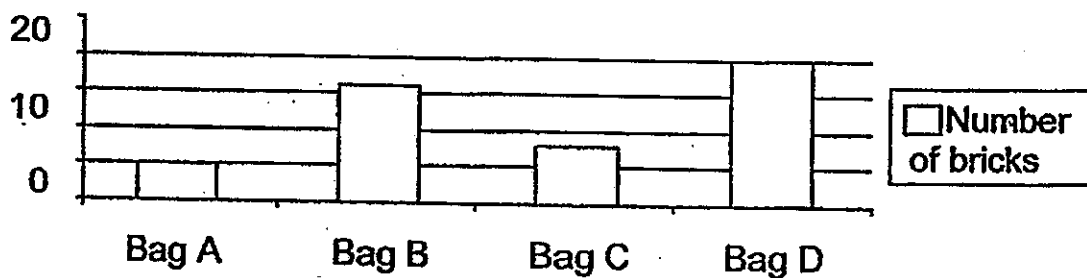
Arrange the bags according to their strength, starting from the strongest to the weakest.
(1 m)

_____ , _____ , _____ , _____

strongest   weakest

39. Study the flow chart below.

```
┌─────────┐      ┌──────────────┐   No  ┌──────────────┐   No  ┌─────┐
│  Start  │─────▶│   Does it    │──────▶│   Does it    │──────▶│  D  │
└─────────┘      │   have       │       │   have six   │       └─────┘
                 │  feathers on │       │    legs?     │
                 │   its body?  │       └──────────────┘
                 └──────────────┘              │ Yes
                        │ Yes                  ▼
                        ▼                   ┌─────┐
                 ┌──────────────┐  No ┌───┐ │  C  │
                 │  Can it fly? │────▶│ B │ └─────┘
                 └──────────────┘     └───┘
                        │ Yes
                        ▼
                     ┌─────┐
                     │  A  │
                     └─────┘
```
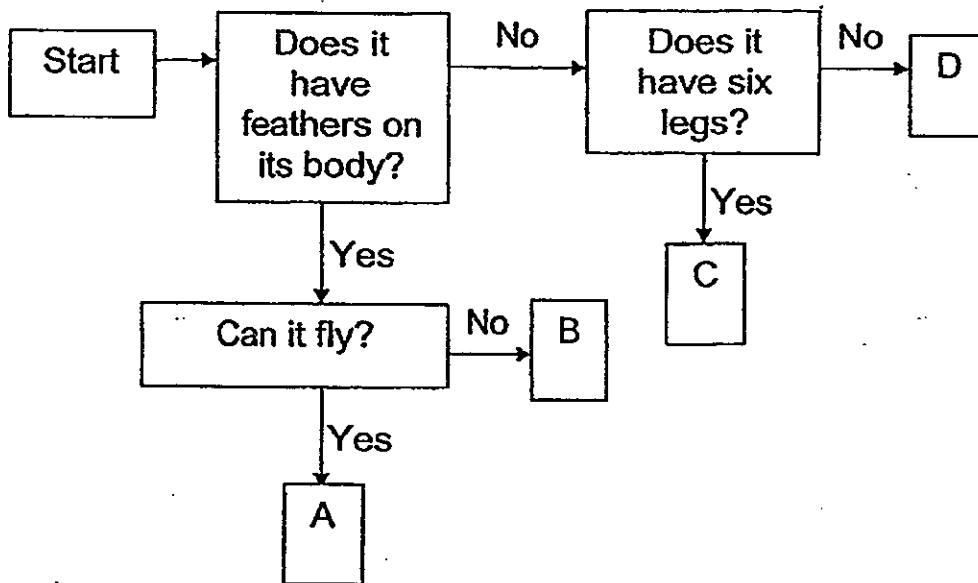
(a) Based on the chart, describe one similarity and one difference between Animal A and Animal B. (2 m)

(i) Similarity:

_____

_____

(ii) Difference:

_____

_____

b) Write the letters, A, B, C and D that represent the animals in the boxes below. (2 m)

(i)	cockroach	
(ii)	hamster	
(iii)	penguin	
(iv)	parrot	

40. Jessie found Animal X in her garden. She made the following observations.

- It lays eggs near water plants.

- It has gills to help it breathe.

- It is a plant-eater.

(a) Based on the information above, what is the most likely body covering this animal has? (1 m)

_____

(b) Which is the most likely group of animals that X belongs to? (1 m)

_____

For Questions 41—44, please refer to Booklet K.

End of Section B

ANSWER SHEET

EXAM PAPER 2013
SCHOOL : PEI CHUN PUBLIC SCHOOL
SUBJECT : PRIMARY 3 SCIENCE

TERM : CA2

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

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
2	3	1	1	2	3	4	2	NA	NA	NA	NA	NA

No ANSWER

Section B

Q31) a) Shape
     b) Size

Q32)

Animals		
P	Q	R
Dolphin	Ant	Emu
Tiger	Grasshopper	Chicken

Q33) a) A
     b) Living things grow but non-living things do not grow

Q34) i) Flowers
     ii) leaves
     iii) stem
     iv) roots

Q35) a) i) A: South
     ii) B: North
   b) Their like poles are facing each other thus they repel
   c) Propping the magnet decreases its magnetism

Q36) a) i) Living things move by themselves
        ii) Living things respond to changes around them
     b) i) Reason 1: The worms did not have food
        ii) Reason 2: The worms did not have water

Q37) a) i) S
        ii) Q
        iii) R
        iv) P
     b) i) Q
        ii) S
        iii) R
        iv) P

Q38) a)

Objects	
Flexible	Stiff
Shoe lace	Wooden pencil
Telephone wire	Flag pole
Rubber hose	
Leather belt	

b) D, B, C, A

Q39) a) i) A and B have feather on their body
        ii) B cannot fly but A can fly
     b) i) C
        ii) D
        iii) B
        iv) A

Q40) a) Scales
     b) Fish