**Pei Chun Public School**
**Semestral Assessment 2 – 2017**
**Science**
**Primary 3**

Name : _____ (  ) Date : 31 Oct 2017

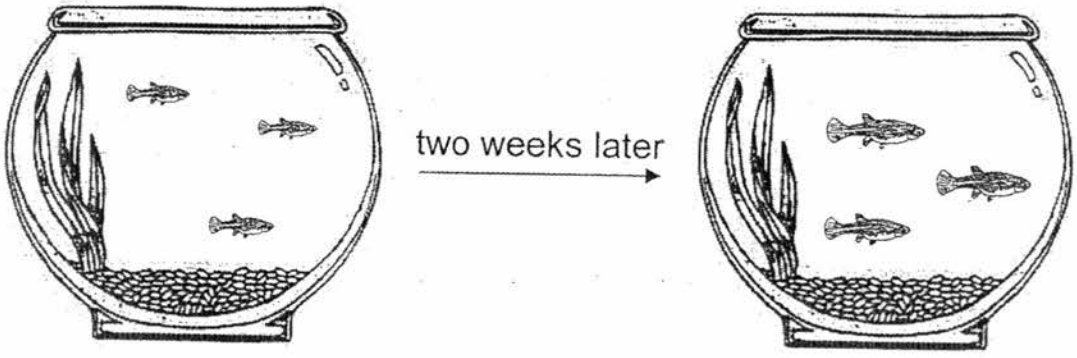
Class : Pri. 3 (  )

Science Teacher : _____ Time : 1 h 20 min

**Section A (24 × 2 marks)**

For questions 1 to 24, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. Bala bought some guppies and kept them in a fish tank. Two weeks later, he observed the following.



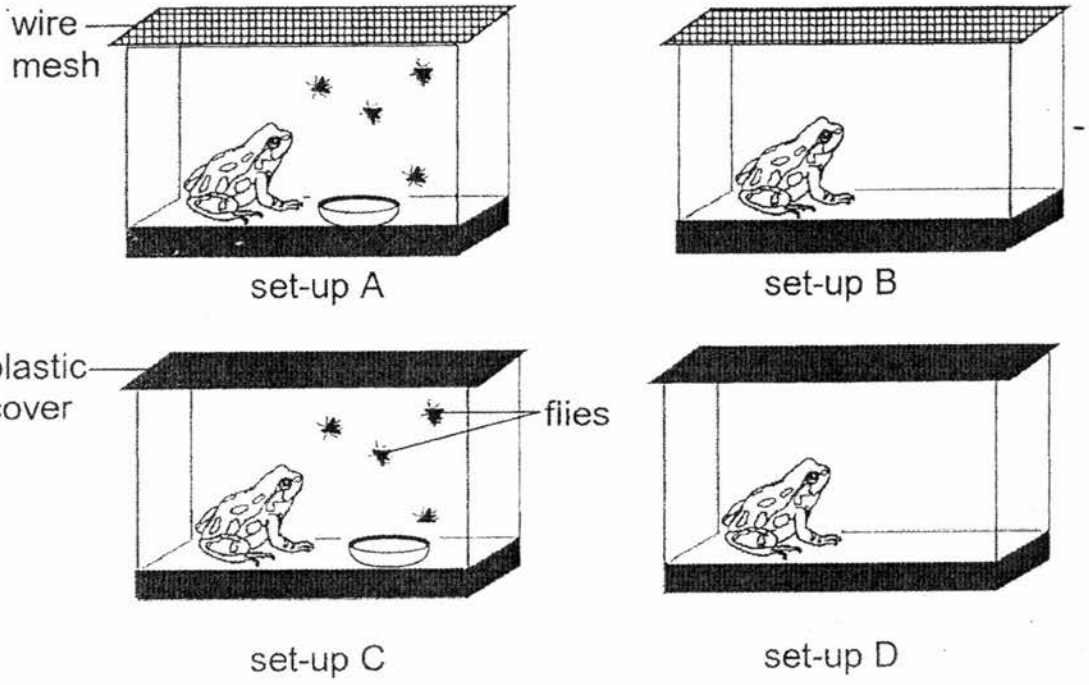

From his observation, Bala can conclude that the guppies are living things because they _____.

(1) grow
(2) reproduce
(3) need air, food and water
(4) respond to changes around them



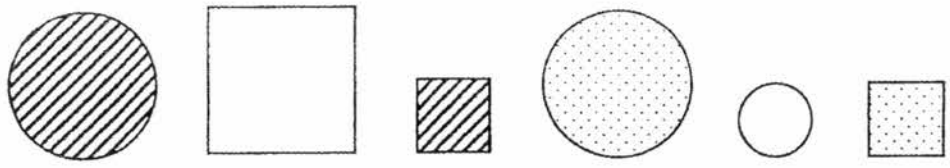
www.testpapersfree.com
Downloaded from SingaKids.com

2. Pete wanted to find out if living things need air to survive.
Which two set-ups should he use to make a conclusion?




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

3. The diagrams below show six different figures.



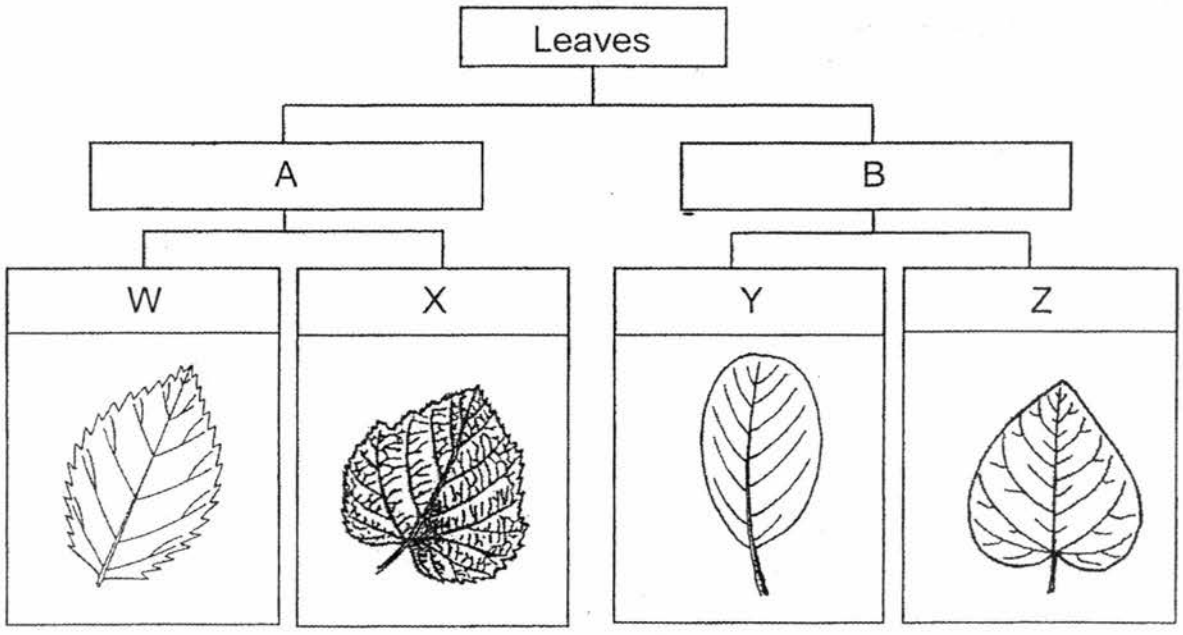
How many way(s) can the figures be classified into **equal** groups?

(1) one
(2) two
(3) three
(4) four



www.testpapersfree.com
Downloaded from SingaKids.com

4. The diagram below shows how different leaves are classified according to characteristics, A, B, W, X, Y and Z.




What are characteristics A and Z?

| | A | Z |
|---|---|---|
| (1) | Oval-shaped | Has smooth edge |
| (2) | Oval-shaped | Heart-shaped |
| (3) | Has jagged edge | Heart-shaped |
| (4) | Has jagged edge | Has smooth edge |



www.testpapersfree.com
Downloaded from SingaKids.com

5. The table below shows how four organisms can be grouped.

| | Can make its own food | Cannot make its own food |
|---|---|---|
| **Reproduce by seeds** | E | F |
| **Does not reproduce by seeds** | G | H |

Which group of organisms does moss belong to?




(1) E
(2) F
(3) G
(4) H

6. Which of the following characteristics are found in birds, but **not** in other animals?

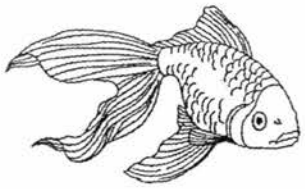
A : They can fly.
B : They lay eggs.
C : They have wings.
D : They have feathers.

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

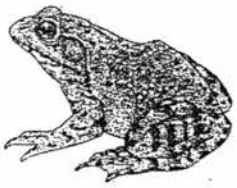


www.testpapersfree.com
Downloaded from SingaKids.com

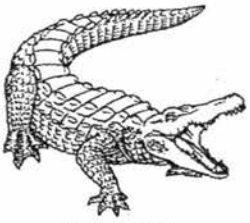
7. Muthu had to classify the three animals shown below.



goldfish

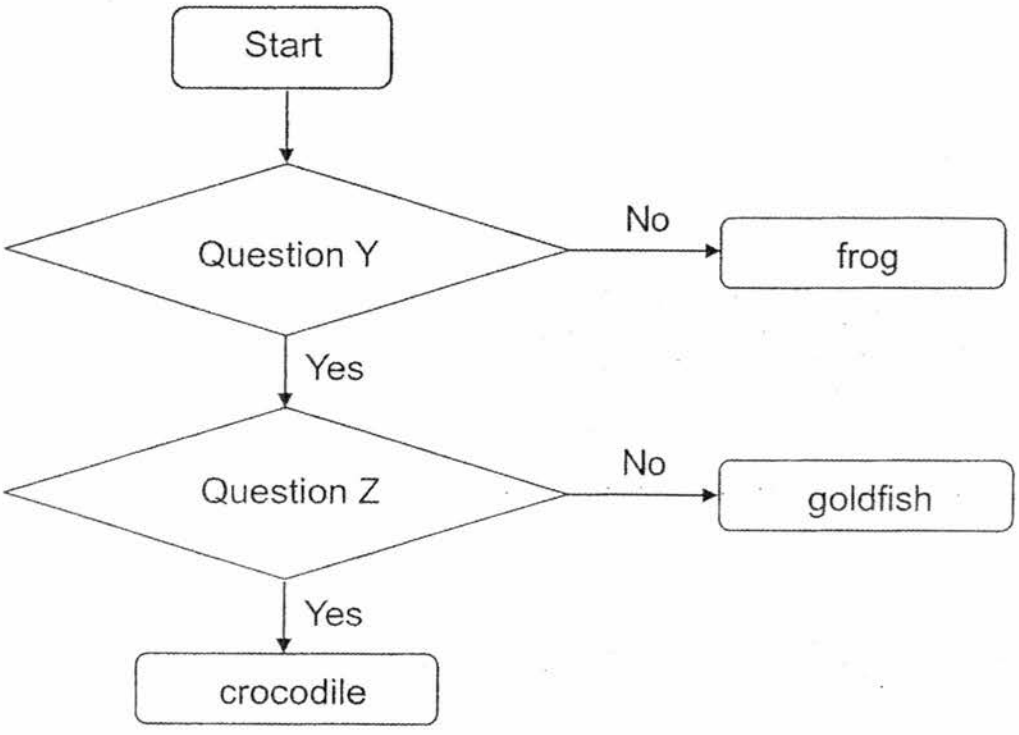


frog



crocodile

He classified them with the help of the chart below.




What are questions Y and Z?

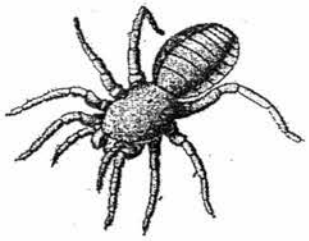
| | Question Y | Question Z |
|---|---|---|
| (1) | Does it have legs? | Can it live on land? |
| (2) | Can it live on land? | Does it have scales? |
| (3) | Does it have legs? | Does it have scales? |
| (4) | Does it have scales? | Does it have legs? |



www.testpapersfree.com

Downloaded from SingaKids.com

8. The diagram below shows an animal in the school garden.



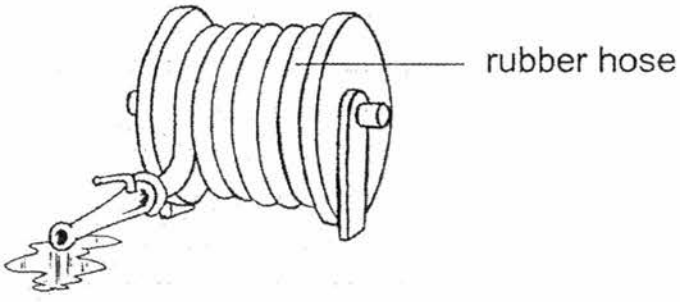
Three children made the following observations about the animal.

| | |
|---|---|
| Fandi | : It only has two body parts. |
| Ginny | : It feeds on other animals. |
| Hema | : It does not have wings. |

Whose observation(s) could be used to show that the animal is not an insect?

(1) Fandi only
(2) Ginny only
(3) Fandi and Hema only
(4) Ginny and Hema only

9. The diagram below shows a rubber hose.




Which property of the rubber hose allows it to be coiled up as shown in the diagram?

(1) It is strong.
(2) It is flexible.
(3) It is waterproof.
(4) It does not break easily.



www.testpapersfree.com
Downloaded from SingaKids.com

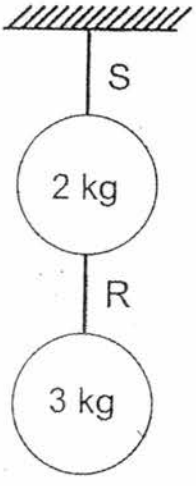
10. Kelly tested three tv of string, R, S and T, by hanging loads from each string. He increased the mass of the load until the strings broke. The maximum mass that each string could hold before breaking is shown in the table below.

| String | Maximum mass that the string can hold before breaking (kg) |
|---|---|
| R | 2 |
| S | 3 |
| T | 5 |

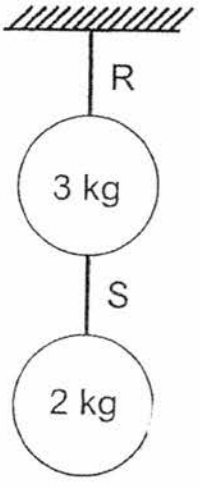
Kelly tried a few arrangements of hanging different loads.

Which of the following arrangements would be possible?

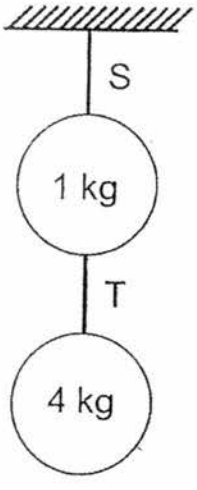
(1)



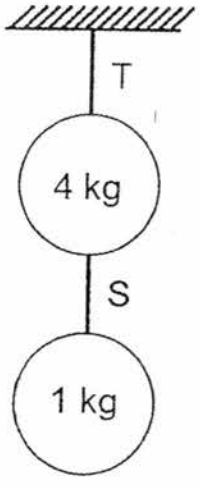

(2)




(3)



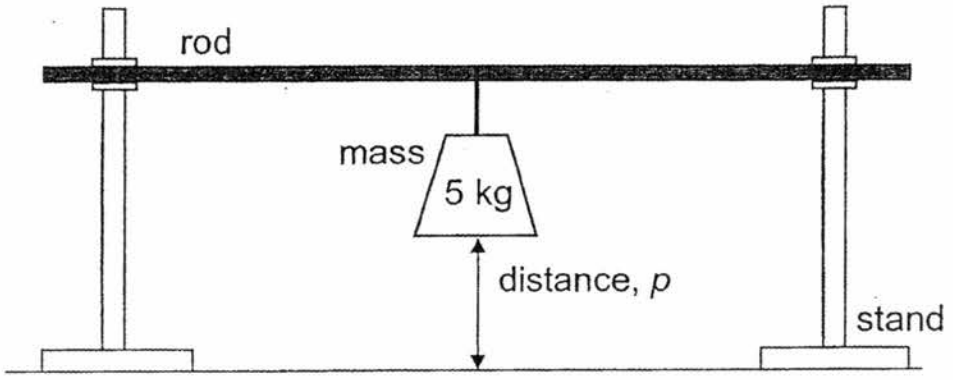

(4)



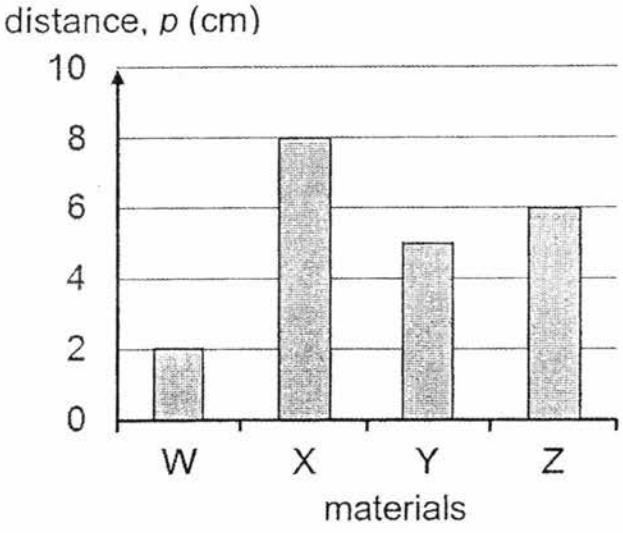



www.testpapersfree.com
Downloaded from SingaKids.com

11. Raj wanted to test the flexibility of four materials, W, X, Y and Z. He attached a 5 kg mass to a rod made of material W and measured the distance, *p*, as shown below.




He repeated the experiment using rods made of materials X, Y and Z. The rods were of the same thickness and length.
He recorded his results in the table below.




Based on his results, which material is the **least** flexible?

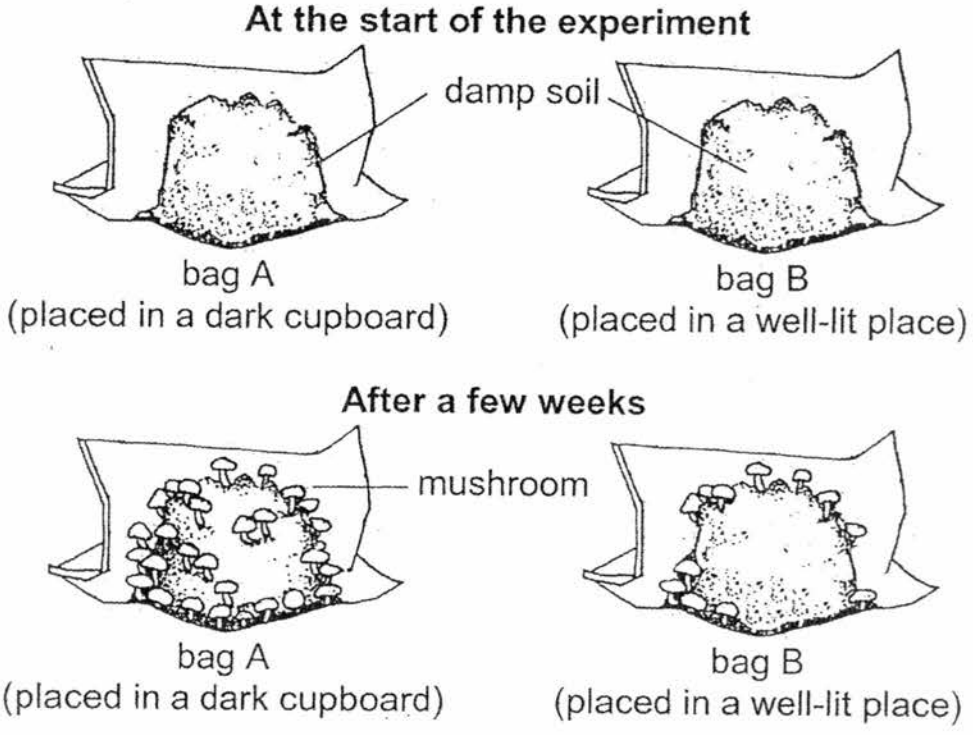
(1) W
(2) X
(3) Y
(4) Z



www.testpapersfree.com
Downloaded from SingaKids.com

12. Yun Hui carried out an experiment to find out if mushrooms need light to grow. She placed the same amount of mushroom spores in two bags of damp soil and left the bags in different places.

The diagrams below show what she observed after a few weeks.




Based on Yun Hui's experiment, which of the following statements about mushrooms is correct?

(1) They need light to grow.
(2) They do not need light to grow.
(3) They can only grow in the dark.
(4) They grow faster in places with light.



www.testpapersfree.com
Downloaded from SingaKids.com

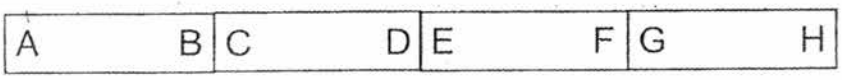
13. The table below shows Hashid's answers to three questions about yeast.

| | Question | Answer |
|---|---|---|
| A | Is it a bacteria? | No |
| B | Can it reproduce? | No |
| C | Is it a micro-organism? | Yes |

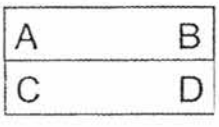
Which question(s) was / were answered correctly?

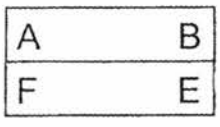
(1) B only
(2) C only
(3) A and B only
(4) A and C only

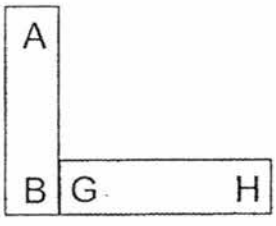
14. Four bar magnets with their ends marked A to H can be arranged as shown below.

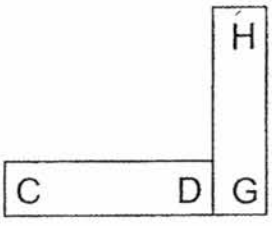



Which of the following arrangement of two of the magnets is **not** possible?

(1)



(2)



(3)


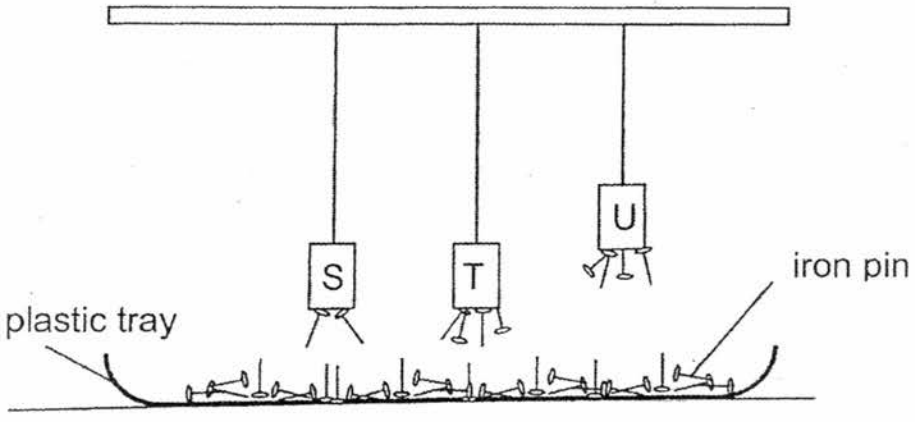

(4)





www.testpapersfree.com
Downloaded from SingaKids.com

15. S, T and U are magnets hanging from strings of two different lengths as shown in the diagram below. S and T are hung at the same height.

A plastic tray of iron pins is placed below the magnets and different numbers of pins are attracted to the magnets.




Based on the diagram, which of the following statements is **not** true?

(1) S is the weakest magnet.
(2) T is as strong a magnet as U.
(3) T is a weaker magnet than U.
(4) U is a stronger magnet than S.

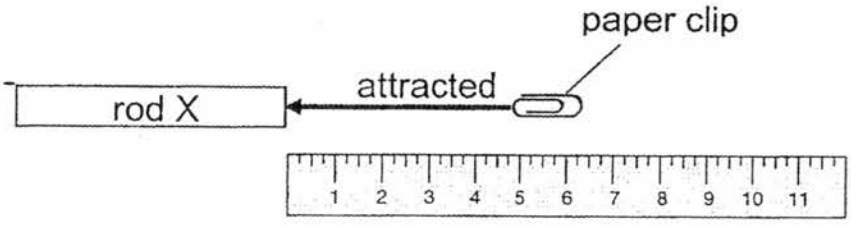
16. Rajoo wanted to separate two types of objects which have been mixed together.
Which pair of objects can be separated using a magnet?

(1) iron pins and steel staples
(2) pencil lead and plastic clips
(3) steel clips and steel staples
(4) steel clips and plastic clips



www.testpapersfree.com
Downloaded from SingaKids.com

17. Richard made three magnets using the stroking method. He used the same bar magnet to stroke three identical iron rods, X, Y and Z, for different number of times. He placed rod X at one end of a ruler and slowly pushed a paper clip towards it until the paper clip was attracted to the rod.

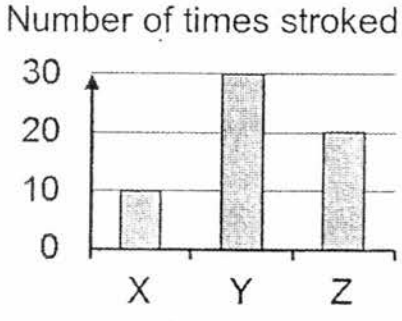



He repeated the experiment with rods Y and Z. He measured the distance at which the paper clip was attracted by each of the rods. His results are shown in the table below.

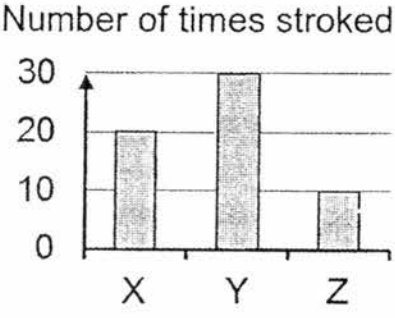
| Magnet | Distance at which the paper clip was attracted to the magnet (cm) |
|---|---|
| X | 5 |
| Y | 3 |
| Z | 4 |

Which of the following graph correctly shows the number of times each of the rods was stroked with the bar magnet?

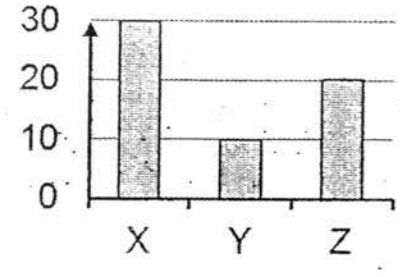
(1)



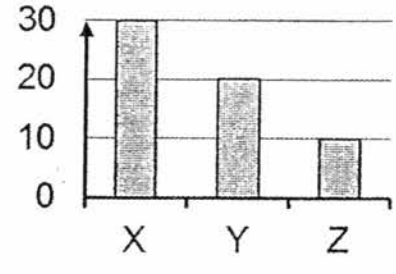

(2)




(3)



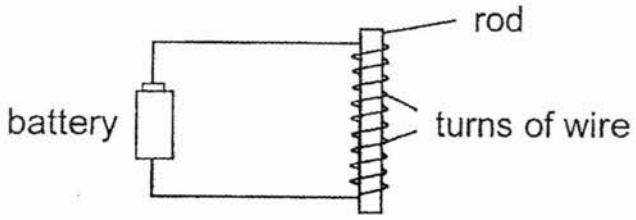

(4)






www.testpapersfree.com
Downloaded from SingaKids.com

18. Peter used the set-up below to attract some pins.







He added more turns of wire around the rod and counted the number of pins attracted to the rod.

His results are shown in the table below.

| Number of turns of wire | Number of pins attracted |
|---|---|
| 10 | 0 |
| 50 | 2 |
| 100 | 5 |

Which of the following best explains why no pin was attracted with 10 turns of wires around the rod?

(1) The battery was not working.
(2) The rod was made of a non-magnetic material.
(3) The pins were made of a non-magnetic material.
(4) The electromagnet was too weak to attract the pins.



www.testpapersfree.com
Downloaded from SingaKids.com

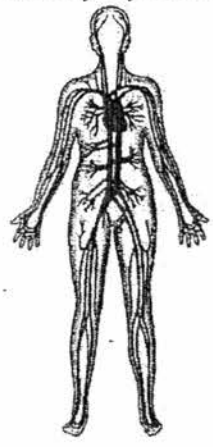
19. The diagram below shows part of the skeletal system in the leg.



Which of the following is **not** a function of the part shown?

(1) It supports the leg.
(2) It gives the leg its shape.
(3) It protects the delicate organs in the leg.
(4) It works with the muscular system to allow the leg to move.

20. The diagram below shows a body system.



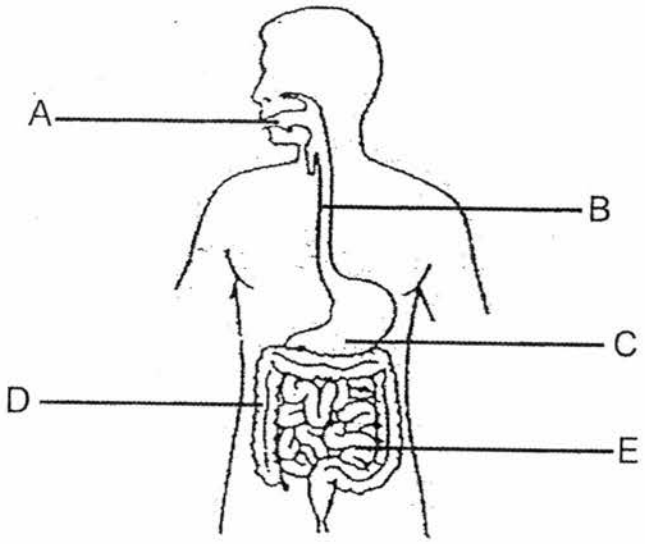
The function of this body system is to _____.

(1) take air into the body
(2) help different parts of the body to move
(3) break down food into simpler substances
(4) transport digested food to the different parts of the body



www.testpapersfree.com
Downloaded from SingaKids.com

21. The diagram below shows the human digestive system.



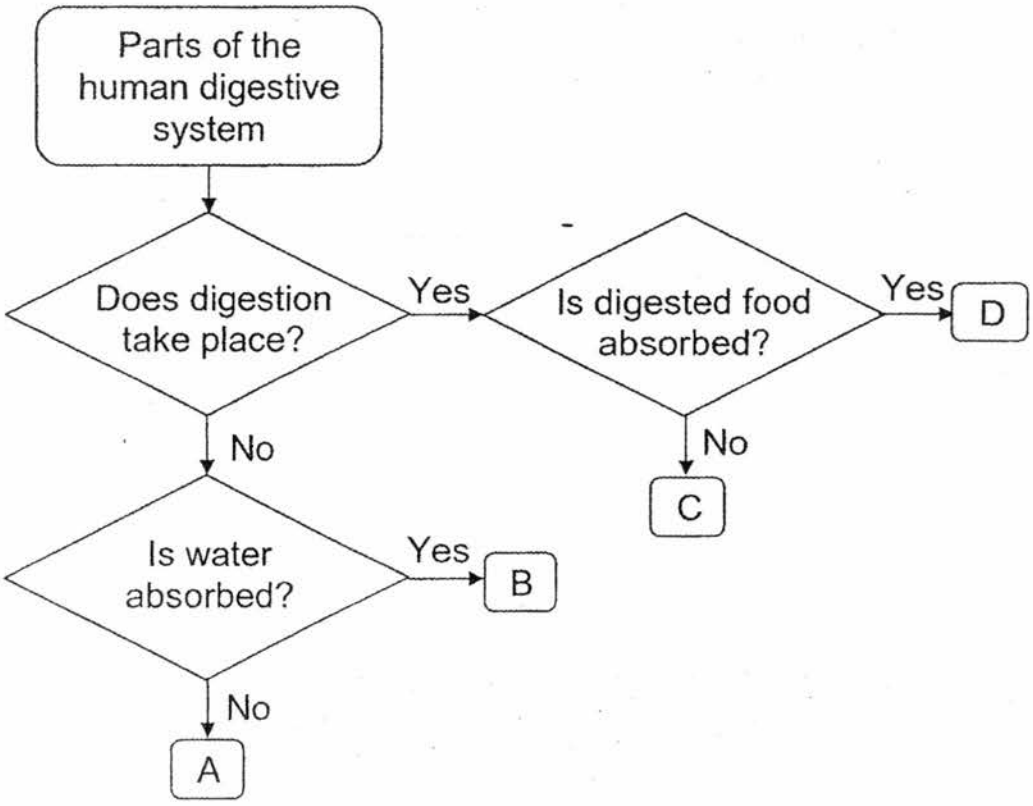

At which parts, A, B, C, D or E, are digestive juices added?

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



www.testpapersfree.com
Downloaded from SingaKids.com

22. Study the flow chart below.



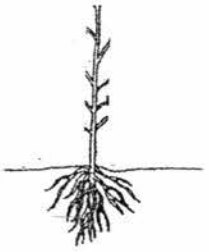

Which letter, A, B, C or D, in the flow chart represents the large intestine?

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



www.testpapersfree.com
Downloaded from SingaKids.com

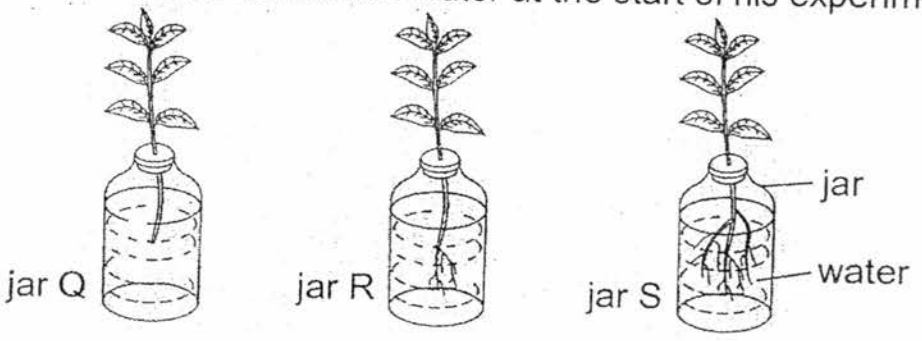
23. Jun Yu put two caterpillars on his plant in his garden. The diagram below shows what his plant looked like after three days.



After two weeks of watering, he noticed that the no new leaves appeared on the plant and the plant died.
The plant died because it could not _____.

(1) make food
(2) produce fruits
(3) produce flowers
(4) take in the water from the soil

24. Ali removed some parts of the roots from three similar plants. He used the set-ups below for his experiment. The three jars contained the same amount of water at the start of his experiment.




After two days, he measured the amount of water left in each jar.
Which of the following correctly shows the results of his experiment?

| | Jar with the <u>most</u> amount of water left | Jar with the <u>least</u> amount of water left |
|---|---|---|
| (1) | R | S |
| (2) | S | Q |
| (3) | Q | S |
| (4) | S | R |

**End of Section A**



www.testpapersfree.com
Downloaded from SingaKids.com

**Pei Chun Public School**
**Semestral Assessment 2 – 2017**
**Science**
**Primary 3**

Name : _____ (  )

Class : Pri. 3 (  )

Date : 31 Oct 2017

Time : 1 h 20 min

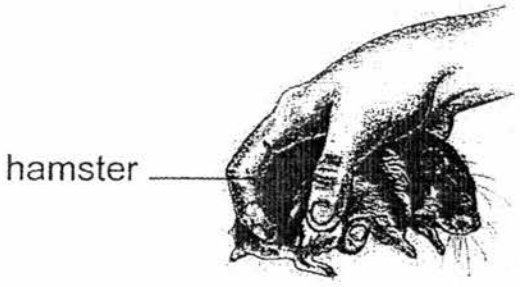
Science Teacher : _____

Parent's signature: _____

| | |
|---|---|
| Section A- | 48 |
| Section B | 32 |
| Total | |

**Section B (32 marks)**
For questions 25 to 35, write your answers in the spaces provided.

25. Sally tried to pick up her pet hamster as shown below.
It jumped out of her hand as she picked it up.




a) What characteristic of living thing was shown by the hamster? [ 1 ]

_____

_____

SCORE



www.testpapersfree.com
Downloaded from SingaKids.com

b) Sally kept six similar hamsters in three cages, A, B and C, for five months.

She took good care of the hamsters and did not add any new hamsters to the cages. She counted the number of male and female hamsters in the cages after five months and recorded her observations in the table below.

| Cage | Number of hamsters in the cage | | | |
|---|---|---|---|---|
| | Start | | After five months | |
| | Male | Female | Male | Female |
| A | 2 | 0 | 2 | 0 |
| B | 0 | 2 | 0 | 2 |
| C | 1 | 1 | 5 | 4 |

Based on her observations, Sally said that hamsters can only reproduce when she keeps a male hamster and a female hamster together.

Is she correct? Circle your answer. [ 1 ]

Yes / No / Cannot tell

c) Refer to Sally's observation and give a reason for your answer in (b). [ 1 ]

_____

_____

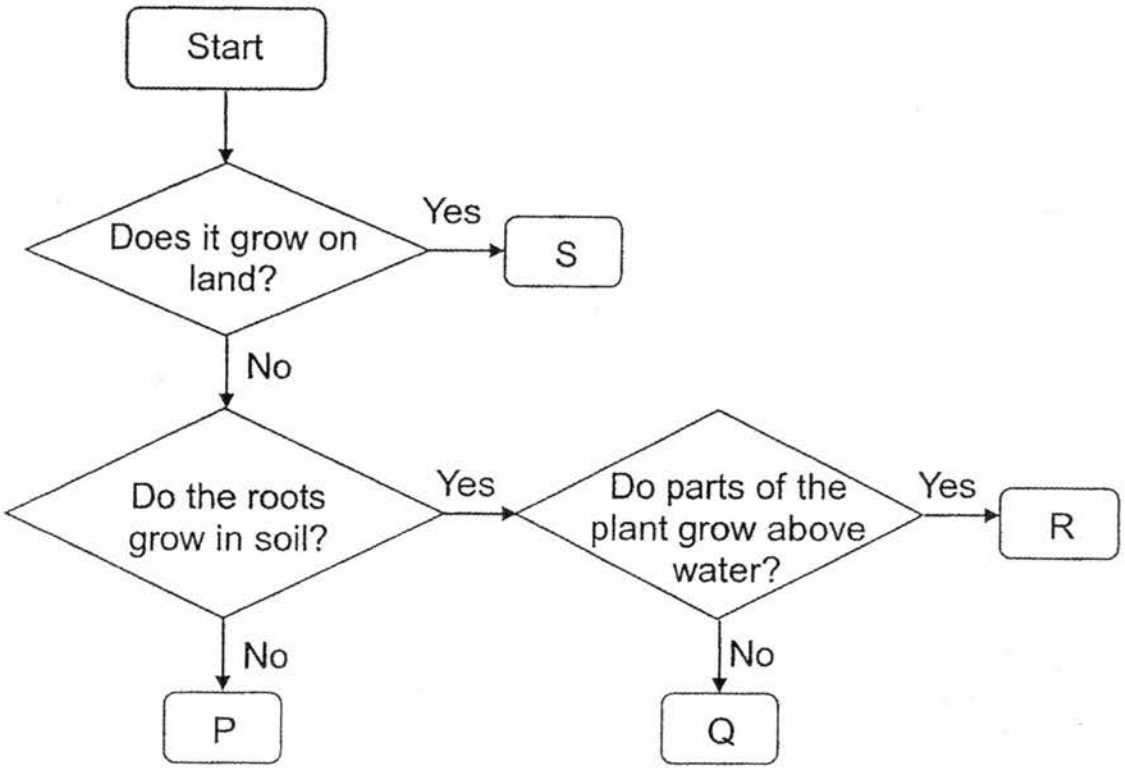
SCORE



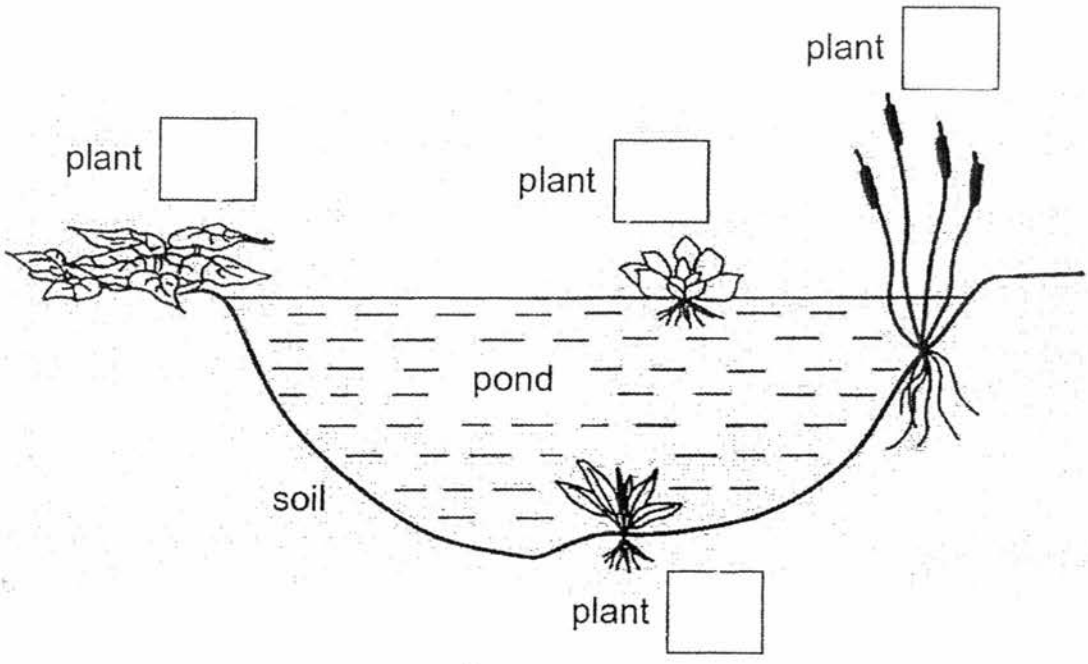
www.testpapersfree.com

Downloaded from SingaKids.com

26. Study the flowchart below. Letters P, Q, R and S represent four different plants.




Match each of the plants in the diagram below to the correct letter. Write the letters in the boxes provided. [ 2 ]




| SCORE | |
|---|---|



www.testpapersfree.com
Downloaded from SingaKids.com

27. The following table gives information on five animals, D, E, F, G and H, based on three characteristics. A tick (✓) shows that the animal has the characteristic.

| Characteristic | D | E | F | G | H |
|---|---|---|---|---|---|
| Can fly | | ✓ | ✓ | | ✓ |
| Lays eggs | ✓ | ✓ | | ✓ | |
| Has hair on its body | ✓ | | ✓ | | |

a) Based on the information given in the table, state **two** characteristics of animal H. [ 1 ]

_____

_____

b) The diagram below shows a bat.



Match the bat to the correct letter (D, E, F, G or H) in the table.

It is animal _____. [ 1 ]

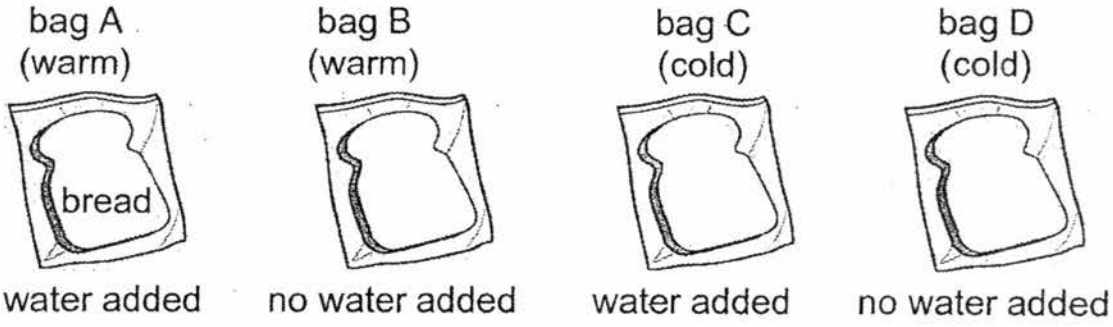
| SCORE | |
|---|---|



www.testpapersfree.com

Downloaded from SingaKids.com

28. Ruth placed two similar pieces of bread in two sealed bags, A and B. She added a few drops of water to the bread in bag A and bag C. She left the bags A and B in a warm place and bags C and D in a cold place.




a) In which bag, A, B, C or D, would mould take the longest time to appear on the bread? [ 1 ]

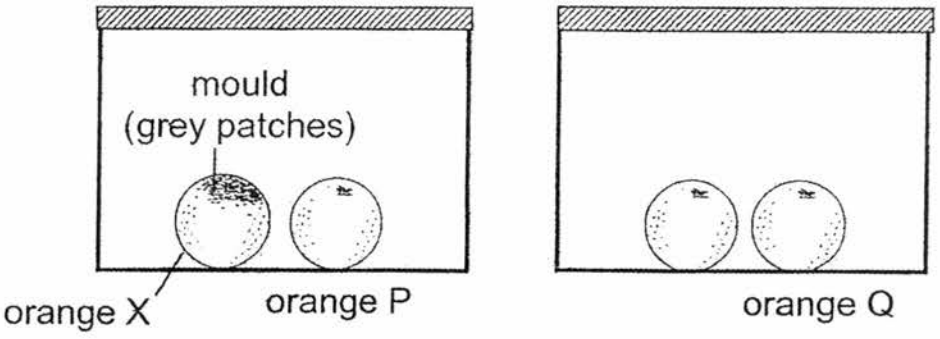
_____

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

_____

_____

c) Ruth conducted another experiment with two similar oranges, P and Q. She placed the oranges in two identical tanks and added another orange to each of the tank as shown below. The tanks were covered and left in the same place.




He observed that mould grew on orange P after a few days but not on orange Q. Explain how the mould on orange X caused mould to grow on orange P first. [ 1 [

_____

_____

| SCORE | |
|---|---|



www.testpapersfree.com
Downloaded from SingaKids.com

29. Four materials, A, B, C and D, of the same size and thickness were placed in four containers for five minutes. Each container was filled with 100 ml of water.

The table below shows the amount of water left in the four containers after the materials were removed.

| Material | A | B | C | D |
|---|---|---|---|---|
| Amount of water left in the container (ml) | 60 | 40 | 90 | 20 |

a) Based on the table above, which material, A, B, C or D, absorbed the most amount of water? Explain your answer. [ 1 ]

_____

_____

b) Based on the table above, which material, A, B, C or D, is the most suitable for making swim suit that dries fast?
Explain your answer. [ 1 ]

_____

_____

SCORE

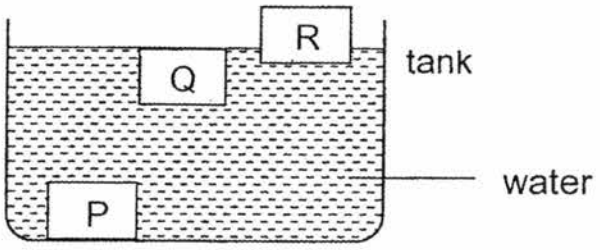


www.testpapersfree.com

Downloaded from SingaKids.com

c) Mary placed 3 cubes made of three different materials, P, Q and R, into a tank filled with water. The cubes were of the same size and mass.

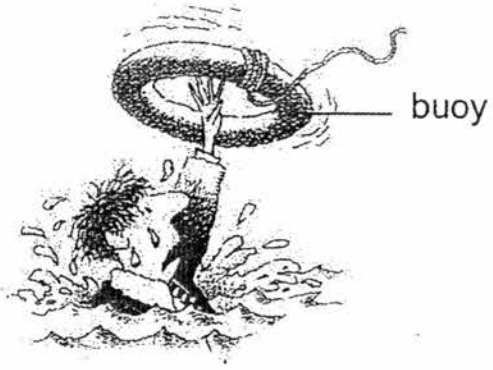
She observed the positions of the cubes in the tank of water. The diagram below shows the results of her experiment.




c) Which property of material is Mary testing? [ 1 ]

_____

d) The diagram below shows a buoy which is thrown to a person in the water so that the person can hold on to it. This will prevent the person from drowning.




Based on her results, which material, P, Q or R, is the most suitable for making the buoy? Explain your answer. [ 1 ]

_____

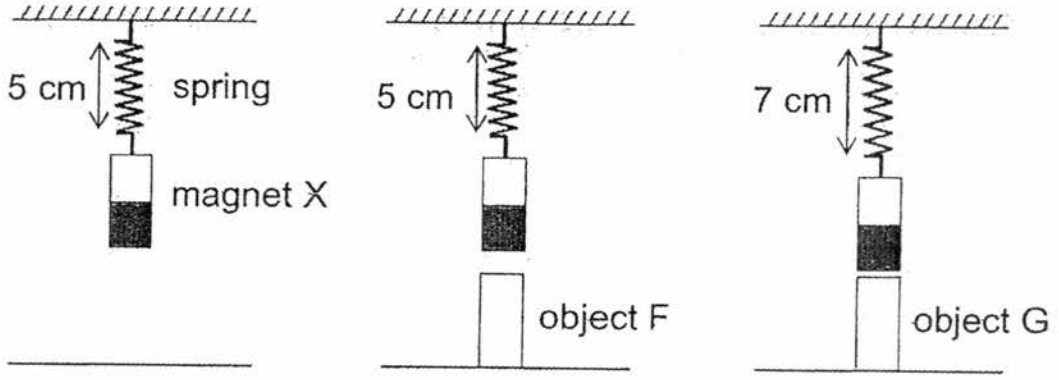
_____

| SCORE | |
|---|---|



www.testpapersfree.com
Downloaded from SingaKids.com

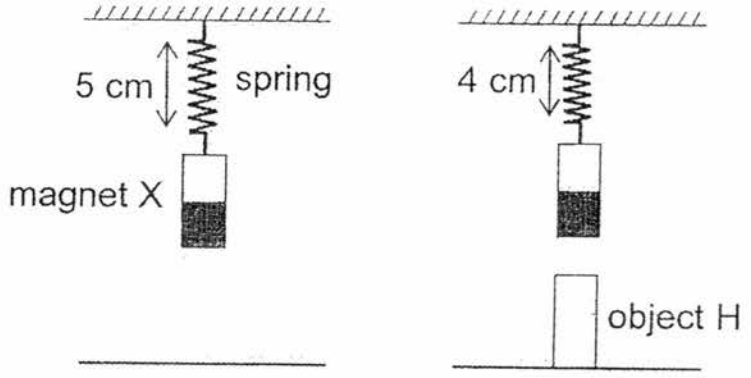
30. John hung magnet X from a spring. He placed two objects, F and G, one at a time, directly under magnet X.
The diagrams below show his observations.




a) Indicate the properties of the materials that objects F and G are made of in the table below. Put a tick (✓) in the correct boxes. [ 2 ]

| Object | Magnetic | Non-magnetic | Not possible to tell |
|---|---|---|---|
| F | | | |
| G | | | |

When John placed object H under magnet X, he observed that the magnet X moved up.




b) What could object H be? [ 1 ]

_____

c) Explain why magnet X moved up. [ 1 ]

_____

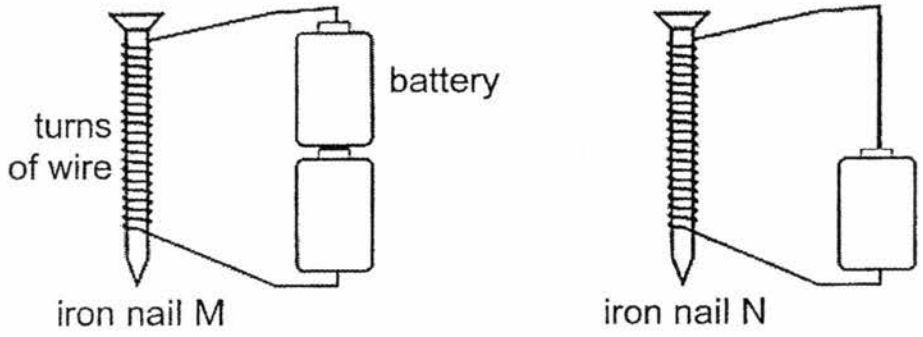
_____

| SCORE | |
|---|---|



www.testpapersfree.com
Downloaded from SingaKids.com

31. Ya Qi used the set-ups shown below to attract some iron clips. He used identical iron nails and batteries for both set-ups




She lowered iron nails M and N into a tray of iron clips and counted the number of clips attracted by each nail.

a) Which iron nail, M or N, would attract more iron clips?
Explain your answer. [ 1 ]

_____

_____

b) Ya Qi removed iron nail M from the turns of wire and lowered nail M into the tray of iron clips.
Would nail M still be able to attract any clips?
Give a reason for your answer. [ 1 ]

_____

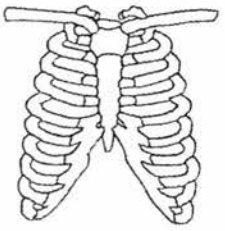
_____

| SCORE | |
|---|---|

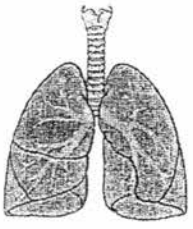


www.testpapersfree.com
Downloaded from SingaKids.com

32. Match the organs to the correct body systems. [ 3 ]







- Circulatory system
- Digestive system
- Muscular system
- Respiratory system
- Skeletal system

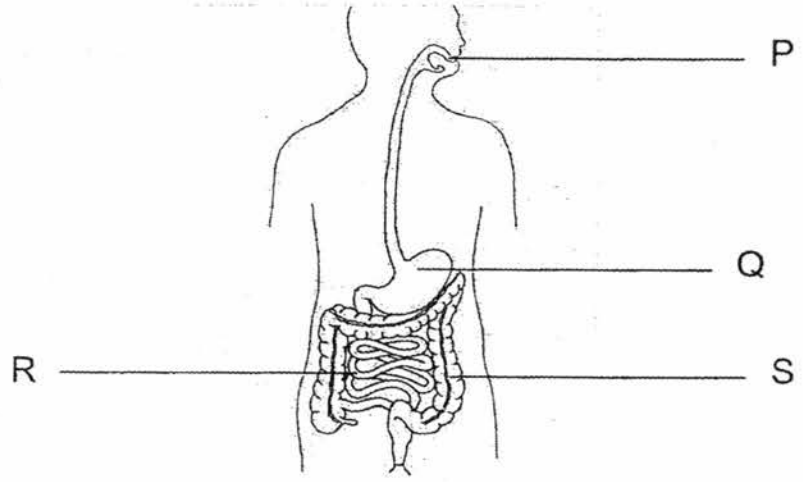
| SCORE | |
|---|---|



www.testpapersfree.com

Downloaded from SingaKids.com

33. The diagram below shows the human digestive system.




a) Referring to the diagram, name the parts of the digestive system represented by the letters shown in the table below. [ 2 ]

| Part | Part of the digestive system |
|---|---|
| P | |
| Q | |

b) In which part, P, Q, R and S, is digestion completed? [ 1 ]

_____

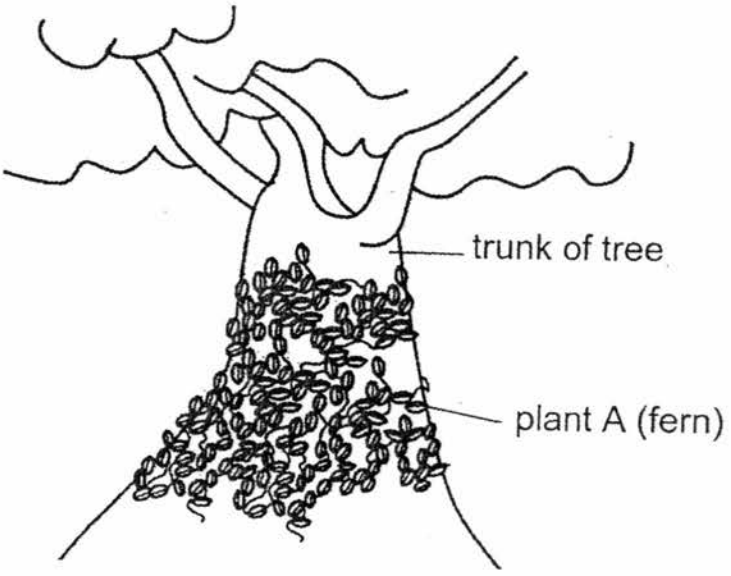
| SCORE | |
|---|---|



www.testpapersfree.com

Downloaded from SingaKids.com

34. Plant A is a fern that grows on the trunk of a tree.

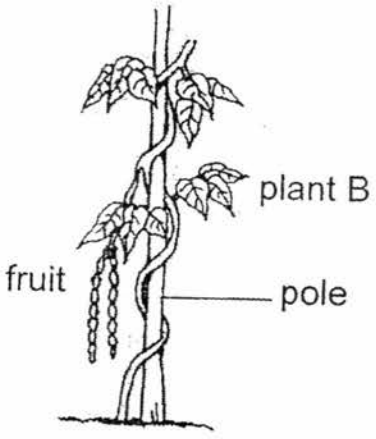



a) Fill in each blank with a suitable word.

Plant A has a _____ stem which grows around the tree trunk for support. It climbs up the tree trunk and spread out its leaves so that its leaves can get enough _____ to make food.

[ 2 ]

b) The diagram below shows plant B.




Based on the diagrams, state the difference in the way plants A and B reproduce.

[ 1 ]

_____

_____

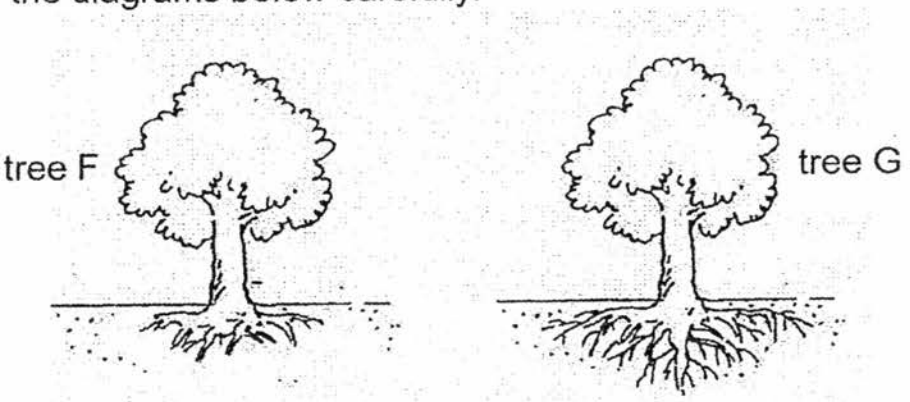
SCORE



www.testpapersfree.com

Downloaded from SingaKids.com

35. Study the diagrams below carefully.




a) Which tree, F or G, is more likely to fall over when blown by a strong wind? Explain your answer. [2]

_____

_____

_____

_____

b) Other than water, state another substance that is taken in from the soil by the roots of the tree. [1]

_____

**End of Section B**

Set by : Mdm Ong Bok Hoon, Miss Rachel Lim and Mrs Myyher Low
Vetted by: P3 Science teachers

| SCORE | |
|---|---|



www.testpapersfree.com
Downloaded from SingaKids.com

**EXAM PAPER 2017**

**LEVEL : PRIMARY 3**
**SCHOOL : PEI CHUN PUBLIC SCHOOL**
**SUBJECT : SCIENCE**
**TERM : SA2**

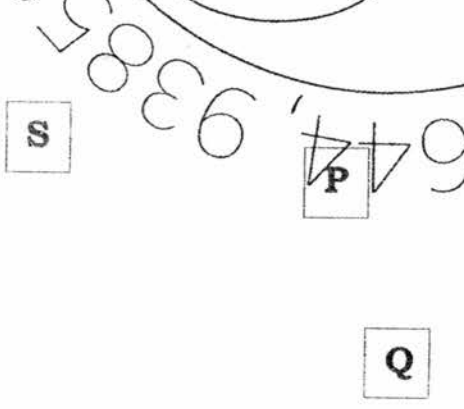
## Section A

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 3 | 2 | 4 | 1 |
| Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 |
| 2 | 4 | 2 | 2 | 4 | 1 | 2 | 4 |
| Q17 | Q18 | Q19 | Q20 | Q21 | Q22 | Q23 | Q24 |
| 3 | 4 | 3 | 4 | 2 | 2 | 1 | 3 |

## Section B

Q25. (a) It responds to changes.
(b) Yes
(c) When there is a male and a female hamster is the cage, the number of hamsters increases after five months.

Q26.




Free Delivery: 98570226, 81612644, 93835858, 98570226, 81612644, 93835858



www.testpapersfree.com
Downloaded from SingaKids.com

Q27. (a) It does not lay eggs and does not have hair on its body.
(b) F

Q28. (a) Bag D
(b) Mould needs water and warmth to grow. It will not grow if there is lack of water and warmth.
(c) Orange P is just next to Orange X and they are in the same tank. The mould on Orange X could easily fall on Orange P and reproduce.

Q29. (a) Material D. It has absorbed the most amount water and it has the least amount left in the container.
(b) Material C. It absorbs the least amount of water so it will take the shortest time for the swim suit to dry.
(c) Ability to float or sink.
(d) The buoy must be able to float on water so we will not sink.

Q30. (a) Object F: Non-magnetic
Object G: Magnetic
(b) A magnet
(c) The like poles of Magnet H and X are facing each other so they repel.

Q31. (a) Iron nail M. As Iron nail M has more batteries than Iron nail N. As a result more electric current flow through Iron nail M and make it a stronger electromagnet.
(b) No. As it is not an electro magnet any more.

Q32.
| | | |
|---|---|---|
| Ribcage | → | Skeletal system |
| Heart | → | Circulatory system |
| Lungs | → | Respiratory system |

Q33. (a) Part P → mouth
Part Q → stomach
(b) Part R.



www.testpapersfree.com
Downloaded from SingaKids.com

Q34. (a) weak, sunlight

(b) Plant A reproduce by spores while Plant B reproduce by seeds.

Q35. (a) Tree G. Its roots spread out and grow further and deeper into the soil. This helps to hold the tree firmly to the ground. As a result, the tree will fall over easily when a strong wind blows.

(b) Minerals.



END OF PAPER

www.testpapersfree.com Downloaded from SingaKids.com