NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 1 2014

BOOKLET A

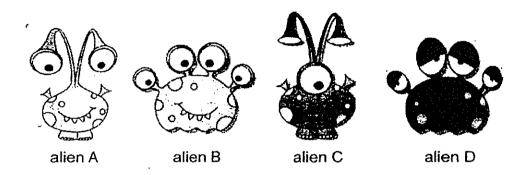
Date: 8 May 2014 Duration: 1 h 20 min

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| FOLLOW ALL INSTRUCTION | JNS CAKEFULLY. | | • |
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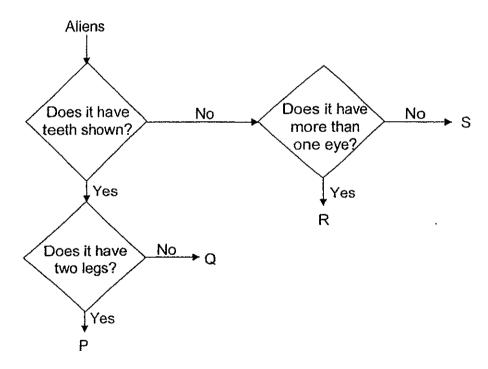
Section A (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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 provided.

1. Ding En studied the 4 aliens shown below.



He was then given the flowchart below to "classify" the aliens.



Based on the flowchart, which alien could be represented by P, Q, R and S?

- (1) Alien A is Q.
- (2) Alien B is S.
- (3) Alien C is P
- (4) Alien D is R.

2. Trisha saw a brown 'twig' in a bush. When the wind blew, it swayed sideways. Then a bird flew towards it and the 'twig' suddenly opened up its wings and flew towards a pile of dead leaves. Trisha could not locate the 'twig' anymore.

Trisha concluded that the 'twig' was a living thing.

Which one of the following observations helped Trisha to arrive at her conclusion?

- (1) It swayed sideways which showed it could move.
- (2) It opened up its wings which showed it could grow.
- (3) It flew towards a pile of dead leaves which showed it could reproduce.
- (4) It flew away when the bird flew towards it which showed it could respond to changes in its surroundings.
- 3. Four children made statements to give examples that living things can grow.

Andre: The caterpillar changed into a butterfly...

Bei Li: Kieran could no longer fit into the shoes he wore last

year.

Camille: The pond that only had frogs was now filled with

many tadpoles.

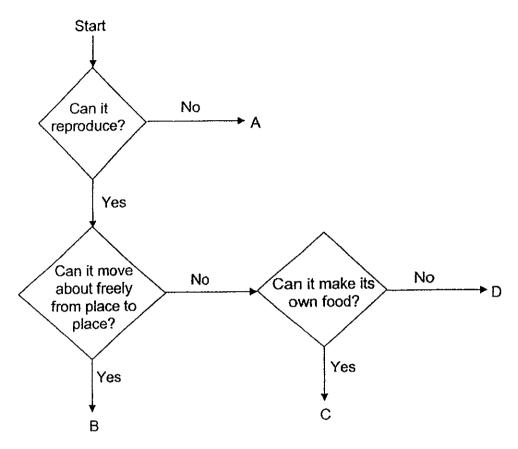
Davindar: The pufferfish became bigger when it swallowed water

into its stomach.

Which children had given examples that correctly show living things can grow?

- (1) Andre and Bei Li only
- (2) Bei Li and Davindar only
- (3) Camille and Davindar only
- (4) Andre, Bei Li and Camille only

Study the flowchart below. 4.



Which of the following, A, B, C or D, best represents a plant?

(1) A (3) C

В

(2) (4) D

Which one of the following boys had made a true statement about 5. plants?

Ali:

Plants can grow only in soil.

Ben:

Plants cannot grow in water.

Chan:

Plants can grow on other plants '

David:

Plants cannot grow on buildings

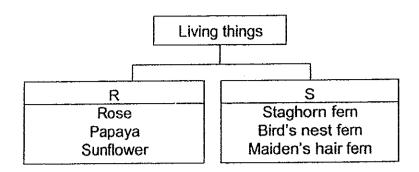
(1) Ali

(2)Ben

(3) Chan

(4) David

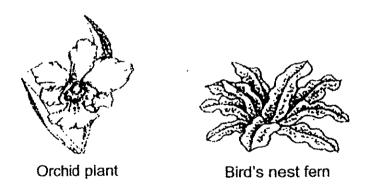
6. Study the chart below.



Which of the following are suitable headings to represent R and S?

| R | S |
|---------------------|----------------------|
| Plants | Fungi |
| Mosses | Fems |
| Flowering plants | Non-flowering plants |
| Reproduce by spores | Reproduce by seeds |

7. The diagram below shows two types of living things.



In which of the following way(s) are these two living things similar?

- A They need water to grow.
- B They reproduce by spores.
- C They can make their own food.
- (1) A only

(2) B only

(3) A and C only

(4) A, B and C only

- 8. Which of the following statements are true about plants?
 - A All plants are edible.
 - B All plants reproduce by seeds.
 - C Plants can be a source of material.
 - D Plants can be used to make medicine:
 - (1) A and B only

(2) C and D only

(3) A, C and D only

(4) A, B, C and D

9. Mr Tan described an unknown animal, Animal X, to his class.

It lays its eggs in water.

It can swim and breathe in the muddy water.

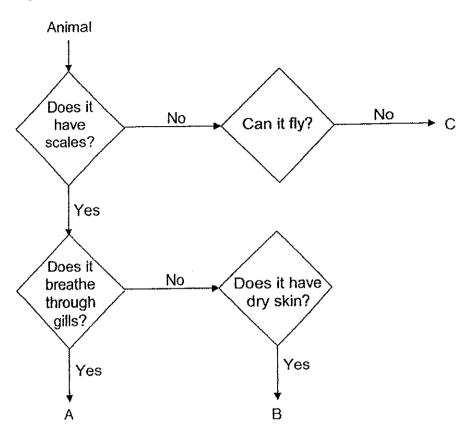
It has no legs and stays underground during the dry season.



Which of the following reasons can help the class conclude that animal X is an amphibian?

- A Animal X can swim.
- B Animal X has no legs...
- C Animal X lays its eggs in water χ
- D Animal X can live both on land and in water.
- (1) Donly
- (2) A and C only
- (3) B and D only
- (4) A, B and C only

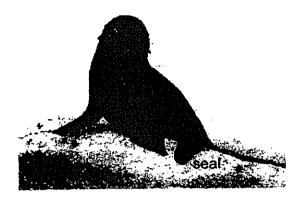
10. Study the flow chart below.



Based on the flowchart, which one of the following animals represent A, B and C correctly?

| [| Α | В | С |
|-----|----------|------------|---------|
| (1) | goldfish | salamander | monkey |
| (2) | dolphin | crocodile | pelican |
| (3) | dolphin | salamander | pelican |
| (4) | goldfish | crocodile | monkey. |

11. Which of the following statements are true about seals?



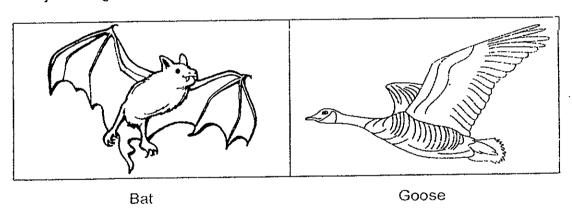
- A They breathe using lungs.
- B They have no outer body covering.
- C The female seals produce milk for their young.
- D They stay under the sun to increase their body temperature.
- (1) A and C only

(2) B and D only

(3) A, B and D only

(4) B, C and D only

12. Study the diagram below.



Which of the following statements about the bat and the goose is/are false?

- A Both animals lay eggs.
- B The bat cannot fly but the goose can fly.
- C The bat's body is covered with hair but the goose's body is covered with feathers.
- (1) A only

(2) Conly

(3) A and B only

(4) B and C only

- 13. Which one of the following explains why insects need a hard outer covering?
 - A It keeps the insects warm.
 - B It gives the insects their shape.
 - C It protects the insects' soft bodies.
 - (1) A only

(2) A and B only

(3) B and C only

(4) A, B and C

- 14. Which one of the following statements is true?
 - (1) Only birds can fly.
 - (2) Only fish have gills.
 - (3) Only fish have scales.
 - (4) Only birds have feathers.
- 15. Study the information in the table below carefully.

| Insect | Has wings | Destroys property | Spreads diseases |
|--------|-----------|-------------------|------------------|
| Α | yes | no | ·yes |
| В | no | yes | no |
| С | yes | no | no |
| D | no | no | no |

Based on the information above, which one of the following could represent insects A, B, C and D?

| | Α | В | С | D |
|-----|------------|------------|------------|------------|
| (1) | ladybird | ant | mosquito | silverfish |
| (2) | silvertish | ladybird | ant | mosquito |
| (3) | mosquito | silverfish | ladybird | ant |
| (4) | ant | mosquito | silverfish | ladybird |

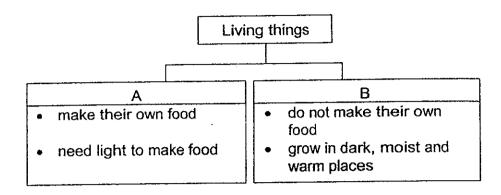
- 16. Which one of the following explains why living things die?
 - A They die when they become old or fall ill.
 - B They die when they are hurt by human activities.
 - C They die when they are eaten by other living things.
 - D They die when they do not have enough air, food or water.
 - (1) A and D only

(2) B and C only

(3) A, B and C only

(4) A, B, C and D

17. Study the chart below.



Which one of the following best represents headings A and B?

| A | В |
|-----------|----------|
| Fungi , | Animals |
| Plants - | Fungi |
| Bacteria, | Plants |
| Animals | Bacteria |

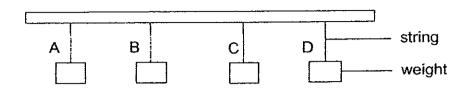
- 18. Which one of the following explains why bacteria are classified as living things?
 - (1) They can be useful or harmful.
 - (2) They feed on other organisms.
 - (3) They can be found everywhere.
 - (4) They can be seen under the microscope.
- 19. Which of the following objects will sink in water?
 - A Rubber ball
 - B Ceramic tile
 - C Glass marble
 - D Wooden toothpick
 - (1) A and C only

(2) B and D only

(3) A, B and C only

(4) A, B and D only

20. David wanted to test the strength of four strings made of different materials, A, B, C and D. He hung weights on each string. He increased the number of weights until the string broke.



He then recorded the most number of weights the string could hold before it broke.

| String | Number of weights added |
|--------|-------------------------|
| Α | 11 |
| В | 7 |
| С | 5 |
| D | 14 |

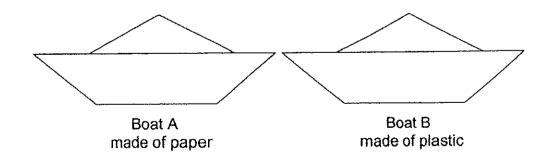
Based on his results, which string was the strongest?

(1) A

(2) B

(3) C

- (4) D
- 21. Kai Wen folded two boats using two different materials. Boat A was made of paper while boat B was made of plastic. He put both of the boats into a basin of water. A few minutes later, he realized that Boat A tore.



Which property was he testing for?

(1) Strength

(2) Flexibility

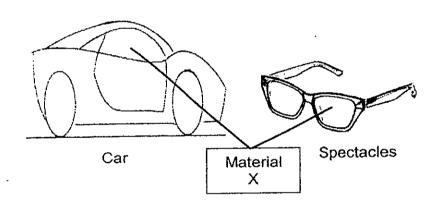
(3) Transparency

(4) Waterproof

- 22. Siti tested a material and listed its properties as shown below.
 - · It is flexible
 - It is waterproof

Based on the properties above, which one of the following objects can be made using this material?

- (1) key
- (2) towel
- (3) fish tank
- (4) water hose
- 23. Material X can be used to make a part of the two objects as labeled below.

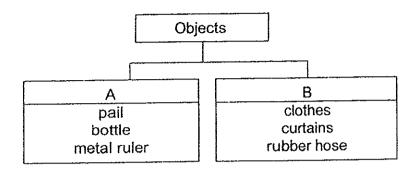


Which of the following properties must Material X have for the parts to function?

- A It is strong so it does not break easily.
- B It is waterproof so it does not absorb water.
- C It is flexible so it can bend without breaking
- D It is transparent to allow most light to pass through.
- (1) A and B only

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

Study the classification chart below. 24.



Which property has been used to classify the objects?

- Flexibility (1)
- (2)
- Waterproof
 Ability to float on water (3) (4)
- Degree of transparency

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 1 2014

BOOKLET B

Date: 8 May 2014

Duration: 1 h 20 min

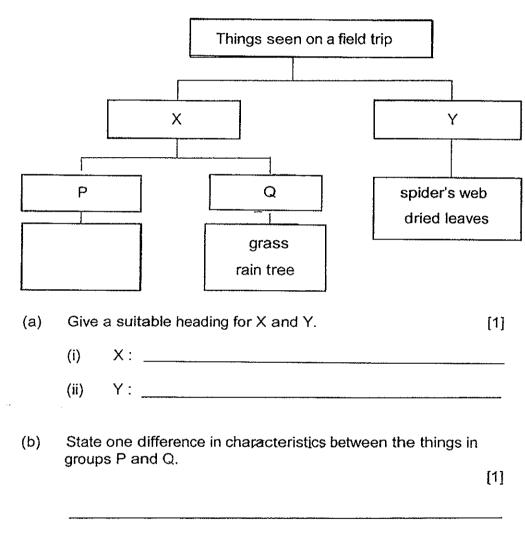
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|-------------------------|--|------------------------|---------------------|------------------------|-------------|
| Class: Primar | y 3 () | | | | |
| Marks Scored | <u>:</u> | | | | |
| Booklet A: | | 48 | | | |
| Booklet B: | | 32 | | | |
| Total : | | 80 | | | |
| We seek yo confirmation | marks awarded sho ur understanding of marks will lead to | in this m delays in | natter a the gen | s any de eration of | elay in the |
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Booklet B consists of 10 printed pages including this cover page.

Section B (32 marks)

Write your answers to questions 25 to 34 in the spaces provided.

25. Trevor classified some things he had seen on a field trip using the diagram below.

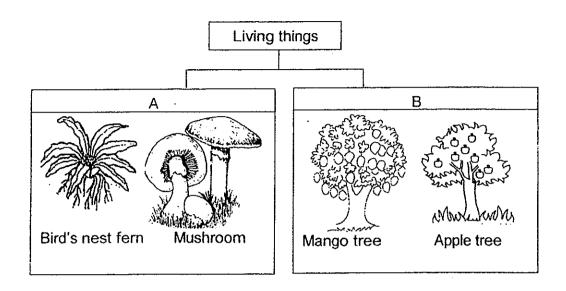


| 26. | Andy found | two | living | things, | Α | and | В, | and | recorded | the | following |
|-----|--------------|-----|--------|---------|---|-----|----|-----|----------|-----|-----------|
| | observations | 8. | | | | | | | | | |

| А | В |
|--|---|
| It has roots, stem and leavesIt grows towards light | It has a cap, stalk, gills and spores It grows in a dark, moist and warm place |

| W | hich group of living things do A and B belong to? [2 |
|----|--|
| A: | |
| B: | |
| sţ | ndy classified some ferns in group B because the ferns had cores. Give a reason, based on a characteristic of ferns, xplain why he is wrong. |
| | |

27. Study the diagram below.

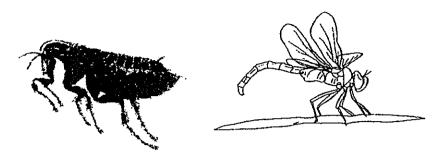


- (a) State the correct headings to represent A and B [2]

 A:

 B:
- (b) Although they are in the same group, state a characteristic that is different between Mushroom and Bird's nest fern. [2]

28. Study the two animals shown below.



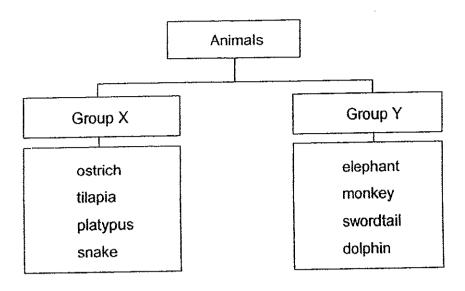
Animal A

Animal B

| Based only | on what | can be s | een in tl | ne dia | gram, | stat |
|-------------|------------|------------|-----------|--------|--|----------|
| differences | between ar | nimal A an | d animal | В. | | |
| (i) | | | | | <u>. </u> | |
| | | | | | | |
| | | | · | | | |
| | | | <u> </u> | | | <u> </u> |

| 29. | A tea | A team of scientists found a strange animal as described below. | | | | | | | |
|-----|-------|---|--|--|--|--|--|--|--|
| | | It has fins to swim and walk on land. It has gills to breathe underwater. It breathes through its moist skin when out of water. | | | | | | | |
| | Som | scientists have difficulty grouping the animal. e scientists grouped them as fish while others grouped them as nibians. | | | | | | | |
| | (a) | Give 2 reasons why the animal can be grouped as 'Fish'. [2] | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | (b) | Give 2 reasons why the animal can be grouped as 'Amphibian' [2] | | | | | | | |
| | | | | | | | | | |
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30. Eight animals have been classified in the chart below.

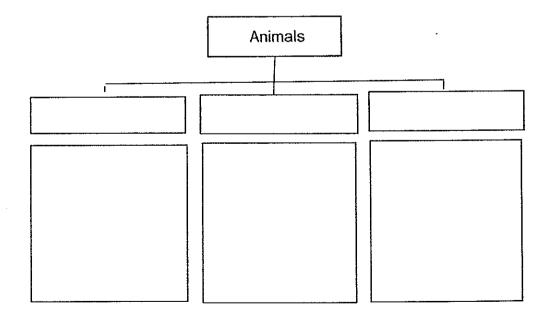


- (a) How are the animals in group X different from the animals in group Y?

 [1]
- (b) Reclassify all the eight animals into three groups in the chart below, based on their outer covering.

 Give a suitable heading for each group.

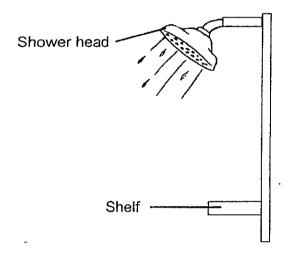
 [3]



31. Study the statements about bacteria below. Put a (tick) in the correct column for each statement. [3]

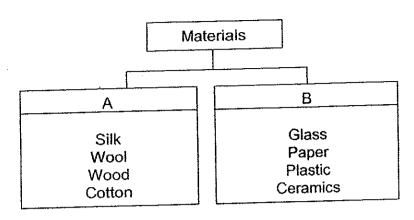
| | Statements | True | False |
|-----|--|------|-------|
| (a) | Bacteria can be seen using a magnifying glass. | | |
| (b) | Bacteria come in different shapes. | | |
| (c) | All bacteria are harmful. | | |

32. Anna needed to make a shelf to put a shampoo bottle in her shower room.



Give two reasons why metal is suitable for making the shelf. [2]

33. The diagram below shows the classification of some materials.

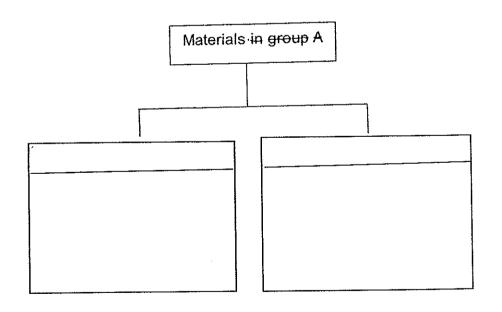


- (a) State the suitable headings for groups A and B

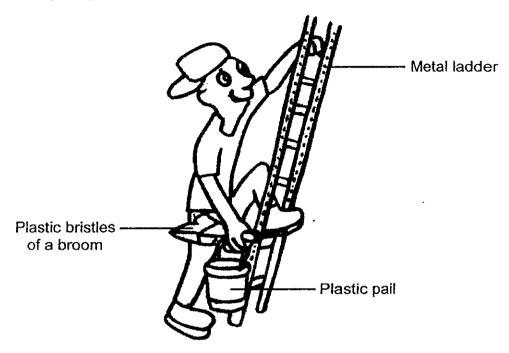
 Group A: _____

 Group B: _____
- (b) Reclassify all the eight materials into two groups in the chart below.

 Give a suitable heading for each group. [2]



34. Study the picture of the cleaner below.



- Give a reason, based on their properties and the function of the objects, why the materials are suitable for making the three objects above. [3]
 - (i) Metal ladder
 - (ii) Plastic bristles
 - (iii) Plastic pail



EXAM PAPER 2014

LEVEL : PRIMARY 3 SCHOOL : NANYANG

SUBJECT : SCIENCE

TERM : SA1

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

Q25 (a) (i) X: Living things

(ii) Y: Non-living things

- (b) Things in group P can move freely from place to place but things in group Q are rooted to one spot.
- Q26 (a) A: Plants

B: Fungi

- (b) Ferns make their own food while fungi absorbs food from their surroundings.
- Q27 (a) A: Reproduce by spores B: Reproduce by seeds
 - (b) Mushroom do not make their own food while bird's nest fern make their own food.
- Q28 (a) Insects. Insects have a pair of feelers, three body parts and six legs.

(b) (i) Animal A has no wings but animal B has wings.

(ii) Animal A has hairy legs but animal B does not have hairy legs.

- Q29 (a) Fish have fins to swim and fish have gills to breathe.
 - (b) They have moist skin to breathe when out of water and they can live both on land and in water.
- Q30 (a) Group X lay eggs but group Y give birth to young alive.
 - (b) Feathers Ostrich

Scales - Tilapia, Snake, Swordtail

Hair - Platypus, Elephant, Monkey, Dolphin

- Q31 (a) False
 - (b) True
 - (c) False
- Q32 It needs to be waterproof as it is exposed to water in the bathroom and it needs to be strong to hold the toiletries place on it.
- Q33 (a) Group A: Natural

Group B: Man-made

- (b) Man-made Flexible, Silk, wool, cotton, paper Once Alive – Stiff, wood, glass, ceramics
- Q34 (a) (i) Metal is strong. It can withstand the weight of the cleaner without breaking.
 - (ii) Plastic is flexible. It allows the bristles to bend, sweeping the dirt away.
 - (iii) Plastic does not break easily so when the person use it, it would not fall.

