Test: (F) Primary 3 - Term 2 (SA1) Science (ACS)
Points: $\quad 56$ points
Name: $\qquad$

## Score:

$\qquad$

## Date:

Signature:

Select multiple choice answers with a cross or tick:Only select one answer
Can select multiple answers

## Booklet A (56 marks)

For each question from 1 to 28 , four options are given. One of them is the correct answer.

The classification chart below shows how some things were classified according to certain characteristics.


2
Which of the following clearly represents letters $\mathrm{X}, \mathrm{Y}$ and Z ?
(1)
(2)
(3)
(4)

| $\mathbf{X}$ | Y | Z |
| :---: | :---: | :---: |
| Living | Can reproduce | Water lily |
| Cannot die | Plants | Banana Tree |
| Living | Plants | Shark |
| Cannot die | Can reproduce | . Cat |A) 1B) 2C) 3D) 4

Evelyn has classified some objects as shown below.

| Group A | Group B |
| :---: | :---: |
| White board | Skipping ropes <br> Students <br> Hockey sticks <br> Chairs |
| Tennis balls |  |

Which of the following are the correct headings for Group A and Group B?
(1)
(2)
(3)
(4)

| Group A | Group B |
| :---: | :---: |
| Found in classroom | Found in PE store room |
| Non-living | Living |
| Found in living room | Found in toilet |
| Living | Non-living |A) 1B) 2C) 3D) 4

## Question 3 of 65

Study the two groups of things below.


Which one of the following is true about the two groups of things?
(1)
(2)
(3)

| Group P | Group Q |
| :---: | :---: |
| Can grow | Cannot grow |
| Can reproduce | Cannot reproduce |
| Cannot make its own food | Can make its own food |
| Cannot respond to changes <br> around them | Can respond to changes around <br> them |A) 1B) 2C) 3D) 4

Peter went to the field and saw some mimosa plants. After he had gently touched the leaves of the mimosa plant, the leaves folded inwards immediately.


Which of the following characteristics is shown when the leaves of the mimosa plant folded inwards̀?A) Living things are shy.B) Living things can die.C) Living things can respond to changes around themD) Living things can move from one place to another by themselves.

Some animals are grouped as shown in the classification table below.

| Group R | Group P |
| :---: | :---: |
| Horse | Owl |
| Sheep | Snake |
| Lion | Seal |

These animals are grouped according to $\qquad$ .A) what they eatB) where they liveC) their outer coveringD) how they move about

The table below shows the characteristics of things A and B .

| Things | Does it need air? | Can it grow? | Can it fly? |
| :---: | :---: | :---: | :---: |
| A | No | No | Yes |
| B | Yes | Yes | Yes |

Which one of the following correctly identifies A and B ?
(1)
(2)
(3)
(4)

| Bird | Airplane |
| :---: | :---: |
| Helicopter | Airplane |
| Butterfly | Helicopter |
| Airplane | Bird |A) 1B) 2C) 3D) 4

Peter wants to conduct an experiment to find out if living things need water to survive.


Which of the two set-ups above should he use to conduct his experiment?A) A and BB) A and CC) B and CD) B and D

## Question 8 of 65

Which one of the following examples does not show the characteristics of a living thing?A) A dog has given birth to 5 puppies.B) A boy is now 5 cm taller than he was last year.C) A school flag is flapping when the wind blows.D) A girl moved her hand away after touching a hot kettle.

Remus has written a riddle that describes a plant. Read the riddle below carefully.
"I grow on a tree.
I cannot bear fruits.
I reproduce from spores. What am I?"
The riddle best describes a $\qquad$ .A) Mango plantB) Cactus PlantC) Balsam plantD) Staghorn fern

How is the bird's nest fern different from the rose plant?


Bird's nest fern


Rose plant

A It has leaves.
B It reproduces from spores.
C It cannot make its own food.A) A onlyB) B onlyC) A and C onlyD) B and C only

Mrs Kang told her students to observe some plants. She then asked the students to find out where the spores were found. Four students have given their responses as shown in the table below.

Whose response is correct?

| Name of student Where spores are found <br> (1) Alan <br> (2) In the roots <br> (3) Beth <br> Cathy On the stem <br> (4) On the leaf <br> Daniel On the fruit |
| :--- |A) 1B) 2C) 3D) 4

Some fruits have been classified in the following groups.


Based on your observation, which fruit was classified wrongly?A) AB) CC) ED) $G$

## Question 13 of 65

Ben, Helen, Ray and Janet were having a discussion on flowering and non-flowering plants and made the following statements.

Ben: Flowering plants only grow on land.
Helen: Flowering plants can reprodue by seeds.
Ray: Non-flowering plants cannot produce fruits.
Janet: Non-flowering plants cannot respond to changes around them.
Whose statements are correct?A) Ben and RayB) Ben and JanetC) Helen and RayD) Helen and Janet

Kenneth placed a plant in a beaker of water and left it near a window. He then added a layer of oil on the surface of the water.


What did Kenneth observe after 5 days?A) The plant wilted and died.B) The plant lost all its roots.C) The water level in the beaker decreased.D) The water level in the beaker remained the same.

## Question 15 of 65

One morning, Leroy observed that the healthy banana tree in his garden did not have any flowers. What could be the most likely possible reason for his observation?
A) The banana plant is a non-flowering plant.B) The banana plant only produces fruits but not flowersC) The banana plant has flowers that only appear at night.D) The banana plant only bears flower at a specific time of the year.

Thé following table gives information on four plants, $\mathrm{W}, \mathrm{X}, \mathrm{Y}$ and Z , based on two characteristics. A tick ( $\checkmark$ ) shows that the plant has the characteristic.

| Characteristics | W | x | y | Z |
| :---: | :---: | :---: | :---: | :---: |
| Has fruits that are edible |  | $\checkmark$ |  | $\checkmark$ |
| Grows on land | $\checkmark$ |  |  | $\checkmark$ |

From the information above, in which group, $A, B, C$ or $D$, do plants $W$ and $Z$ belong in the following classification chart?

(1)
(2)

|  | Plant W | Plant Z |
| :---: | :---: | :---: |
|  | D | B |
| B | A |  |
| C | D |  |
| A | C |  |

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

## Question 17 of 65

Which of the following statements about flowering plants is true?A) Only plants with flowers can make their own foodB) Only plants with green leaves can make their own food.C) Plants with leaves of any colours can make their own food.D) Plants that reproduce from spores cannot make their own food.

The diagram below shows three leaves, $P, Q$ and $R$.


P


Q


R

Based on your observation, which of the following description(s) of the leaves is/are correct?

A They are palm-shaped.
B They are heart-shaped.
C They have jagged edges.
D They have smooth edges.A) C onlyB) A and C onlyC) A, B and D onlyD) B, C and D only


In which group does a toad belong to?A) Group WB) Group $X$C) Group YD) Group Z

Which of the following is not an insect?
A)

B)

C)

D)


Study the organism below.


Which of the parts shown above help the organism to swim?A) B and C onlyB) A and D onlyC) A, B and D onlyD) All of the above

Study the flowchart below.


Which one of the following correctly represents the group of animals $\mathrm{W}, \mathrm{X}$ and Y belong to?
(1)

| Bird | Amphibian | Fish |
| :---: | :---: | :---: |
| $Y$ | $X$ | $W$ |
| $W$ | $Y$ | $X$ |
| $Y$ | $W$ | $X$ |
| $X$ | $Y$ | $W$ |A) 1B) 2C) 3D) 4

The picture shows an ostrich.


## A It is a bird as it has a beak.

B It is a bird as it has feathers.
C It is not a bird as it cannot fly.
D It is not a bird as it can run very fast.
Which of the above statements are true of an ostrich?A) D onlyB) A and B onlyC) C and D onlyD) A, B and C only

## Question 24 of 65

Several children observed Animal X and made the following statements.
Andy: It lays eggs.
Alan: It has a long tail.
John: It has moist skin.
Mark: It can also breathe with lungs.
Which animal group does Animal X most likely belong to?A) FishB) MammalC) ReptileD) Amphibian

Study the animals below.


House Lizard


Frog

Which of the following is true for house lizard but false for frog?A) Can live in water only.B) Reproduce by laying eggs.C) Have dry skin covered with scales.D) Have a constant body temperature.

Study the classification chatt below.


Which of the following can be the sub-headings $X$ and $Y$ be?

|  | $\mathbf{\| c \|}$ | $\mathbf{y}$ |
| :---: | :--- | :--- |
| A | Give birth to young alive | Lay eggs |
| B | Have an outer covering of hair | Do not have an outer covering of hair |
| C | Have a constant body <br> temperature | Do not have a constant body <br> temperature |
| D | Suckle their young | Do not suckle their young |

A) B and C onlyB) C and D onlyC) A, B and D onlyD) All of the above

## Question 27 of 65

Jason found an animal in a garden and he wanted to find out if it is an insect. What must he do to ensure that it is an insect?A) Measure the length of the animal.B) Find out whether the animal has wings.C) Observe whether the animal lays eggs.D) Find out the number of body parts the animal has.

Study the flow chart below.
A) AB) BC) CD) D

## Booklet B

For questions 29 to 41, write your answers in a paper.
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

## Mrs Lee gave six figures, A, B, C, D, E and F, to Jerry as shown below.



A


State one characteristic that Jerry could use to classify the 6 figures into 2 groups so that there is an equal number of figures in each group.

Mrs Lee asked Jerry to use anфther characteristic to regroup the six figures into 2 groups with an equal number of figures in each group. How could Jerry regroup the six figures?
Write the letters (A, B, C, D, E and F) in the boxes provided.

reference to previous question)

The table below gives information about four things based on some characteristics. A tick ( $\checkmark$ ) shows that the thing has the characteristic.

|  | Thing |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Characteristic | P | Q | R | S |
| Needs air, food and water to survive | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Can be found inside the pond | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |
| Can reproduce and can die | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Can make its own food | $\checkmark$ | $\checkmark$ |  |  |

Fill in the boxes with the letter $P, Q, R$ or $S$ in the classification table below.


With reference to the previous question, name a thing that has the same characteristics as Q.

William observed and classified some things into 2 groups as shown in the table below.

| Group | Group |
| :---: | :---: |
| Cockroach | Fork |
| Elephant | Spoon |
| Mushroom | Sharpener |
| Fern | Eraser |

Based on the information above, answer the following questions:
Give a suitable headings for Group X and Group Y.
Group X: $\qquad$
Group Y: $\qquad$

Classify the things in Group X in the table below based on the given headings.


Help William to classify the objects in Grpup Y into 2 groups in the table below based on the headings provided.


Study the flow chart which shows the characteristics of some plants.


Based on the flow chart, state all the characteristics of $Z$.

## Question 37 of 65

Based on the flow chart, state a difference between X and Y .

The diagram below shows an Ixora plant.


Which letter, $\mathrm{X}, \mathrm{Y}$ or Z , in the flow chart above represents the Ixora plant?
(with reference to the previous flow chart)

James used three similar plants, A, B and C, to conduct an experiment. He removed all the leaves from Plant $A$, and some leaves from Plant $C$. He then placed each plant in a container filled with 700 ml of water as shown in the diagram below.


After 3 days, James measured the amount of the water in each container. The table below shows the amount of water left in each container.

| Amount of water left after 3 days (ml) |  |  |
| :---: | :---: | :---: |
| A | B $_{2}$ | C |
| 695 | 520 | 580 |

Based on the results in the table, state if each of the following statement is 'True', 'False' or 'Not possible to tell' by putting a tick in the correct box.

|  | Statement | True | False | Not <br> possible <br> to tell |
| :---: | :--- | :---: | :---: | :---: |
| (i) | Plant C took in the greatest <br> amount of water. |  |  |  |
| (ii) | Plant A took in less water <br> than plant B. |  |  |  |

After 1 week, James recorded his observations of the three plants in the table below.

| Plants | Observations |
| :---: | :---: |
| A | It died. |
| B | All the leaves are still green and healthy. |
| C | Only a few leaves are still green and healthy. |

Why did plant B grow the best?

## Question 41 of 65

The table below shows the different conditions in his experiment. Put a tick in the correct box(es) to indicate the condition(s) he should keep the same in order to carry out a fair experiment.

| Conditions | Keep the same |
| :---: | :---: |
| Amount of roots |  |
| Type of plant used |  |
| Location of the plants |  |
| Number of leaves on the plant |  |

Study the two fruits based on the characteristics given in the table below.


Papaya


Lychee

Compare the two fruits based on the characteristics given in the table below.

| Characteristics | Papaya | Lychee |
| :---: | :---: | :---: |
| Texture of outer <br> covering |  |  |
| Number of seeds |  |  |

The diagram below shows a watermelon.


Watermelon

Which fruit is the watermelon similar to, papaya or lychee? Explain why.

Jason placed a plant which was growing upright in a black box that has a hole on the left side. After 2 days, he noticed that the plant grew towards the left as shown in the diagram below.


Which characteristics of living things does the experiment show?

## Question 45 of 65

With reference to the previous question, draw how the same plant will most likely look after a few days when he placed it in a black box with a hole on the right.

Nathan planted a seed in a pot with soil and placed it near the window in his room to receive sunlight. He then observed the seed growing into a plant over 8 weeks. He measured and recorded the height of the plant over 8 weeks in the table as shown below.

| Week | Height $(\mathbf{c m})$ |
| :---: | :---: |
| 1 | 2 |
| 2 | 3 |
| 3 | 7 |
| 4 | 10 |
| 5 | 13 |
| 6 | $?$ |
| 7 | 19 |
| 8 | 22 |

Based on the results in the table, what would be the height of the plant in week 6 ?
The height of the plant in week 6 would be $\qquad$ cm .

With reference to the previous question, state the characteristics of living thing that the plant shows.

## Question 48 of 65

After week 8, Nathan went on a trip with his entire family for 2 weeks and there was no one at home during that time. When Nathan returned home, he observed that the plant withered and died at the same location. What could be a likely reason for the plant to die?

The diagram below shows a plant with different parts, $\mathrm{W}, \mathrm{X}, \mathrm{Y}$ and Z .


Name the parts of the plant in the table below.

| Letter | Name of the part of the plant |
| :---: | :---: |
| W |  |
| $X$ |  |
| $Y$ |  |
| $Z$ |  |

Why are plants important to the survival of other living things?

Study the flow chart on animals A, B, C and D.
$\square$


Based on the flow chart, which animal A, B, C, D is most likely an Eagle?

## Question 52 of 65

Based on the flow chart, state two characteristics of Animal D.

## Question 53 of 65

Give an example of animal B.

Study the classification chart given below.


Which one of the animals is classified wrongly?

Question 55 of 65

With reference to the previous question, explain clearly based on its characteristics why the animal you chose in (a) is classified wrongly? [Do not compare the animal group they belong to]

Give suitable sub-headings for Group A and Group B.
Group A : $\qquad$

Group B : $\qquad$

## Observe animals E and F carefully.



How do animal $E$ and $F$ reproduce?

Question 58 of 65

With reference to the previous question, based on your observation, state one similarity between animal $E$ and animal $F$.

With reference to the previous question, state one difference between animal $E$ and animal F.

## Study Animal Y below.



Animal $Y$
Based on your observation, which animal group does Animal Y belong to?

State two reasons for your answer in the previous question.

## Question 62 of 65

With reference to the previous question, name the outer covering of Animal Y . State its function.

The diagram below shows a spider.


Does the spider belong to the same animal group as Animal Y ? Give a reason for your answer.
(with reference to the
previous question)

The pictures below show an angelfish and a crocodile.


Angelfish


Crocodile

What animal group do the Angelfish and Crocodile belong to?
Angelfish: $\qquad$
Crocodile: $\qquad$

Based on the characteristics of the animal groups that the angelfish and crocodile belong to, state two similarities between the angelfish and the crocodile.
(with reference to
the previous question)

