## ClassMarker

## Primary 4 - Term 4 Science (RGPS)



## Test Introduction

+ Add Introduction

58 Questions (66 Points)

Test Questions 1 Test Assignment

## Question 1

Booklet A (52 x 2 marks)
For each question from 1 to 25 , four options are given. One of them is the correct answer.

When threatened, the hedgehog curls itself up into a ball, making it difficult for predators to eat it.


This shows that the hedgehog is a living thing because it $\qquad$ $-$
A) grows
B) reproduces
C) needs air, food and water
D) respond to changes in its surroundings

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,155,786$ |

## Question 2

## Study the diagram below carefully.



## What could P be?

A) bird
B) insect
C) mammal
D) amphibian

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,155,794$ |

$«^{\pi}$ Answers | Edit | Duplicate | 1 Used In | $\stackrel{\text { Reorder }}{ }$

## Question 3

Joanne made the following observations on the life cycle of an animal.

- There are four stages in the life cycle
- Some stages of the life cycle occur in water

What animal was Joanne observing?
A) frog
B) beetle
C) mosquito
D) cockroach

Randomize Answers: N

| Date Added: | Tue 1st Dec 2020 |
| :--- | :--- |
| Last Modified: | N/A |
| QID\#: | $25,155,810$ |

$x^{\star}$ Answers | Edit | © Duplicate | 1 Used In | $\hat{\text { ® Reorder }}$

## Question 4

The diagram below shows four stages of the growth of a young plant in the incorrect order. Arrange the stages in the correct order.


c


D

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

Which one of the following shows the correct sequence when food moves through some parts of the digestive system?
(3)
A) 1
(B) 2
C) 3
D) 4

## Question Type:

Randomize Answers:

Last Modified: N/A
QID\#:

## Multiple Choice

No
Tue 1st Dec 2020
N/A
$25,155,824$
$\qquad$
$*^{\star}$ Answers | Edit | © Duplicate | Used In | $\stackrel{\sim}{\text { Reorder }}$

## Which of the following objects is made of waterproof material?


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

## Question Type:

Randomize Answers:
Date Added:
Multiple Choice

Last Modified:
QID\#:

No
Tue 1st Dec 2020
N/A
$25,155,839$

## $\mathbf{*}^{n}$ Answers | Edit | © Duplicate | $\uparrow$ Used $\ln \mid \stackrel{\rightharpoonup}{*}$ Reorder

## Question 7

Matter is anything that has mass and occupies space.
Which of the following is not matter?
A) oil
B) air
C) sand
(D) shadow

## Question Type:

Randomize Answers: No
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#:

## Question 8

Which one of the following is a source of light?
(1) eyes
A) 1
B) 2
C) 3
D) 4

Question Type:
Multiple Choice
Randomize Answers:
Date Added:
Last Modified:
Tue 1st Dec 2020
N/A
QID\#:

Siti cooked a pot of chicken soup in the pot shown below.


She was able fo remove the lid of pot using the wooden handle. This is because wood is a $\qquad$ -
A) light material
B) flexible material
C) poor conductor of heat
D) good conductor of heat

## Question Type:

Randomize Answers:
Date Added:
Multiple Choice

Tue 1st Dec 2020
Last Modified:
QID\#:
N/A
$25,155,874$

## $\mathbf{k}^{\star}$ Answers | Edit | 纪Duplicate | 4 Used $\ln \mid \hat{*}$ Reorder

## Question 10

An object P was attracted to a magnet, as shown in the figure below.


Object $P$ is made of $\qquad$ .
A) iron
B) wood
C) plastic
D) rubber

The diagrams below show the life cycles of a chill plant and a chicken.


Which one of the following statements best describes the conditions that are required during process $X$ and process $Y$ ?
A) warmth must be present in both processes
B) sunlight must be present in both processes
C) both processes only takes place in the night
D) both processes require the presence of the adults

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| RID\#: | $25,155,900$ |



Question 12

Study the fowchart below.


Amelia identfies Animals X and Y as shown in the table below.

| Animal $X$ | Animal $Y$ |
| :---: | :---: |
|  |  |

What are questions A and B likely to be?

| Question A |  | Question B |
| :--- | :--- | :--- |
| (1) | Does it have a three-stage life cycle? | Does the young resemble its adult? |
| (2) | Does the young resemble ils adult? | Does the young live on land? |
| (3) | Does it have a four-stage life cycle? | Does il have a three-stage life cycle? |
| (4) | Does the young five on land? | Does it have a four-stage Ife cycle? |

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

## Question Type:

Randomize Answers:
Date Added: No

Last Modified: N/A
QID\#:

Tue 1st Dec 2020
N/A
25,155,905
$x^{\pi}$ Answers | Edit | E? Duplicate

James wanted to conduct an experiment to find out if different amounts of digestive juices would affect the rate of digestion of noodles.

He prepared the following set-ups for the experiment.

| Set-up | Volume of <br> digestive <br> juices $(\mathrm{ml})$ | Type of <br> noodles | Mass of <br> cooked <br> noodles (g) | Duration of <br> experiment <br> (minutes) |
| :---: | :---: | :---: | :---: | :---: |
| A | 5 | rice | 20 | 20 |
| B | 5 | rice | 40 | 20 |
| C | 10 | rice | 20 | 20 |
| D | 10 | wheat | 40 | 15 |

Which of these set-ups should James use to ensure a fair test has been conducted?
A) A and B
B) A and C
C) B and C
D) B and D

## Question Type:

Multiple Choice
Randomize Answers:
Date Added: Tue 1st Dec 2020
Last Modified:
QID\#:
N/A
25,155,960

## 

Question 14

The diagram shows a plant.
Parts A, B, C and D show the different parts of the plant.


Which of the following matches the correct part of the plant to its function?

| (1)Part Name of part Function <br> A Flower To make food <br> (2) B Fruit <br> (3) C Stem <br> (4) D Roots <br> (To transport water from the roots to the other   <br> parts of the plant   |
| :--- |

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

## Question Type:

## Multiple Choice

Randomize Answers:
Date Added:
Last Modified:
QID\#:
Tue 1st Dec 2020
N/A
25,155,969

## Plant P grew around a pole while Plant Q grew around a tree trunk.



## Which of the following is correct?

A) Both plants are non-flowering plants
B) Plant $p$ has a strong stem but plant $Q$ has a weak stem
C) Both plants need a support to grow towards the sunlight
D) Plant P can make its own food as it has flowers but not plant Q

Question Type:
Multiple Choice
Randomize Answers:
Date Added:
Last Modified:
Tue 1st Dec 2020
N/A
25,155,989

The diagram below shows a tightly sealed $1000-\mathrm{cm}^{3}$ container.
The container was initially filled with $200 \mathrm{~cm}^{3}$ of liquid $X$ and $50 \mathrm{~cm}^{3}$ of solid $Y$. The rest of the container was filled with gas $\mathbf{Z}$.


## $50 \mathrm{~cm}^{3}$ of liquid X was removed.

Which of the following statements about the volume of matter in the container are true?

A The volume of gas $Z$ was $750 \mathrm{~cm}^{3}$ at first.
B The final volume of ges $\mathbf{Z}$ was $650 \mathrm{~cm}^{3}$ in the end.
C. The final volume of gas $\mathbf{Z}$ was $800 \mathrm{~cm}^{3}$ in the end.

D The final volume of liquid X was $100 \mathrm{~cm}^{3}$ in the end.
A) A and C
B) A and D
C) B and C
D) B and D

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,155,997$

## $\mathbf{x}^{x}$ Answers | Edit | 纪Duplicate | 4 Used $\ln \mid \stackrel{\rightharpoonup}{\boldsymbol{*}}$ Reorder

Question 17

Objects A and B were placed on a balance as shown below.


Objects A and B were then placed in identical containers containing the same amount of water.


Based on the observations above, which of the following statement is true?

|  | Volume | Mass |
| :--- | :--- | :--- |
| (1) | Object A has a larger volume than <br> object B. | Object A has a larger mass than <br> object B. |
| (2) | Object A has a larger volume than <br> object B. | Object A has the same mass as <br> object B. |
| (3) | Object A has a larger volume than <br> object B. | Object A has a smaller mass than <br> object B. |
| (4) | Object A has a smaller volume <br> than object B. | Object A has a greater mass than <br> object B. |

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

Question Type:
Randomize Answers:
Date Added:
Last Modified:
QID\#:

Multiple Choice

Tue 1st Dec 2020
N/A
25,156,003

Cynthia could see her pet dog when she stood behind the glass as shown in the diagram below.


Which one of the following explains why Cynthia could see her pet dog?
A) The glass reflected light from the dog into Cynthia's eyes
B) The glass reflected light from the lamp into Cynthia's eyes
C) The pet dog reflected light from the lamp through the glass into Cynthia's eyes
D) The pet dog gave off light and the light entered Cynthia's eyes through the glass

Question Type:
Randomize Answers:

Last Modified: N/A
QID\#: $\quad 25,156,025$

## 

Question 19

Azahar set up a light source and a light sensor to count the number of balls going through a hole as shown.


He threw a fow identical balls one at a time and recorded the results.

Which one of the following graphs shows the amount of light recorded by the light sensor as he threw the ball?
(1)
Amount of light (units)

(2)
Amount of light (units)

(3)
Amount of light (units)

(4)
Amount of light (units) "

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

## Question Type:

Randomize Answers:
Date Added:
Last Modified:
QID\#:
No
Tue 1st Dec 2020
N/A
25,156,031

Maliida studied the shadows formed by two identical cones. The oones were placed at different positions under identical light sources in a dark room.


1111

paper A

lamp
$1 / 11$

paper B

Which one of the following shadows would be observed on each piece of the paper?
(1)

| Papor A | Paper B |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

A) 1
B) 2
C) 3
$\sqrt{\text { D) }} 4$

## Question Type:

Randomize Answers:
Date Added:
Last Modified:
QID\#:

Multiple Choice
No
Tue 1st Dec 2020
N/A
25,156,039

## Samantha placed a metal spoon in a cup of ice cream.



The spoon became colder after a while.

## Which one of the following explains this?

A) The cup lost heat to the ice cream
B) The ice cream lost heat to the spoon
C) The spoon lost heat to the ice cream
D) The spoon gained heat from the ice cream

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,077$ |

[^0]Remove From Test

Kate placed some water in a beaker at room temperature over a bunsen burner. After 10 minutes, the water started to boil. She left the water boiling in the beaker for 10 minutes. She removed the beaker immedlately and left it in the freezer for another 20 minutes. At the end of the experiment, she noticed that the water is still in liquid state.

Which one of the following graphs correctly shows the results of Kate's experiment?

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

Question Type:
Randomize Answers:
Date Added:
Last Modified:
QID\#:

Multiple Choice
No
Tue 1st Dec 2020
N/A
$25,156,085$

Daniel prepared a set-up to investigate the effect of heat on the volume of air in the flask as seen below.


Which one of the following correctly describes the observation of the experiment and the explanation for the observation?
(1)

| Observation | Explanation |
| :--- | :--- |
| Coloured water was drawn into the <br> delivery tube. | Heat causes a decrease in the <br> volume of air. |
| Coloured water was drawn into the <br> delivery tube. | Heat causes an increase in the <br> volume of air. |
| Formation of bubbles observed in <br> the coloured water. | Heat causes a decrease in the <br> volume of air. |
| Formation of bubbles observed in <br> the coloured water. | Heat causes an increase in the <br> volume of air. |

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

## Question Type:

Multiple Choice
Randomize Answers:
Date Added:
No
Last Modified:
QID\#:
Tue 1st Dec 2020
N/A
25,156,094

Annika labelled the different parts of a bar magnet, $\mathrm{A}, \mathrm{B}$ and C as shown in the diagram below. She brought the bar magnet close to a tray of iron nail as shown in the diagram below

tray of iron nails
Which of the following would most likely show the number of iron nails that would be attracted to parts $\mathrm{A}, \mathrm{B}$ and C of the magnet?
(1)

| A | B | C |
| :---: | :---: | :---: |
| 2 | 6 | 2 |
| 3 | 1 | 8 |
| 6 | 1 | 5 |
| 8 | 6 | 3 |

A) 1
B) 2
$\checkmark$ C) 3
D) 4

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| RID\#: | $25,156,100$ |

[^1]Question 25

The diagram below shows the door bell system. When the switch is closed, the U -shaped core will be magnetized and become an electromagnet, attracting the plate with the hammer, hitting the gong.


What of the following materials should be used to make the U -shaped core and plate?
(1)
(2)
(3)
(4)

| U-shaped core | Plate |
| :---: | :---: |
| Aluminium | Iron |
| Iron | Steel |
| Steel | Copper |
| Copper | Iron |

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

## Question Type: <br> Multiple Choice

Randomize Answers: No
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,156,104$
$«^{\star}$ Answers | Edit | 饱Duplicate | 1 Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$
Question 26

Booklet B
This section 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.
The diagram below shows the human digestive system.


Based on the diagram above, identify the part where
(a) digestion is completed: $\qquad$
A) 1
B) 2
C) 3
D) 4

## Question Type:

Randomize Answers:
Date Added:
Last Modified:
QID\#:

Multiple Choice
No
Tue 1st Dec 2020
N/A
25,156,115
A) 1
B) 2
C) 3
D) 4

Question Type:
Randomize Answers:
Date Added:
No

Last Modified: N/A
QID\#:
$25,156,120$

## $x^{*}$ Answers | Edit | CRDuplicate | 1 Used In | $\uparrow$ Reorder

Question 28

## The diagram shows plant $\mathbf{Y}$.


(a) Name plant part X .

X: $\qquad$

Accepted answers:
leaves

| Question Type: | Free Text |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,183$ |

Question 29
$\qquad$

## Accepted answers：

```
\checkmark \text { food}
```

```
Question Type: Free Text
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID#:
25,156,188
*^Answers | Edit | &}\mathrm{ Duplicate | 4 Used In | 仑 Reorder
```


## Question 30

Xiull left three set－ups of plant $Y$ near a window in her kitchen as shown．She then recorded the water level， H after 2 days．

wanted to find out if the amount of roots of a plant affects the amount of water taken in．Which set－ups should Xiuli use to carry out a fair test to investigate her aim？Explain your answer clearly．

Question Type：Essay
Date Added：Tue 1st Dec 2020
Last Modified：N／A
QID\＃：25，156，213

Correctly answered feedback
Set－up $Q$ and $R$ should be used to carry out a fair test because the amount of water，number of leaves and presence of oil are kept constant in both set－ups to ensure a fair test

## Incorrectly answered feedback

Set－up $Q$ and $R$ should be used to carry out a fair test because the amount of water，number of leaves and presence of oil are kept constant in both set－ups to ensure a fair test

```
```

* Answers | Edit | \&?Duplicate | 4 Used In | 仓 Reorder

```
```

```
```

* Answers | Edit | \&?Duplicate | 4 Used In | 仓 Reorder

```
```


## Question 31

Which of the three set－ups will have the lowest water level H recorded after 2 days？Explain your answer clearly．

```
Question Type: Essay
Date Added: Tue 1st Dec 2020
```

| Last Modified: | N/A |
| :--- | :--- |
| QID\#: | $25,156,230$ |

Correctly answered feedback
P. It makes more food than $Q$ and $R$, has more roots than $Q$ to absorb more water

Incorrectly answered feedback
P. It makes more food than $Q$ and $R$, has more roots than $Q$ to absorb more water

```
* Answers | Edit | &{Duplicate | 4 Used In | 令Reorder
```

Question 32

The picture below shows an empty bottle.


## Circle the correct state for the following things.

Bottle cap:
A) solid
B) liquid
C) gas

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,238$ |

## $\mathbf{k}^{\wedge}$ Answers | Edit | EDDuplicate| $\mathbb{4}$ Used In | $\stackrel{\bullet}{\text { Reorder }}$

Question 33

Content inside bottle:
A) solid
B) liquid
C) gas
Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#:
$25,156,240$

## 

## Question 34

Meixuan placed a metal rod and a plastic rod into a tank of boiling water as shown below. Equal amounts of butter were put on both rods of the same height.


## What would Meixuan observe and why?

Melxuan observed that the butter on the plastic rod melted more
$\qquad$
$\qquad$ conductor of heat than metal.
[2]

Accepted answers:
$\checkmark$ slower,poorer
$\checkmark$ slower, poorer
$\checkmark$ slower ,poorer
$\checkmark$ slower, poorer
slower poorer

Question Type: Free Text
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: 25,156,254
$\qquad$

## Dlane stroked two similar iron rods X and Y with the same magnet as shown in the figure below.



Both rods became temporary magnets and were used to attract similar paper clips.
(a) Tick ( $\checkmark$ ) the correct answer in the table below:
[1]
$\operatorname{Rod} \mathrm{X}$
attracted $\qquad$ Rod Y
A) less paper clips than
B) more paper clips than
C) the same number of paper clips as

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,266$ |



## Question 36

Diane's observations show that the paper clips are $\qquad$ objects.
A) strong
B) magnetic
C) flexible

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#:
25,156,274
$*^{\star}$ Answers | Edit | Equplicate | 1 Used In | $\hat{*}$ Reorder
Question 37

Insect $P$ lays eggs on dead animals upon their death.
-

(a) Complete the life cycle of insect P as shown below.


Accepted answers:
$\checkmark$ larva

Question Type: Free Text
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,156,283$
$x^{x}$ Answers | Edit | © Duplicate | 1 Used In | $\hat{\text { F Reorder }}$
Question 38

Insect P lays eggs on dead animals upon their death.

(a) Complete the life cycle of insect P as shown below.


Accepted answers:
$\checkmark$ Pupa

Question Type: Free Text
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,156,287$

## $\mathbf{k}^{\wedge}$ Answers | Edit | © Duplicate | 1 Used In | $\stackrel{\rightharpoonup}{\text { R Reorder }}$

Question 39

The table below shows the surrounding temperature and the number of days taken for an egg of insect $P$ to turn into an adult.

| Surrounding temperature <br> ("C) | Number of days taken for an egg of <br> insect $P$ to turn into an adult |
| :---: | :---: |
| 20 | 27 |
| 25 | 23 |
| 30 | 15 |
| 35 | 12 |
| 40 | 12 |

(b) What is the relationship betwoen the surrounding temperature and the number of days taken for an egg of insect $P$ to turn into an adult?

|  |  |
| :--- | :--- |
| Surrounding <br> tomperature from <br> $20^{\circ} \mathrm{C}$ to $35^{\circ} \mathrm{C}$ |  |
|  |  |

Correctly answered feedback

| Surrounding <br> temperature from <br> $20^{\circ} \mathrm{c}$ to $35^{\circ} \mathrm{C}$ | The cooler the temperature is, the more <br> number of days it takes for insect P to <br> turn into an adult. |
| :--- | :--- |
| Surrounding <br> temperature from <br> $35^{\circ} \mathrm{c}$ to $40^{\circ} \mathrm{c}$ | The number of days taken for the egg to <br> turn into the adult remained the same <br> when the surrounding temperature <br> increased from $35^{\circ} \mathrm{c}$ to $40^{\circ} \mathrm{C}$. |

[^2]| Surrounding <br> temperature from <br> $20^{\circ} \mathrm{c}$ to $35^{\circ} \mathrm{c}$ | The cooler the temperature is, the more <br> number of days it takes for insect P to <br> turn into an adult. |
| :--- | :--- |
| Surrounding <br> temperature from <br> $35^{\circ} \mathrm{c}$ to $40^{\circ} \mathrm{c}$ | The number of days faken for the egg to <br> turn into the adult remained the same <br> when the surrounding temperature <br> increased from $35^{\circ} \mathrm{c}$ to $40^{\circ} \mathrm{C}$. |

## Question 40

Eleana measured 5 ml of four different substances and added these substances info four different test tubes. Each of the test-tube contains a piece of food. The exporiment took place at room termperature.

She recorded the time taken for the piece of food to be broken down into simpler substances. The results of her investigation is shown in the table below.

| Substance | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| Time taken for the <br> piece of food to be <br> broken down into <br> simpler substances <br> (minutes) | B | 3 | 6 | more than <br> 10 |

(a) Which substance, $\mathrm{A}, \mathrm{B}, \mathrm{C}$ or D , was most effective in breaking down the piece of food into simpler substances? Explain your answer.

```
Question Type: Essay
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID#: 25,156,304
```

Correctly answered feedback
B. It took the least amount of time for the food to be broken down into simpler substances

## Incorrectly answered feedback

B. It took the least amount of time for the food to be broken down into simpler substances

## Question 41

Eleana observed that the piece of food was still intact in the set-up with substance $D$ at the end of the
10 minutes. Based on her observation, what can Eleana conclude about the Set-up with substance D at the end of the 10 minutes?

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,318$ |

Correctly answered feedback
It took the longest amount of time for the food to be broken down into simpler substances

Incorrectly answered feedback
It took the longest amount of time for the food to be broken down into simpler substances

```
* Answers | Edit | Duplicate | { Used In | 今 Reorder Remove From Test
```


## Question 42

State the organ system that is involved in transporting the simpler substances to the other parts of the body

Accepted answers:
$\checkmark$ circulatory
$\checkmark$ circulatory system

| Question Type: | Free Text |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,329$ |

$\varkappa^{\#}$ Answers

```
0}\mathrm{ Edit Duplicate
```

Question 43

Mario carried out an experiment using four different strips of materials, P, Q, R and S, of the same length and thickness. She hung weights on the end of esch material She kept increasing the mass of the weights till the strip of material started to break.


The table below shows the mass of the weights each material could hold before it started to break.

| Materials | Total mass of weights before it started to break <br> $(\mathrm{kg})$ |
| :---: | :---: |
| P | 3.5 |
| Q | 8.5 |
| R | 13.0 |
| S | 17.5 |

Maria conducted the second experiment as shown below. She then measured the maximum distance, d cm, each strip of material could bend.


| Materials | $\mathbf{d}(\mathrm{cm})$ |
| :---: | :---: |
| $\mathbf{P}$ | 0 |
| $\mathbf{Q}$ | 5 |
| $\mathbf{R}$ | 13 |
| $\mathbf{S}$ | 0 |

(a) Marie wanted to choose one of the above materials $P, Q, R$ or $S$ to make a drying rack to dry wet clothes as shown below.


Based on the results obtained from the two experiments, which material, P, Q, R or S , is most suitable for making the drying rack? Explain your answer clearly.

Question Type: Essay
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,156,343$

Correctly answered feedback
a) S . It is the strongest material as it could withstand the most number of weights before it started to break. It is also not flexible, meaning that it can hold its shape. This makes it the most suitable material to make the drying rack as the rack will be carrying items that have weight and the rack needs to have a firm shape.

Incorrectly answered feedback
a) S . It is the strongest material as it could withstand the most number of weights before it started to break. It is also not flexible, meaning that it can hold its shape. This makes it the most suitable material to make the drying rack as the rack will be carrying items that have weight and the rack needs to have a firm shape.

## Question 44

State another property of the material that is needed to be considered for making the drying rack

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,352$ |

Correctly answered feedback
It must be waterproof

Incorrectly answered feedback
It must be waterproof

## Question 45

Based on the results obtained from the two experiments, which one of the materials $P, Q, R$ or $S$ is most suitable for making a fabric bag? Explain your answer.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,367$ |

R. Material R could bend the most easily and could hold 13 KG of weights.

Incorrectly answered feedback
R. Material R could bend the most easily and could hold 13 KG of weights.

## $\mathbf{*}^{\wedge}$ Answers | Edit | Coblicate | 4Used In | 合 Reorder

Remove From Test

## Question 46

The diagram shows a set-up with a cylinder and a metal plunger. Aisha filled the cylinder with $20 \mathrm{~cm}^{3}$ of water leaving $20 \mathrm{~cm}^{3}$ of air.


Aisha pushed the metal plunger downwards as far as she could without any air or water escaping.
(a) Draw how the set-up would look like after she pushed the metal plunger downwards.


Please type "done" to proceed to the next question

Question Type: Essay

| Date Added: | Tue 1st Dec 2020 |
| :--- | :--- |
| Last Modified: | N/A |

Last Modified: N/A
QID\#: 25,156,383


Incorrectly answered feedback


[^3]
## Question 47

Explain your answer in (A)

Question Type: Essay

| Date Added: | Tue 1st Dec 2020 |
| :--- | :--- |
| Last Modified: | N/A |
| QID\#: | $25,156,393$ |

## Correctly answered feedback

Air has no definite volume and can be compressed. However, water has a definite volume and cannot be compressed.

## Incorrectly answered feedback

Air has no definite volume and can be compressed. However, water has a definite volume and cannot be compressed.

Question 48

Peter wanted to investigate the degree of transparency of materials, A, B and C. He prepared the set-up and placed each material in between the light source and the light sensor as shown below.


The amount of light detected by the light sensor are shown in the table below.

| Materials | Amount of light detected by the light <br> sensor (unit) |
| :---: | :---: |
| A | 243 |
| B | 770 |
| C | 0 |

(a) Based on the readings above, arrange the materials, A, B and C, in order of their degree of transparency, starting with the most transparent material.

Clue
Match
most transparent B
transparent A
opaque C

Question Type: Matching
Grade style: Full points if all answers are correct
Shuffle Mode: Shuffle Matches Only
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,156,412$

Question 49

Peter's mother owns a food stall in the canteen. She placed the cooked food in an enclosed food warmer cabinet as shown below such that the pupils could see and select the food when they ordered it.

(b) Based on Peter's results, which material, $\mathrm{A}, \mathrm{B}$ or C , is most suitable for making part $X$ of the food warmer cabinet such that the pupils could see and select the food when they place their order? Explain your answer.

Question Type: Essay
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: 25,156,429

Correctly answered feedback
B. It allows the most light to pass through, reflecting less light into the pupils' eye which enable them to be able to see the food clearer.

Incorrectly answered feedback
B. It allows the most light to pass through, reflecting less light into the pupils' eye which enable them to be able to see the food clearer.

```
**Answers | Edit | ElDuplicate | \ Used In | 人ि}\mathrm{ Reorder
```

Question 50
(c) Peter conducted an experiment to find out the size of shadows of different objects formed on the screen. Two opaque objects, $\mathbf{P}$ and $\mathbf{Q}$, were placed at different distance from the torch as seen below.



Object $P$


Object Q

Draw the shadow of objects, $\mathbf{P}$ and $\mathbf{Q}$, that would be formed on the screen in the box below.

Please type "done" to proceed to the next question

Question Type: Essay
Date Added: Tue 1st Dec 2020
Last Modified:
QID\#:
25,156,447

Correctly answered feedback

[^4]

```
**Answers | Edit | EDDuplicate | 4 Used In | 仓े Reorder
```

Without moving the location of objects $P$ and $Q$, suggest one way that Peter could cast a bigger shadow of object $P$ and $Q$ on the screen.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,462$ |

Correctly answered feedback
Move the torch closer to P and Q

Incorrectly answered feedback
Move the torch closer to P and Q

```
«}\mathrm{ Answers | Edit | &uplicate | & Used In | 仑 Reorder Remove From Test
```

Sytia set up the folowing experiment as shown below. The cups and beakers hive the same volume of water in both set-ups.


Sylvia took the temporativen of the water in both cups usirg a thermerreter at every mirute inteval for 10 minutes and recorded two sets of data. The resuls are represented in the line graphs below.

(a) State the lines that beat represent the semperature of the water in the cups over time in the graph above.

Tempersture of the water in plastic cup : Line $\qquad$
A) $P$
(B) Q

| Question Type: | True False |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,482$ |

```
* Answers E Edit 绍Duplicate 4 Used In 会 Reorder
```

Question 53

Temperature of the water in the metal cup: $\qquad$
A) $P$
B) $Q$

## Question 54

Explain the result of the line graph that represented the temperature of the water in the metal cup

Question Type: Essay
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,156,503$

Correctly answered feedback
The metal cup is a better conductor of heat compared to plastic, thus it conducted heat more quickly from the hot water in the Styrofoam container to the water in the metal cup.

## Incorrectly answered feedback

The metal cup is a better conductor of heat compared to plastic, thus it conducted heat more quickly from the hot water in the Styrofoam container to the water in the metal cup.

## 

## Question 55

Sylvia had forgotten to remove the thermometers in each cup. She observed that the water in the cups reached the same temperature after 16 hours. Give a reason for her observation.

## Question Type: Essay

Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: 25,156,517

Correctly answered feedback
The cup's water was at a room temperature

Incorrectly answered feedback
The cup's water was at a room temperature


Paul made an electromagnet using two batteries, an iron nail and a piece of wire as used below.


He fested the magnetic strength of the electromagnet by placing it near a tray of pins. He then recorded his observations in the table below.
(a) Complete the table below. [1]

| Number of turns of the <br> coils around the iron nail | 5 | 10 | 15 | 20 |
| :--- | :---: | :---: | :---: | :---: |
| Number of pins attracted <br> by the iron nail | 1 | 3 | (a) | 7 |

Accepted answers:
$\checkmark 5$
$\checkmark$ five

Question Type: Free Text
Date Added: Tue 1st Dec 2020
Last Modified: N/A
QID\#: $\quad 25,156,523$

Question 57 Primary 4 Science » Primary 4 Science (Term 4)
(b) He then repested the experiment using a copper nail.

Complete the table below by ticking ( $\downarrow$ ) the correct boxes accordingly to ensure a fair experiment.

| Variables | Kept the same | To be changed |
| :--- | :---: | :---: |
| Number of batteries used |  |  |
| Number of turns of the coils |  |  |
| Length of wire |  |  |
| Type of nail used. | - | - |

Please type "done" to proceed to the next question

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,536$ |

Correctly answered feedback


Incorrectly answered feedback

| Number of batteries used. |  |  |
| :--- | :---: | :---: |
| Number of turns of the coils |  |  |
| Length of wire |  |  |
| Type of nail used |  |  |

## 

## Question 58

Predict the number of pins that the copper nail would be able to attract when Paul made 25 turns of coils around it. Give a reason for your prediction.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Tue 1st Dec 2020 |
| Last Modified: | N/A |
| QID\#: | $25,156,572$ |

Correctly answered feedback
0 . Copper is a non-magnetic material which cannot be magnetised.

Incorrectly answered feedback
0 . Copper is a non-magnetic material which cannot be magnetised.


[^0]:    $*^{\#}$ Answers $\qquad$ 4 Used In | 合 Reorder

[^1]:    $*^{*}$ Answers | Edit © Duplicate| 4 Used In | $\stackrel{\rightharpoonup}{\text { R Reorder }}$

[^2]:    Incorrectly answered feedback

[^3]:    $k^{\wedge}$ Answers | Edit | EDPlicate | 4Used In | 合 Reorder

[^4]:    Incorrectly answered feedback

