## ClassMarker

## Primary 4 - Term 2 (SA1) Science (School SN)



## Test Introduction

+ Add Introduction

56 Questions (66 Points)

Test Questions 1 Test Assignment

## Question 1

Booklet A ( $28 \times 2$ marks $\}$
For each question from 1 to 28 , four options are given. One of them is the correct answer.
Four pupils, Amy, Betty, Candy and Demi, made some statements about flowering plants.


Which of the pupils made statements that wore true?
A) Amy and Betty only
B) Amy and Candy only
C) Betty and Demi only
D) Candy and Demi

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 16th Sep 2020 |
| Last Modified: | N/A |
| QID\#: | $23,699,554$ |

The diagram below shows the arrangement of the leaves of a plant as seen from the top.


Which one of the following statements best explains how this arrangement of the leaves heips the plant to make more food?
A) It helps the plant to take in more air
B) It helps the plant to take in more light
C) It helps the plant to absorb more nutrients
D) It helps the plant to absorb more rainwater

## Question Type: Multiple Choice

Randomize Answers: No
Date Added: Wed 16th Sep 2020
Last Modified: N/A
QID\#: $\quad 23,699,575$

## $\mathbf{*}^{\wedge}$ Answers | Edit | E Duplicate | $\mathbb{4}$ Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$

## Question 3

The characteristics of plant A and B are shown in the table below.

| Characteristics | Plant A | Plant B |
| :--- | :---: | :---: |
| Produces spores | Yes | No |
| Makes its own food | Yes | Yes |
| Produces fruits | No | Yes |

Which of the following best represents plant A and plant B ?
A)

| Plant A | Plant B |
| :--- | :--- |
| papaya tree | fern |

B)

| bracket fungi | orchid |
| :--- | :--- |

C) | mushroom | papaya tree |
| :--- | :--- |

D) fern rose plant

| Question Type： | Multiple Choice |
| :--- | :--- |
| Randomize Answers： | No |
| Date Added： | Wed 16th Sep 2020 |
| Last Modified： | N／A |
| QID\＃： | $23,699,596$ |

## $\approx^{\pi}$ Answers｜Edit｜约Duplicate｜ 1 Used $\ln \mid$ है Reorder

## Question 4

Elizabeth found an animal in a park
Which of the following characteristics should she use to identify it as a fish or reptile？

A）presence of gills
B）type of body covering
C）method of reproduction
D）whether it produces milk for its young

| Question Type： | Multiple Choice |
| :--- | :--- |
| Randomize Answers： | No |
| Date Added： | Wed 16th Sep 2020 |
| Last Modified： | N／A |
| QID\＃： | $23,699,618$ |

## $\mathbf{x}^{\wedge}$ Answers｜Edit｜纪Duplicate｜ 4 Used In｜仓̂ Reorder

## Question 5

Which one of the following graphs shows the possible amount of food eaten during the different stages in the life cycle of a ladybird？

A）
amount of
food eaten

stages

B）

$\checkmark$ D)
amount of
food eaten

egg larva pupa adult
stages

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 16th Sep 2020 |
| Last Modified: | N/A |
| QID\#: | $23,699,652$ |

## Question 6

Study the classification table below.

| Group A | Group B |
| :---: | :---: |
| aeroplane | dog |
| kite | eagle |

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

| Group A | Group B |
| :--- | :--- |
| Can fly | Cannot fly |

B) | has two legs | has four legs |
| :--- | :--- |

C) | can reproduce | cannot reproduce |
| :--- | :--- |

D) | does not need air, water and food | needs air, water and food |
| :--- | :--- |

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 16th Sep 2020 |
| Last Modified: | N/A |
| QID\#: | $23,699,681$ |

## 

## Question 7

The life cycle of a plant is shown below.


Which of the following statements about the plant are true?

A During germination, the roots appear first.
B During germination, the shoots appear first.
C The seed leaf provides food for the germinating seed.
D The seed needs air, water and sunlight to germinate.
A) A and C only
B) A and D only
C) B and C only
D) B and D only

Question Type: Multiple Choice
Randomize Answers: No
Date Added: Wed 16th Sep 2020
Last Modified: N/A
QID\#: $\quad 23,699,696$

## 

Remove From Test

## Question 8

Study the classification chart below.


Which one of the following headings best represents systems $X, Y$ and $Z$ ?
(1)

| $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :---: | :---: | :---: |
| circulatory system | skeletal system | muscular system |
| muscular system | circulatory system | skeletal system |
| skeletal system | digestive system | respiratory system |
| respiratory system | muscular system | digestive system |

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

## Question 9

Which of the following statements about bacterial are true?

A: Bacteria feed only on dead things
B: Bacteria cannot make their own food
C: All bacteria can be seen by the naked eye
D: Bacteria can be useful or harmful to humans
A) A and B only
B) B and D only
C) C and D only
D) A, B and C only

Question Type:
Randomize Answers: No
Date Added: Wed 16th Sep 2020

Last Modified: N/A
QID\#:

## $*^{\star}$ Answers | Edit | EDPlicate | 4 Used In | $\stackrel{\text { Reorder }}{ }$

## Question 10

The diagram below shows the nymph and adult of a cockroach.
-

nymph

adult

Which of the following statements are true?

A Both the nymph and the adult can fly.
B The adult has bigger wings than the nymph.
C. The adult can lay eggs but the nymph cannot.

D The nymph moults several times but the adult does not.
A) A and B only
B) A and C only
C) B and D only
D) C and D only


#### Abstract




## Question 11

Which of the following characteristics are commonly found in birds, but not in other animals?
A: They lay eggs
B: They have a beak
C: They have feathers on their bodies
D: They breathe through their moist skin and lungs
A) A and B only
B) B and C only
C) C and D only
D) A, B and C only

Question Type: Multiple Choice
Randomize Answers: No
Date Added: Wed 16th Sep 2020
Last Modified: N/A
QID\#: $\quad 23,699,764$

## थA Answers | Edit | \& Duplicate | 1 Used $\ln \mid$ ₹Reorder

## Question 12

Study the classification chart below.


Which one of the following best represents animals $\mathrm{A}, \mathrm{B}$ and C ?
A) 1
(B) 2
C) 3
D) 4

Question Type:
Randomize Answers: No
Date Added: Wed 16th Sep 2020
Last Modified: N/A
QID\#:

## $\mathbf{*}^{\wedge}$ Answers | Edit | Duplicate | $\mathbb{4}$ Used In | $\stackrel{\rightharpoonup}{\boldsymbol{*}}$ Reorder

## Question 13

Adam placed three similar pots of plants in a dark room as shown below. He gave them the same amount of water and fertiliser each day.


Adam is trying to find out if the $\qquad$ affects the growth of the plants.
A) type of fertiliser
B) amount of water
C) presence of light
(D) colour of the light

## Question Type:

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

Multiple Choice
No
Wed 16th Sep 2020
N/A
23,699,783

## 

Question 14

Study the diagram below.


What is the least number of mirrors Peter needs to place in the tube in order to see the teddy bear?
A) 3
B) 4
C) 5
D) 6

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Wed 16th Sep 2020
Last Modified:
QID\#:

N/A
23,699,792

## 

Question 15

## Study the diagram below.



## measuring cylinder

## What is the volume of liquid in the measuring cylinder?

(A) 43 ml
B) 44 ml
C) 53 ml
D) 57 ml

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 16th Sep 2020 |
| Last Modified: | N/A |
| QID\#: | $23,699,809$ |

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**Answers | Edit | & Duplicate | 4 Used In | * Reorder
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## Question 16

Yuki wanted to make a temporary magnet out of the nail. Which one of the following nails will be magnetised?

## A)


B)

copper nail
C)

D)


Question Type:
Randomize Answers:

Last Modified: N/A
QID\#: 23,699,842

Multiple Choice
No
Wed 16th Sep 2020

## $\star^{\star}$ Answers | Edit | Euplicate | $\mathbb{1}$ Used In | 令 Reorder

## Question 17

A bar magnet has been cut into two pieces along the dotted line as shown below. A and B represent the two poles of the magnet.


The two pieces of the bar magnet together with a U-shaped magnet are then arranged such that they attract one another. Which one of the following arrangements is possible if A is the north pole of the bar magnet?
A)

B)

D)


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

Multiple Choice
No
Wed 16th Sep 2020
N/A
23,699,871


Question 18

The line graph below shows the, length of the shadow of a tree at different times of the day.
length of
shadow (m)


Which point on the graph $A, B, C$ or $D$ is most likely the length of the shadow of the tree at 12 pm ?
A) A
B) B
C) C
D) $D$

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 16th Sep 2020 |
| Last Modified: | N/A |
| QID\#: | $23,699,881$ |
|  |  |
|  |  |

## Question 19

The diagram below shows a window frame and a window pane.


Which one of the following properties should we consider when choosing suitable materials for making the window frame and the window pane?
(1)

| Window frame | Window pane |
| :---: | :---: |
| waterproof | flexibility |
| allows light to pass through | ability to float |
| flexibility | strength |
| strength | allows light to pass through |

A) 1
B) 2
C) 3

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

## Multiple Choice

No
Wed 16th Sep 2020
N／A
23，699，891

## $«^{\star}$ Answers｜Edit｜缊Duplicate｜〒 Used In｜仑 Reorder

## Question 20

Jenny placed objects A and B on a balance．The balance tited as shown in the diagram below．


She then repeated the experiment by placing objects $A$ and $C$ on the balance．The balance filted as shown in the diagram below．


Which one of the following statements is true？

A）A has the least mass
B）$B$ has the least volume
$\checkmark$ C）$C$ has the greatest mass
D）B and C have the same volume

Question Type：
Randomize Answers：
Last Modified：N／A
QID\＃：$\quad 23,699,906$
$k^{*}$ Answers

Multiple Choice
No
Wed 16th Sep 2020

Fiona filled a beaker with water as shown in set-up A. She then lowered object X into the beaker and observed that the water level rose as shown in set-up $B$.


What was she trying to find out from her experiment?
A) The size of object $X$
B) The mass of object $X$
C) The volume of object X
D) The state of matter of object X

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Wed 16th Sep 2020 |
| Last Modified: | N/A |
| QID\#: | $23,699,928$ |

$\mathbf{*}^{\star}$ Answers | Edit | \& Duplicate | Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$
Question 22

The moon is able to shine at night because it $\qquad$
A) glows in the dark
B) gives off light of its own
C) reflects light from the Sun
D) reflects light from the Earth

## Question Type:

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

## Multiple Choice

No
Wed 16th Sep 2020
N/A
23,699,943

[^0]Study the flow chart below.


Which of the letters P, Q, R or S best represents a ceramic vase?
A) $P$
(B) $Q$
C) $R$
D) S

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

Multiple Choice
No
Wed 16th Sep 2020
N/A
23,699,951

Materials A, B, C, and D were placed in the funnels as shown below. 200 ml of water was poured into each funnel and some of the water was collected in the beakers.

amount of water collected in the beaker

Arrange the materials $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D based on their ability to absorb water,
(1)
(2)
(3)
(4)

| Absorbs the least $\longrightarrow$ Absorbs the most |  |  |  |
| :---: | :---: | :---: | :---: |
| A | C | D | B |
| B | A | D | C |
| C | D | A | B |
| D | C | B | A |

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

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed
Last Modified: N/A
QID\#: 23,700,014

## $\mathbf{*}^{\wedge}$ Answers | Edit | EDuplicate | $\uparrow$ Used In | 领Reorder

## Question 25

- The diagram below shows a syringe containing substance $Z$.


Darren tried to push in the plunger but it did not move.
Based on his experiment, what can Darren conclude about substance Z ?
A) Substance $Z$ has mass
B) Substance $Z$ has a fixed volume
C) Substance $Z$ can be compressed
D) Substance $Z$ has no definite shape

## Question Type:

Randomize Answers:
Date Added: Wed 16th Sep 2020
Last Modified:
QID\#:

Multiple Choice
No
Wed 16th Sep 2020
23,700,034

## 

Question 26

A mixture of materials $P$ and $Q$ is poured into a machine. The machine separates materials based on their magnetic properties.
mixture of materials P and Q poured in


Based on the diagram above, which of the following conclusions are true?

A Only roller M is a magnet.
B Material $Q$ is a magnetic material.
C Both rollers M and N are magnets.
D Roller $M$ has a stronger magnetic pull.
A) A and D only
B) B and C only
C) A, B and C only
D) B, C and D only

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Wed 16th Sep 2020
Last Modified: Wed 16th Sep 2020
QID\#:

## Question 27

The diagram below shows a torch shining on objects $\mathrm{A}, \mathrm{B}$ and C .


The shadow of the objects cast on the screen is shown below.


Which of the following is most likely to be objects $A, B$ and $C$ ?
(1)

| Object A | Object B | Object C |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |

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

Date Added:
Last Modified: QID\#:

Yanni conducted an experiment using two different materials A and B as shown in the diagram below. She ensured that the batteries and wires were in working condition before the experiment.


She placed some steel clips near material A and B and recorded her observations in the table below.

| Material | Number of steel clips attracted |
| :---: | :---: |
| A | 9 |
| B | 0 |

Based on the results in the table, what could be a possible reason for her observations?
A) Material A is made of aluminium
B) The battery in set-up Y was not working
C) Material $B$ is made of non-magnetic material
D) There were too few coils of wire around material B

```
Question Type: Multiple Choice
Randomize Answers: No
Date Added: Wed 16th Sep 2020
Last Modified: N/A
QID#: 23,700,082
```

$\mathbf{*}^{\wedge}$ Answers | Edit | E Duplicate | 4Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$

## Question 29

## 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 different stages A, B, C and D in the He cycle of a butterfly.


A


B


C


D
(a) Arrange the stages of the lfe cycle of the buttertly in the correct order, by writing the letters $A, C$ and $D$ in the boxes provided.

(b) Judy observed some butterfly eggs on a leaf. Explain why the butterfly lays its eggs on a leat.
$\qquad$
$\qquad$
(c) Judy cosserved that the butterlly moulled at one stage of its life cycle. At which stage of its Iffe cycle A, B, C or D did it moull? Explain why it moulted.

Question Type: Essay
Date Added: Thu 17th Sep 2020
Last Modified:
N/A
QID\#:
23,713,726

Correctly answered feedback
a)

b) The is to ensure the butterfly larvae can feed on the leaves once they are hatched from the eggs.
c) It moulted at stage $\mathbf{D}$ as it is too big for its skin so it shed its skin and grow new skin.

Incorrectly answered feedback
a)

b) The is to ensure the butterfly larvae can feed
on the'leaves once they are hatched from the eggs.
c) It moulted at stage D as it is too big for its skin so it shed its skin and grow new skin.

The diagram below shows the fie cycle of a mosquito.

(a) The larva and pupa of a mosquito breathes through broathing tubes. How does pouring a tayer of oil above the water surface kill them?
(b) At which stage of a mosquito's ilie cycle is it considered a pest to humans? Explain why.

| Date Added: | Thu 17th Sep 2020 |
| :--- | :--- |
| Last Modified: | N/A |

QID\#: $\quad 23,713,744$

Correctly answered feedback
a) The layer of oil above the water surface blocks air entering the breathing tubes therefore they will not get air and they will die.
b) The adult stage as they suck our blood and we may get sick.
c) The mosquito lay eggs on stagnant surfaces so by pouring away the stagnant water will prevent the mosquito's eggs from hatching and develop into adults.

Incorrectly answered feedback
a) The layer of oil above the water surface blocks air entering the breathing tubes therefore they will not get air and they will die.
b) The adult stage as they suck our blood and we may get sick.
c) The mosquito lay eggs on stagnant surfaces so by pouring away the stagnant water will prevent the mosquito's eggs from hatching and develop into adults.

Study the flow chart below.


Based on the flow charl, state the characteristics of animal D.
$\qquad$

Question Type: Essay
Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#: 23,713,761

Correctly answered feedback
Animal D lay eggs, does not breathe through gills and it can fly

Incorrectly answered feedback
Animal D lay eggs, does not breathe through gills and it can fly

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

Based on the flow chart, state one similarity between animal B and C.

Question Type: Essay
Date Added: Thu 17th Sep 2020

Last Modified: N/A
QID\#: 23,713,774

Correctly answered feedback
They both lay eggs

Incorrectly answered feedback
They both lay eggs
```

$*^{*}$ Answers | Edit | Duplicate | $\mathbb{1}$ Used In | $\stackrel{\text { Reorder }}{ }$

```

\section*{Question 33}

Which letter \(A, B, C\) or \(D\) in the flow chart best represents a snake?
A) A
B) B
C) C
D) \(D\)

\section*{Question Type:}

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

\section*{Multiple Choice}

No
Thu 17th Sep 2020
N/A
23,713,833

\section*{\(*^{\boldsymbol{x}}\) Answers | Edit | EOplicate | 4 Used In | 合 Reorder}

\section*{Question 34}

Gerald planted a seed in his gardan and watered it daily. He recorsed tis observations of the development of the seed over five weeks in the graph below.

(a) Gerald observed that the plant grew af a regular rate from week 1 to week 5. Draw the height of the plart at week 3 in the graph above.
(b) Based on the graph, which characteristic of fiving things does the plant show?
(c) Gerald decided to stop watering his young plant after mook 5 . What do you think will happen to the young plant after two weeks? Give a reason for your answer.
\(\qquad\)
a)

b) Plants can grow.
c) The plant will die as plant it need water to survive.

Incorrectly answered feedback
a)
height of young plant (cm)

b) Plants can grow.
c) The plant will die as plant it need water to survive.

Vivian carried out an experiment with two similar slions of broad A and B. She added 10 ml of water to the bread in set-up \(A\) and 20 mi of waser to the bread in \(\operatorname{set-up} B\). Both bread A and B were placed side by side near a window. Afler five days, she observed the amount of bread mould co the two slices of bread.
(9) Stave the alm of Viviaris experiment.
(b) State two changes Vivian should make to her experiment if she wants to find out if the location where the bread slices are placed will affoct the growth of bread mould.
(9) \(\qquad\)
\(\qquad\)
(i) \(\qquad\)

Question Type: Essay
Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#:
23,713,885

Correctly answered feedback
a) The aim is to find out if the amount of water added to the bread would affect the rate of the mould growing on the bread.
b) i) She should add the same amount of water to both slices of bread.
ii) She should put one slice of bread near the window and the other slice of bread in the fridge.

\section*{Incorrectly answered feedback}
a) The aim is to find out if the amount of water added to the bread would affect the rate of the mould growing on the bread.
b) i) She should add the same amount of water to both slices of bread.
ii) She should put one slice of bread near the window and the other slice of bread in the fridge.

The two charts below shows how four plants A, B, C and D can be classified in two dillerent waya.


Based on the chart above, state the characteristics of the fruit of plant \(D\).

Correctly answered feedback

\section*{a) The fruit of plant \(D\) is non-poisonous and it has more than one seed.}

Incorrectly answered feedback

\section*{a) The fruit of plant \(D\) is non-poisonous and it has more than one seed.}

\section*{\(\mathbf{*}^{\wedge}\) Answers | Edit | Con Duplicate | 4 Used \(\ln \mid \stackrel{\rightharpoonup}{\boldsymbol{*}}\) Reorder}

\section*{Question 37}

Which plant \(\mathrm{A}, \mathrm{B}, \mathrm{C}\) or D best represents a mango plant?
A) A
B) B
C) C
D) \(D\)
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Thu 17th Sep 2020 \\
Last Modified: & N/A \\
QID\#: & \(23,713,914\)
\end{tabular}

Aminah saw plant X in her garden as shown below. She observed that it had no flowers and concluded that it was a non-flowering plant.


Do you agree with her? Give a reason for your answer.
\(\qquad\)

Question Type: Essay
\begin{tabular}{ll} 
Date Added: & Thu 17th Sep 2020 \\
Last Modified: & N/A \\
QID\#: & \(23,713,956\)
\end{tabular}

Correctly answered feedback
c) No. The flowers will only bloom at a certain period of time. It was not bloom when Aminah saw it.

Incorrectly answered feedback
c) No. The flowers will only bloom at a certain period of time. It was not bloom when Aminah saw it.

The diagram below shows a human circulatory system.

(a) State two functions of the human system shown above.

Function 1: \(\qquad\)
\(\qquad\)

Function 2: \(\qquad\)
\(\qquad\)

Question Type: Essay
Date Added: Thu 17th Sep 2020

Last Modified:
N/A
QID\#:

Correctly answered feedback
a) Function 1: It transport water, mineral salts, digested food, oxygen to all parts of the body.

Function 2: It removes wasted products from our body.

Incorrectly answered feedback
a) Function 1: It transport water, mineral salts, digested food, oxygen to all parts of the body.

Function 2: It removes wasted products from our body.

The diagram below shows Maya's hand holding a crayon.


Name the two organ systems that work together to allow Maya to hold a crayon.
(0) \(\qquad\)
(ii)
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Thu 17th Sep 2020 \\
Last Modified: & N/A \\
QID\#: & \(23,713,979\)
\end{tabular}

Correctly answered feedback
i) Muscular system.
ii) Skeleton system.

Incorrectly answered feedback
i) Muscular system.
ii) Skeleton system.
\(x^{\pi}\) Answers Edit \& Duplicate 4 Used In | \(\stackrel{\rightharpoonup}{*}\) Reorder Remove From Test

\section*{Question 41}

Timmy wanted to test the magnetic strength of four different bar magnets \(\mathrm{W}, \mathrm{X}, \mathrm{Y}\) and \(Z\). He placed them at the same starting poirt. He then slowly pushed the paper clips towards the magnets along the rulers and measured the distance at which the paper clips were attracted to the magnets. The resuls are shown below.
w

x

z


Based on the results, amange megnets \(\mathrm{W}, \mathrm{X}, \mathrm{Y}\) and Z from the one with the greatest magnetic strength to the one with the weakest magnetic strength. Write the letters \(\mathrm{W}, \mathrm{X}, \mathrm{Y}\) and Z in the boxes provided below.
[2]


Accepted answers:
\(\checkmark X, Z, W, Y\)
\(\checkmark X, Z, W, Y\)
\(\mathrm{X}, \mathrm{Z}, \mathrm{W}, \mathrm{Y}\)
\(X, Z, W, Y\)
XZWY

Question Type: Free Text
Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#:
23,714,008

\section*{}

Question 42

Would the results shown above be different if Timmy reduced the sizes of all the magnets? Explain your answer

Question Type: Essay
\begin{tabular}{ll} 
Date Added: & Thu 17th Sep 2020 \\
Last Modified: & N/A
\end{tabular}

Last Modified: N/A
QID\#: 23,714,046

Correctly answered feedback
No, as they will still have the same magnetic strength

Incorrectly answered feedback
No, as they will still have the same magnetic strength

Ashwin collecled water ssmples X, Y, Z from three different rivers and set up a torch and a light sensor as shown below.


He conducled the experiment in a dark room and racorded the readings from the data logger in the table below.
\begin{tabular}{|c|c|c|}
\hline Water sample & Amount of water (mi) & \begin{tabular}{c} 
Amount of light detected by the \\
light sensor (lux)
\end{tabular} \\
\hline\(X\) & 250 & 455 \\
\hline\(Y\) & 250 & 880 \\
\hline\(Z\) & 250 & 100 \\
\hline
\end{tabular}
(a) Ashwin then placed a coin in each of the petri dishes containing water samples \(X\), \(Y\) and \(Z\).
Based on the fable above, in which water sample will the coin be seen most dearly? Explain your answer.
(b) Besides using the same amount of water, state another variable that must be kept constant to ensure a fair test.
(c) Give a reason why the experiment needs to be conducted in a dark room
(d) Ashwin shone a torch at a metal can as shown in the diagram below.
,


Draw the shadow formed by the metal can in the box below.


Correctly answered feedback
a) Sample Y, as it allowed most light to pass through it. Hence, this indicating the water in sample \(Y\) is the clearest and allowing most light to pass through.
b) The distance between the troch and the water sample in the petri dish.
c) As other light not coming from the torch will not be detected by the light sensor.
d)


Incorrectly answered feedback
a) Sample Y, as it allowed most light to pass through it. Hence, this indicating the water in sample \(Y\) is the clearest and allowing most light to pass through.
b) The distance between the troch and the water sample in the petri dish.
c) As other light not coming from the torch will not be detected by the light sensor.
d)


Linda placed a weight on three materials P, Q and R. The materials are of the same thickness. She recorded her observations in the table below,

\begin{tabular}{|c|c|}
\hline Material & Observation \\
\hline\(P\) & It brake. \\
\hline\(Q\) & It was able to bend. \\
\hline\(R\) & It remained the same. \\
\hline
\end{tabular}
(a). What is the aim of Linda's experiment?

Question Type: Essay
Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#: 23,714,492

Correctly answered feedback
To find out if which material is the strongest

Incorrectly answered feedback
To find out if which material is the strongest

Remove From Test

\section*{Question 45}

Material \(Q\) is made of steel
A) True
B) False
(C) Not possible to tell

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#: \(\quad 23,714,508\)
\(\boldsymbol{x}^{\boldsymbol{\pi}}\) Answers | Edit | Collicate | 4 Used In | 合 Reorder
Remove From Test

Material R will not break if a 70 kg weight is placed on it
A) True
B) False
C) Not possible to tell
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Thu 17th Sep 2020 \\
Last Modified: & N/A \\
QID\#: & \(23,714,512\)
\end{tabular}
```

**Answers | Edit | Duplicate | 4 Used In | * Reorder

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Remove From Test

\section*{Question 47}
0.5 pts

Material P is able to float on water
A) True
B) False
C) Not possible to tell

Question Type:
Randomize Answers: No
Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#:
23,714,523
\(\star^{\star}\) Answers | Edit | 号Duplicate | 4 Used In | 合 Reorder
Remove From Test

\section*{Question 48}

Material P will be able to hold a 88 KG box
A) True
B) False
C) Not possible to tell

\section*{Question Type:}

Randomize Answers:
Date Added:
Multiple Choice

Thu 17th Sep 2020
Last Modified: N/A
QID\#: \(\quad 23,714,534\)
\(\star^{\star}\) Answers

The diagram below shows a skate scooter.
4


Based on the table, which material P, Q or R is most suitable for making the frame of the skate scooter? Give a reason for your answer.
\(\qquad\)

Question Type: Essay
Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#: \(\quad 23,714,549\)

Correctly answered feedback
R as it is the strongest among the other material tested. So it can withstand the body mass of the rider without breaking easily.

Incorrectly answered feedback
R as it is the strongest among the other material tested. So it can withstand the body mass of the rider without breaking easily.

The diagram bolow shows a bar magnet labelled with letters A, B, C, D and E as shown below.


The bar magnet was fowered into a tray of steel pirs. The number of pins attracted to each of the different parts of the bar magnet were counted and recorded in the graph below.


Wrise \(\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}\) and E in the boxes in the graph to represent the different parts of the magnet.

Accepted answers:
C,A,B,D,E
C, A, B, D, E
\(C, A, B, D, E\)
CABDE
c , a , b , d ,e

\section*{Question Type: Free Text}

Date Added: Thu 17th Sep 2020
Last Modified: N/A
QID\#: 23,714,612
\(\mathbf{x}^{\boldsymbol{x}}\) Answers | Edit | Duplicate | \(\mathbb{4}\) Used In | \(\hat{\boldsymbol{*}}\) Reorder
Remove From Test

\section*{Question 51}
(b) Based on your answer in (a), explain your choice for part C of the magnet.
(c) Which property of magnets does this experiment show?
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Thu 17th Sep 2020 \\
Last Modified: & N/A \\
QID\#: & \(23,714,688\)
\end{tabular}

Correctly answered feedback
b) Part \(C\) is the center of the magnet. It is the weakest part of the magnet. Hence, it attracted the least number of steel pins.
c) The strongest part of the magnet is at the both poles and the weakest part of the magnet is at the center.

Incorrectly answered feedback
b) Part \(\mathbf{C}\) is the center of the magnet. It is the weakest part of the magnet. Hence, it attracted the least number of steel pins.
c) The strongest part of the magnet is at the both poles and the weakest part of the magnet is at the center.

\section*{Question 52}

Shu Fen filed a \(500 \mathrm{~cm}^{3}\) tank with \(300 \mathrm{~cm}^{3}\) of water. She then turned on the tap and allpwed only \(200 \mathrm{~cm}^{3}\) of water to flow out as shown below.


What is the final volume of air in the tank?

Accepted answers:
\(\checkmark 400 \mathrm{~cm} 3\)
\(\checkmark 400 \mathrm{~cm} 3\)
\(\checkmark 400\)
/ 400 CM 3
400 cm 3
\begin{tabular}{ll} 
Date Added： & Thu 17th Sep 2020 \\
Last Modified： & N／A \\
QID\＃： & \(23,714,699\)
\end{tabular}
\(«^{\star}\) Answers｜Edit｜EDDicate｜ 1 Used In｜合 Reorder
Remove From Test

\section*{Question 53}

What does this show about the property of air？
\begin{tabular}{ll} 
Question Type： & Essay \\
Date Added： & Thu 17th Sep 2020 \\
Last Modified： & N／A \\
QID\＃： & \(23,714,707\)
\end{tabular}

Correctly answered feedback
Air takes up space

Incorrectly answered feedback
Air takes up space
```

* Answers | Edit \& Duplicate | Used In | 人 Reorder

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\section*{Question 54}

Shu Fen prepared two cups of the same size and shape．She filled cup A with 300 ml of milk tes and cup 8 with 250 mi of milk tea．She then added some tepioca pearls into cup B and observed that the two cups hed the same liquid level as shown below．

）What is the fotal volume of the fapidca pearls in cup B？

\section*{Accepted answers：}

\section*{Question Type：Free Text}

Date Added：Thu 17th Sep 2020
Last Modified：N／A
QID\＃：\(\quad 23,714,716\)
```

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

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The two cups have the same liquid level although they contain different amounts of milk tea. Explain why
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Thu 17th Sep 2020 \\
Last Modified: & N/A \\
QID\#: & \(23,714,727\)
\end{tabular}

\section*{Correctly answered feedback}

The tapioca pearls takes up space in cup B taking up the space of water originally in the cup causing the water level to rise

\section*{Incorrectly answered feedback}

The tapioca pearls takes up space in cup B taking up the space of water originally in the cup causing the water level to rise

\section*{\(\mathbf{k}^{n}\) Answers | Edit | 约Duplicate | 4 Used In | \(\boldsymbol{*}\) Reorder}

\section*{Question 56}

\section*{Study the diagram below.}

(a) What would happen to the water level in the cylinder I siti sucks out some air through the straw?

Siti set up the experiment as shown below. She cut off the bottom of a bottle and attachod a balloon to the opening of the bottie. She then pushed the bottle vertically into the peil of water.

(b) What do you think she will obearma? Give a reason for your answer.

Correctly answered feedback
a) The water level will increase.
b) The balloon would be inflated. When Siti push the bottle into the water, the air in the bottle was pushed into the balloon. The air occupied the space in the balloon and the balloon became inflated.

Incorrectly answered feedback
a) The water level will increase.
b) The balloon would be inflated. When Siti push the bottle into the water, the air in the bottle was pushed into the balloon. The air occupied the space in the balloon and the balloon became inflated.```


[^0]:    * Answers Edit © Duplicate 4 Used In | - Reorder

