## ClassMarker

## Primary 6 Science (Prelim) - Raffles (Y0) /

| Add Questions |  |  | Assign | Settings | Review |
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| Equplicate | A Print | © Delete |  |  | 4 Ass |

## Test Introduction

+ Add Introduction


## 64 Questions (68.5 Points)



Which of the following is correct? A tick $(\sqrt{ })$ shows the presencs of the characteristic(s) of the animals.
A.

| Group | Has body <br> covering of <br> feathers | Has body <br> covering of fur | Has wings |
| :---: | :---: | :---: | :---: |
| A |  | $\sqrt{ }$ | $\checkmark$ |

$\checkmark$ B.

| A | V |  | $\checkmark$ |
| :---: | :---: | :---: | :---: |

c.

D. $\square$

## Question Type:

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

Fri 8th Oct 2021
N/A
29,264,554

```
**Answers | Edit | EDuplicate | { Used In | 仓े Reorder
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## Question 2

Which of the following statements about fungi are true?
A Yeast is a type of fungi.
B Fungi reproduce by spores.
C Fungi are not made of cells.
D Fungi do not have chloroplasts.
A. A and B only
B. C and D only
C. A, B ad D only
D. B, C and D only
Question Type: Multiple Choice

Randomize Answers: No
Date Added: Fri 8th Oct 2021
Last Modified:
N/A
QID\#:
29,264,563


Question 3

Observations made on animals P and Q are recorded in the table below.

| Characteristic | Has 3-staged life <br> cycle | Lay eggs on <br> land | Young resembles <br> adult |
| :---: | :---: | :---: | :---: |
| Animal |  |  |  |
| $P$ | $\gamma$ | $\sqrt{2}$ |  |
| $Q$ | $\gamma$ |  | $\checkmark$ |

## Which of the following represents animals P and Q correctiy?

A.

| Animal P | Animal Q |
| :--- | :--- |
| butterfly | mosquito |

B.

| Animal P | Animal Q |
| :--- | :--- |
| butterfly | frog |

$\checkmark \mathrm{c}$.

| Animal P | Animal Q |
| :--- | :--- |
| cockroach | frog |

D.

| Animal P | Animal Q |
| :--- | :--- |
| cockroach | mosquito |


| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,571$ |

## 

## Question 4

Bethany investigated the conditions needed for the germinstion of green beans.
She prepared three set-ups, A, B and C, each containing same amount of cotton wool and the same number of green beans as shown below.


The table beiow shows the conditions ench set-up was exposed to.

|  | Conditions |  |  |
| :---: | :---: | :---: | :---: |
| Set up | Cotton wool | Temperature <br> $\left({ }^{\circ} \mathrm{C}\right)$ | Presence of <br> Ulght |
| A | damp | 30 | yes |
| B | dry | 30 | yes |
| C | damp | 0 | no |

Bethany recorded the observations on the green beans after five days.
Which of the following observations correctly matches the reason?
A.

| Observation | Reason |
| :--- | :--- |
| Green beans in set-up A <br> germinated. | Air, water and warmth needed for germination were <br> present. |

- B.

| Observation | Reason |
| :--- | :--- |
| Green beans in set-up A <br> germinated. | Air, water and warmth needed for germination were <br> present. |

c.

| Observation | Reason |
| :--- | :--- |
|  |  |

Green beans in set-up B did not germinate. |No light was present.

D. | Observation | Reason |
| :--- | :--- |
| Green beans in set-up C did not germinate. | No warmth and light were present. |

## Question Type:

Randomize Answers:
Date Added:
Multiple Choice
Fri 8th Oct 2021
Last Modified:
N/A
QID\#:

## 

## Question 5

The diagrams below show the reproductive systems of a plant and human.


Plant reproductive system


Human reproductive system

Which of the following represent the parts involved in producing the male reproductive cells?
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: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,602$ |

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\(«^{\pi}\) Answers Edit E Euplicate 1 Used In | \(\stackrel{\rightharpoonup}{\text { Reorder }}\)
```

Question 6

The diagram below shows how a frult is developed from a flower.

$$
\text { flower } \rightarrow \text { Process } X \rightarrow \text { Process } Y \rightarrow \text { fruit }
$$

## Which of the following correctly identifies processes $X$ and $Y$ ?

A.

| Process $\mathbf{X}$ | Process $\mathbf{Y}$ |
| :--- | :--- |
| seed dispersal | fertilisation |

B.

| Process $\mathbf{X}$ | Process $\mathbf{Y}$ |
| :--- | :--- |
| fertilisation | seed dispersal |

c.

| Process $\mathbf{X}$ | Process $\mathbf{Y}$ |
| :--- | :--- |
| fertilisation | pollination |

$\checkmark$ D.

| Process $\mathbf{X}$ | Process $\mathbf{Y}$ |
| :--- | :--- |
| pollination | fertilisation |

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

Multiple Choice
No
Fri 8th Oct 2021
N/A
29,264,782

## Question 7

The diagrams below show two flowers, G and H , from the same type of plant.


Which is / are the arrow(s) that represent(s) the process polination?
A. C
B. D
C. B and C only
D. A and E only

## Question Type:

Multiple Choice
Randomize Answers:
Date Added:
Fri 8th Oct 2021
Last Modified:
N/A
QID\#:
29,264,785

## 

## Question 8

Sarah wanted to find out if overcrowding affects plant growth. The table below shows four different sot-ups, P, Q, R and S, each containing the same amourt of soil. She watered each set-up with the same amount of water daily.

|  | Conditions |  |  |
| :---: | :---: | :---: | :---: |
| Set-ups | Size of pot and number of seeds | Location | Temperaturo ( ${ }^{\circ} \mathrm{C}$ ) |
| P |  | classroom | 25 |
| 0 |  | garden | 35 |
| R |  | ganden | 25 |
| 5 |  | garden | 35 |

Which sel-ups, $P, Q, R$ and $S$, shouid Sarah use to ensure a fair test?
A. $P$ and $R$ only
B. P and S only
$\checkmark$ C. $Q$ and $S$ only
D. $Q$ and $R$ only

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,787$ |

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**Answers Edit 约Duplicate | Used In | 人 Reorder
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The chart below shows the amount of food digested in various parts of the human digstives system sic hours aflor a meal.


Based on the graph above, which one of the following best repensents $W, X, Y$ and $Z$ rospectively?
A.

| $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :--- | :--- | :--- |
| stomach | large intestine | small intestine | mouth |

B.

| $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :--- | :--- | :--- |
| stomach | mouth | small intestine | large intestine |

C.

| $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :--- | :--- | :--- |
| mouth | small intestine | large intestine | stomach |

D.

| $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :--- | :--- | :--- |
| small intestine | large intestine | mouth | stomach |

Question Type:
Randomize Answers:
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#:
29,264,798

Norris prepared set-ups A, B and C using the same type of plant. She removed some roots from the plants in set-ups B and C and removed some lesves from the plant in sot-up C as shown in the diagrams below. She observed the volume of water left in each sel-up over a period of one week.


Set-up A


Set-up B


Set-up C

Which of the following graphs best represents the results obtained for the three setups, A, B and C?
A. Volume of water left ( ml )


Time (days)
B. Volume of water left ( ml )

C.

Volume of water left (ml)

$\checkmark$ D.
Volume of water left (ml)


Question Type:

## Multiple Choice

Randomize Answers: N
Date Added: Fri 8th Oct 2021
Last Modified:
QID\#:
N/A
29,264,801

Which one of the following parts is found in a root cell but not in a cheek cell?
A. cell wall
B. cytoplasm
C. chloroplast
D. cell membrane

## 

Question 12

Denise prepared $\operatorname{set}-\mathrm{ups} \mathrm{A}, \mathrm{B}, \mathrm{C}$ and D as shown below.


She measured the concentration of carbon dioxide in the waler in each test tube bofore the experiment and two hours later.

In which test-tube would there be a decrease in the concentration of carbon dioxide after two hours?
A. Set-up A
B. Set-up B
C. Set-up C
D. Set-up D

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,805$ |

[^0]Question 13

Gabi wanted to construct a flying model as shown in the diagram below.


She wanted to conduct a test launch where the flying model would fy to a height of one metre when filled with water and that it would not be dameged when it landed on the ground.

Which of the following properties must she consider while selecting the materials to build her flying model?
A. Strength and waterproof
B. Strength and conductor of heat
C. Conductor of heat and flexibility
D. Conductor of electricity and waterproof

Question Type:
Randomize Answers:
Date Added:
No
Fri 8
Fri 8th Oct 2021
Last Modified:
N/A
QID\#:

A sealed container holds $700 \mathrm{~cm}^{3}$ of oil and $300 \mathrm{~cm}^{3}$ of a.r as shown below. Ancther $200 \mathrm{~cm}^{3}$ of oil is removed and $100 \mathrm{~cm}^{3}$ of air is added to the container through the purnp.


What is the final volume of air in the container?
A. $300 \mathrm{~cm}^{3}$
B. $400 \mathrm{~cm}^{3}$
C. $500 \mathrm{~cm}^{3}$
D. $600 \mathrm{~cm}^{3}$

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,816$ |

$\mathbf{*}^{\wedge}$ Answers | Edit | \& Duplicate | 4Used In | 合 Reorder
Question 15

Tim had a bag of identical marbless. He wanted to find the volume of each marble. He filled a measuring cylinder with water as shown in diagram below.


Tim then put ten marbles in the messuring cyinder of water. His result is shown below


Based on Tim's experiment, which of the following is correct?
A Marbles occupy space.
B Water has no definite volume.
C The volume of each marble is $5 \mathrm{~cm}^{2}$.
A. A only
B. B only
C. A and C only
D. A, B and C

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

Multiple Choice
No
Fri 8th Oct 2021
N/A
29,264,819

The table below shows the freezing point and boiling point of three substances, $X, Y$ and $Z$.

| Substance | Freezing point $\left({ }^{\circ} \mathrm{C}\right)$ | Boling point $\left({ }^{\circ} \mathrm{C}\right)$ |
| :---: | :---: | :---: |
| $X$ | 6 | 80 |
| $Y$ | 17 | 118 |
| $Z$ | 43 | 181 |

Which of the substances, $X, Y$ or $Z$, is/are liquid(s) at $90^{\circ} \mathrm{C}$ ?
A. X only
B. $Y$ only
C. $Y$ and $Z$ only
D. X and Z only

Question Type:
Randomize Answers:
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#: $\quad 29,264,823$

## 

Question 17

Dora wanted to investigate the electrical conductivity of rods A, B, C and D. She constructed the circult as shown below.


She recorded her coservation below when she removed certain rods and closed the switch.

| Rod (s) removed from the circuit | Buib lighted up |
| :---: | :---: |
| $D$ | yes |
| B and C | yes |
| B, C and D | no |
| A, B, D | no |

Based on her observation, which of the following concluslons about the rods A, B, C and $D$ is correct?
A.

| Electrical conductor(s) | Electrical insulator(s) |
| :--- | :--- |
| A, C | B, D |

B. | Electrical conductor(s) | Electrical insulator(s) |
| :--- | :--- |
| B, C, D | A |

C. | Electrical conductor(s) | Electrical insulator(s) |
| :--- | :--- |
| A | B, C, D |

D.

| Electrical conductor(s) | Electrical insulator(s) |
| :--- | :--- |
| B, D | A, C |

Question Type:
Multiple Choice
Randomize Answers:
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#: $\quad 29,264,834$

## $*^{\pi}$ Answers | Edit 饮Duplicate (4 Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$

Question 18

The circuit below consists of identical bulbs, B1, B2, B3 and B4, all lit up.


Which of the following is likely to be observed when only one of the bulbs in the above crccit is fused at one sime?
A.

| Bulb that was <br> fused | Smallest number of bulbs <br> remaining lit | Largest number of bulbs <br> remaining lit |
| :--- | :--- | :--- |
| B1 or B4 | 0 | 3 |

B.

| Bulb that was <br> fused | Smallest number of bulbs <br> remaining lit | Largest number of bulbs <br> remaining lit |
| :--- | :--- | :--- |
| B1 or B3 | 1 | 2 |


| Bulb that was <br> fused | Smallest number of bulbs <br> remaining lit | Largest number of bulbs <br> remaining lit |
| :--- | :--- | :--- |
| B2 or B3 | 2 | 3 |

D.

| Bulb that was <br> fused | Smallest number of bulbs <br> reamaining lit | Largest number of bulbs <br> remaining lit |
| :--- | :--- | :--- |
| B2 or B4 | 0 | 3 |


| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,893$ |


#### Abstract




## Question 19

## A steel bar XY was magnetised using the "stroke" method as shown in Diagram 1 below.

Diagram 2 shows the magnetic poles of XY after it was magnetised.


Another steel bar below was magnelised using two magnets as shown in Diegram 3.


Diagram 3
Identify the poles at A and B used to magnetise the steel bar respectively.
A.

| Poles at $\mathbf{A}$ | Poles at B |
| :--- | :--- |
| N | S |

B.

| Poles at $\mathbf{A}$ | Poles at B |
| :--- | :--- |
| $S$ | $N$ |

c.

| Poles at $A$ | Poles at B |
| :--- | :--- |
| $N$ | $N$ |

D. | Poles at A | Poles at B |
| :--- | :--- |
| S | S |


#### Abstract




Al, Beth, Caling, and Dew preparod the following set-ups using identioal bowes $A$ and B as shown below.


The boxes were placed at the same starting point on the ramps. Thoy olaservod that box B would slide dowh the ramp but box A remained stationary.

The pupils made the following statements:

| All | The gravitational force acting on both boxes was the <br> same. |
| :--- | :--- |
| Both | The gravitational force acting on bor B was more than <br> that of boxA. |
| Cailing | The surface of the ramp where box A was placed on was <br> smoother. |
| Devi | The frictonal force between bex B and the surface of the <br> ramp wes less than that of box A and the surface of the <br> ramp. |

Which of the pupils made the correct statements?
A. Ali and Cailing
B. Ali and Devi
C. Beth and Cailing
D. Beth and Devi

## Question Type:

Randomize Answers: No
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#: $\quad 29,264,906$

Question 21

Which of the following arrows shows the direction of frictional force acting on a ladder which is leaning against the wall?
A.

$\checkmark$ в.

C.

D.

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,913$ |

## *Answers Edit © Duplicate 4 Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$

Question 22

Stella carried out an experiment to find out which rubber ball, P. Q or R, travelled the furthest distance when it was rolled down the same ramp as shown bulow. The rubber balls were identical in size but of different masses.


For each ball, she repeated the experiment three times. She recorded the distance travelled by each ball in the table below. However, she did not carry out a fair test when conducting the experiment with ball R .

|  | Distance travelled by balls (cm) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $1^{\text {tr }}$ try | $2^{\text {ne }}$ try | $3^{\text {rc }}$ try | Average |
| P | 141 | 143 | 146 | 143.3 |
| Q | 183 | 184 | 180 | 182.3 |
| R | 90 | 125 | 680 | 142.5 |

Based on the results of the above experiment, which of the following statements isfare most likely to be true?

A The amount of gravitational force acting on ball $Q$ was the least.
B The way she released bull $R$ was not the same for al the throe tries.
C Ball R was released at different positions on the ramp at each repeated experiment.
A. A only
B. B only
C. B and C only
D. A, B and C

## Question Type:

Randomize Answers: No
Date Added: Fri 8th Oct 2021

Last Modified: N/A
QID\#:
29,264,916

## 

Question 23

A light sensor is used to count the number of wooden blocks on a moving balt in a factory as shown in the sel-up below.


The belt moves at a constant speed. The workers plotied the results in the graph shown below.

Light intensity (lux)


Based on the graph above, how many wooden blocks were counted in five seconds?
A. 2
B. 3
C. 4
D. 5

The diagram below shows a lamp post. The distance from A to B is identical to the distance from B to C . David walked under the lighted lamp post from B to C , then C to A passing $B$ again. He increased his speed while walling from $B$ to $A$


Which one of the diagrams below shows the changes in the length of the boy's shadow over the period of time?
A.

## Length of shadow (cm)


B.

## Length of <br> shadow (cm)


C.

Length of shadow (cm)

$\checkmark$ D.
Length of
shadow (cm)

Question Type: Multiple Choice
Randomize Answers: No
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#:
QID\#: 29,264,921


Remove From Test

Question 25

Emma carried out an experiment with the two set-ups $X$ and $Y$ as shown below. She used idenfical containers and burners for the two sel-ups.

In set-up $X$, she placed a blob of wax on a surface which was placed 5 cm above the base of the container.

In set-up $Y$, she placed the same amount of wax on an identical surface. The surface was raised is on above the base of the container as shown below.


She recorded her observalion in the tabla below.

| Layer of air botwoen wax and <br> base of container $(\mathrm{cm})$ | Time taken for wax to melt $(\mathrm{s})$ <br> 5 |
| :---: | :---: |
| 15 | 20 |
|  | $B 5$ |

Based on the resu*s of the experiment, Emma attompted to prepare fried ios croam, it is a clessert where conated ice cream is quickly deep fried to create a goiden and crispy shel around the stil cold lce cresm.

She prepared the flour dough using a mixture of water, balVng soda and four. She coated the identical ice creams with different amounts of flour dough as shown below.

Then they were deep fried using the same amount of heat for ten seconds until golden brown.


Emma observed that one of the ice creams melled ater ten seconds. Which one of the following is correct?
A.

| Ice cream that melted | Reason |
| :--- | :--- |
| A | The flour dough is a good conductor of heat. |

B.

| Ice cream that <br> melted | Reason |
| :--- | :--- |
| A | There was less air in the dough. Thus, the ice cream gained heat <br> faster. |

C. | Ice cream that melted | Reason |
| :--- | :--- |
| B | The air in the air bubbles is a poor conductor of heat. |

D.

| Ice cream that melted | Reason |
| :--- | :--- |
| B | The flour dough has more air bubbles round the ice cream. |

## Question Type:

Multiple Choice
Randomize Answe
No
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#:
29,264,945

## 

## Question 26

Alson propared the set-up shown bolow using the same amount of wax to hold the identical thumbtacks on the materials A and B respectivety. The malerials are of identical length. The thumbtacks were placed at equal distance away from the heat source. Alison observed the thurnbtack on material B drop off first.


Next, she wrapped a piece of paper round materials A and B as shown below and put over a hoat source. She observed the piece of paper after throe mirutes.


Which of the following provides the correct observation and explanation?
A.

| Observation | Explanation |
| :--- | :--- |
| The paper on material A would <br> burn. | Material A conducted heat to the paper more <br> quickly. |

B.

| Observation | Explanation |
| :--- | :--- |
| The paper on material A would | Material A conducted heat away from the paper more |

C.

| Observation | Explanation |
| :--- | :--- |
| The paper on material B would <br> burn. | Material B conducted heat to the paper more <br> quickly. |

D.

| Observation | Explanation |
| :--- | :--- |
| The paper on material B would <br> burn. | Material B conducted heat away from the paper more <br> slowly. |

Question Type:
Multiple Choice
Randomize Answers:
Date Added: No
Fri 8th Oct 2021

N/A
29,264,965
Last Modified:

## 

## Question 27

Linda designed a model as shown below.
wooden container


The cup is fixed onto a wooden rod which car move at pivot A.
Water from a tark is dripped into the cup. When the cup is filled up with water, it moved down, causing the other end of the rod to hit against the wooden block.

Which of the following should Linda change to enable her model to produce a louder sound?

A increase the slze of the hole
B increase the size of the wooden ball
C changs the wooden ball to a metal bell
D increase the height of the tank above the wooden container
A. A only
B. C and D only
C. A and D only
D. A, B and C only

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,972$ |

$\star^{\pi}$ Answers Edit 红Duplicate | $\mathbb{1}$ Used In | $\hat{*}$ Reorder

Question 28

Trina conducted an experiment using springs $X$ and $Y$. She hung different numbers of weights one at a firme and recorded the length of the springs. Hor results wore shown in the graph bsiow.


The two springs, $X$ and $Y$, were used to make the two cish racks, which hoid idenkical number of plates as shown bolow.


When Thra memoved thme piates from the top of dish rack 1, the metai disc moved up trom P to Q. She also removed three plates from dish rack 2.

Bares onthe graph and the informalion provided, which of the following statement(s) is/are frue when three plates were temoved from the two dish racks?

A The metat Gecs on both tacks have gravitational polertial energy and elastic potarfial energy.

B The matal cisc on dish rack 1 wil have less gravitational potential energy than the metal disa in dish rack 2.

C The metal discs for both racks moved up because the stratched springs exerted a puiling force on the metal discs.

D The metal disc moved up as the weight of the plstes is greater than the alastic spring force acting on the metal discs.
A. A and B only
B. A and C only
C. B and C only
D. B and D only

| Question Type: | Multiple Choice |
| :--- | :--- |
| Randomize Answers: | No |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,264,976$ |

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


## Study the chart below.



Based on the chart above, fill in the blank with the correct answers.
Question X: $\qquad$ (0.5 marks)

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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | Fri 8th Oct 2021 |
| QID\#: | $29,264,980$ |

Correctly answered feedback
Question X: can it make its own food

Incorrectly answered feedback
Question X: can it make its own food

## Study the chart below.



Based on the chart above, fill in the blank with the correct answer.
Question Y: $\qquad$

Accepted answers:
Bird nest fern

## Question Type: Free Text

Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#: $\quad 29,264,983$


Question 31

## Study the chart below.



How does organism Y reproduce?

Accepted answers:
$\checkmark$ spores

Question Type: Free Text
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#: $\quad 29,264,985$
$*^{n}$ Answers | Edit | EDDuplicate | 1 Used In | $\hat{\text { E Reorder }}$
Question 32

The diagram shows the characteristics of three fruits, P, Q and R found in a park. A lick $(V)$ shows the presence of the charactaristic of the frults.

|  | Characteristic of fruit |  |  |
| :---: | :---: | :---: | :---: |
| Fruit | Edible julcy flesh | Wing-like structure | Pod-like structure |
| $P$ | $\checkmark$ |  |  |
| Q |  | $\checkmark$ |  |
| R |  |  | $\checkmark$ |

Study the chart below.


Based on the information from the chart above, state one similarity between Plant B and Plant D. (1 mark)

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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,547$ |

Correctly answered feedback
Both of them reproduce from seeds.

Incorrectly answered feedback
Both of them reproduce from seeds.

The diagram shows the characteristics of three fruits, P, Q and R found in a park. A tick ( $V$ ) shows the presence of the characteristic of the frults.

|  | Characteristic of fruit |  |  |
| :---: | :---: | :---: | :---: |
| Fruit | Edible julcy flesh | Wing-like structure | Pod-like structure |
| $P$ | $\checkmark$ |  |  |
| Q |  | $\checkmark$ |  |
| R |  |  | $\checkmark$ |

Study the charl below.


Based on the information from the table and the chart on the previous page, which plants, A, B, C and $D$, in the chart best represents plants that bear fruits $P, Q$ and $R$ ?

Clue
Match

Fruit P: Plant $\qquad$ C
Points: +0.3-0

Fruit Q: Plant $\qquad$ B
Points: +0.3-0

Fruit R: Plant $\qquad$ D

Points: + 0.4 - 0

| Question Type: | Matching |
| :--- | :--- |
| Shuffle Mode: | Shuffle Matches Only |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,564$ |

$\qquad$

The diagram shows the characteristics of three fruits, $P, Q$ and $R$, found in a park. A tick ( $V$ ) shows the presence of the characteristic of the frults.

|  | Characteristic of fruit |  |  |
| :---: | :---: | :---: | :---: |
| Fruit | Edible juicy flesh | Wing-like structure | Pod-like structure |
| P | $\checkmark$ |  |  |
| Q |  | $\checkmark$ |  |
| R |  |  | $\checkmark$ |

Study the chart below.


The number of young plants that bear fruits P and R were found at various distances from their parent plants as shown in the graph below.


Based on the information above, which bar, 1 or 2, represents the results recorded for plants of fruit P. Explain your answer.

Accepted answers:
$\checkmark$ Bar 2
$\checkmark 2$

Correctly answered feedback
Bar 2. The number of young plants of $P$ are decreasing as the distance from the parent plant increases. The animals ate the thick juicy flesh of the fruit and passed but the indigestible seed in their droppings when animals moved away.

## Incorrectly answered feedback

Bar 2. The number of young plants of $P$ are decreasing as the distance from the parent plant increases. The animals ate the thick juicy flesh of the fruit and passed but the indigestible seed in their droppings when animals moved away
$\mathbf{*}^{\star}$ Answers | Edit | Equplicate | 4 Used In | 领Reorder

## Question 35

The diagram below shows a plant.


State the main function of part G. (1 mark)

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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,609$ |

Correctly answered feedback
It traps light energy from the sun to make food for the plant.

## Incorrectly answered feedback

It traps light energy from the sun to make food for the plant.

## Question 36

## The diagram below shows a plant.



State the part of the flower that part H developed from.

Accepted answers:
$\checkmark$ ovary

| Question Type: | Free Text |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,622$ |

Question 37

The diagram below shows a plant.


Four parts of the plant are listed below. Draw arrows ( $\rightarrow$ ) in the diagram below to show how food is transported in the plant.


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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,636$ |

Correctly answered feedback


Incorrectly answered feedback

$*^{\star}$ Answers｜Edit｜B Duplicate｜4 Used In｜合 Reorder
Remove From Test

## Question 38

Ali wanted to find out how the distance between the lamp and the test－tube of an aqustic plant would affiect the number of bubbles produced by the plant．He prepared two set－ups， A and B ，as shown below．


He counted the rumber of bubbles produced per minute for both set－ups．His results are as shown．

| Set－up | Number of bubbles produced per minute |
| :---: | :---: |
| A | 17 |
| B | 33 |

Based on Ali＇s results，explain how the distance between the lamp and the test－tube of the aquatic plant affect the rate of photosynthesis．（2 marks）

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．

```
Question Type: Essay
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID#: 29,269,672
```


## Correctly answered feedback

As the distance between the lamp and the test tube increases the aquatic of light received by the plant decreased．Thus，the rate of photosynthesis will decrease，producing bubbles．

## Incorrectly answered feedback

As the distance between the lamp and the test tube increases the aquatic of light received by the plant decreased．Thus，the rate of photosynthesis will decrease，producing bubbles．

```
```

**Answers | Edit | \&-Duplicate | \ Used In | 仑 Reorder

```
```

```
```

**Answers | Edit | \&-Duplicate | \ Used In | 仑 Reorder

```
```

Ali wanted to find out how the distance between the lamp and the test-tube of an aquatic plant would affect the number of bubbles produced by the plant. He prepared two sef-ups, A and B, as shown below.


He counted the rumber of bubbles produced per minute for both set-ups. His results are as shown.

| Sat-up | Number of bubbles produced per minute |
| :---: | :---: |
| A | 17 |
| B | 33 |

State two variables that Ali has to keep constant when conducting his experiment. (1 mark)
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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,679$ |

Correctly answered feedback

1) Intensity of light from the lamp.
2) Number of plants.

Incorrectly answered feedback

1) Intensity of light from the lamp.
2) Number of plants.
$\boldsymbol{x}^{\pi}$ Answers | Edit | E Duplicate | 1 Used In | $\stackrel{\Delta}{*}$ Reorder

Ali wanted to find out how the distance between the lamp and the test-fube of an aquatic plant would affect the number of bubbles produced by the plant. He prepared two set-ups, A and B, as shown below.


He counted the rumber of bubbles produced per minute for both set-ups. His results are as shown.

| Sot-up | Number of bubbles produced per minute |
| :---: | :---: |
| A | 17 |
| B | 33 |

Ali recorded the initial mass of the aquatic plants before the experiment and the final mass of the aquatic plants in each set-up after three days. Both lamps were switched on continuously for three days. Which plant would have a greater increase in mass? Explain your answer. (2 marks)

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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,702$ |

## Correctly answered feedback

Set-up B. The lamp was placed at a closer distance to the plant in B than in A. Thus, the light intensity in B would be higher than A and the plant in B can trap more light to make more food and photosynthesis faster allowing its mass to increased more and stored as starch in the plant.

## Incorrectly answered feedback

Set-up B. The lamp was placed at a closer distance to the plant in B than in A. Thus, the light intensity in B would be higher than A and the plant in B can trap more light to make more food and photosynthesis faster allowing its mass to increased more and stored as starch in the plant.

## $\boldsymbol{x}^{\boldsymbol{\pi}}$ Answers | Edit | Coplicate | 4 Used In | 合 Reorder

## Question 41

Two identical cups, X and Y , were balanced on a rod. A buming candle was placed below cup $X$ as shown below.


Would the rod tilt downwards towards X , remain balanced or tilt downwards toward Y ? Explain your answer. (2 marks)

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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,763$ |

## Correctly answered feedback

Tilt downwards to Y . Air around the candle will gain heat from the flame and rise up to go into X , pushing $X$ up. Thus, the rod will tilt to $Y$.

## Incorrectly answered feedback

Tilt downwards to Y . Air around the candle will gain heat from the flame and rise up to go into X , pushing $X$ up. Thus, the rod will tilt to $Y$.

## 

Two identical cups, X and Y , were balanced on a rod. A buming candle was placed below cup $X$ as shown below.


Changes were made to the set up by replacing cup $Y$ with cup $M$, made of a different material.


It was observed that the rod was balanced only when the candle was placed under cup X. Explain the observation.

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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,772$ |

## Correctly answered feedback

Cup $X$ has a greater mass than $M$. At the start of the experiment. The rod would tilt downward to $X$. Thus, the rising of air around the candle was able to push X.

## Incorrectly answered feedback

Cup $X$ has a greater mass than $M$. At the start of the experiment. The rod would tilt downward to $X$.
Thus, the rising of air around the candle was able to push X.

## $\mathbf{k}^{\text {n }}$ Answers | Edit | CRD Duplicate | $\mathbb{1}$ Used In | $\hat{*}$ Reorder

## Question 43

The diagram below shows the change of state of water.


Name the process $X$.

Accepted answers:
$\checkmark$ Melting

Question Type: Free Text
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#: $\quad 29,269,774$

## 

Question 44

The diagram below shows the change of state of water.


Name the process Y .

Accepted answers:
condensation

## Question Type: Free Text

Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID\#: $\quad 29,269,779$
$\qquad$

## The diagram below shows the change of state of water.



## Michelle bought some slices of hot crispy toasted bread for her grandfather and then walked home.



When she reached home, she found that the slices of crispy toasted bread were damp. Explain her observation. (2 marks)

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.

```
Question Type: Essay
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID#: 29,269,791
```

Correctly answered feedback
Water vapour inside the sealed plastic bag gained heat from the hot bread and increased in temperature. The vapour then lost heat to the cooler inner surface of the sealed plastic bag and condensed to form tiny water droplets. Which slid down the plastic bag and dripped on the bread.

## Incorrectly answered feedback

Water vapour inside the sealed plastic bag gained heat from the hot bread and increased in temperature. The vapour then lost heat to the cooler inner surface of the sealed plastic bag and condensed to form tiny water droplets. Which slid down the plastic bag and dripped on the bread.

```
*^Answers | Edit | E.Duplicate | 4 Used In | 合Reorder
```

The diagram below shows the change of state of water.


## Michelle bought some slices of hot crispy toasted bread for her grandfather and then walked home.



Suggest what Michelle could have done to ensure the slices of toasted bread remained crispy by the time she reached home. (1 mark)

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.

```
Question Type: Essay
\begin{tabular}{ll} 
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,797\)
\end{tabular}
```

Correctly answered feedback
Open the sealed plastic bag.

Incorrectly answered feedback
Open the sealed plastic bag.


Jason made a toy trsin and a steel tunnel. Both had a helght of 10 cm . The aluminium strips were athached to the toy train. The diagram below shows his toy train sct.


Jason observed that the light bulb on the toy train only lit up when the train was moving completely under the steel tunnel.

Explain why the bulb on the toy train only lit up when it was moving completely in the steel tunnel. (2 marks)

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.

```
Question Type: Essay
Date Added: Fri 8th Oct 2021
Last Modified: N/A
QID#: 29,269,809
```


## Correctly answered feedback

When the train moved completely in to the steel tunnel, the aluminium strips touched the steel tunnel and closed the gap in the circuit. Thus, the circuit was closed and electricity could flow through the circuit, enabling the bulb to light up.

## Incorrectly answered feedback

When the train moved completely in to the steel tunnel, the aluminium strips touched the steel tunnel and closed the gap in the circuit. Thus, the circuit was closed and electricity could flow through the circuit, enabling the bulb to light up.

```
*^Answers | Edit E. Duplicate| 4 Used In | है Reorder

Jason made a toy trsin and a steel tunnel. Both had a helght of 10 cm . The aluminium strips were athached to the toy train. The diagram below shows his toy train sct.


Jason replaced the steel tunnel with another tunnel that was made of plastic and steel as shown in the diagram below. The height of the new tunnel was also 10 cm.

battery
Describe what Jason would obsenve of the bulb while the same toy train was moving through the new tunnel shown abovg,

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.
Question Type: Essay
\begin{tabular}{ll} 
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A
\end{tabular}
QID\#: 29,269,817

\section*{Correctly answered feedback}

The bulb will flash, and the light bulb will light up and then not light up then light up again and soon.

\section*{Incorrectly answered feedback}

The bulb will flash, and the light bulb will light up and then not light up then light up again and soon.
\(\square\)


The toy car below moves along the wooden planik.


When magnet \(X\) is placed at position \(A\), the wooden car moved from position \(A\) to \(B\). Give a reason for his observation. (1 mark)

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.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,823\)
\end{tabular}

\section*{Correctly answered feedback}

X's north pole and the magnet on the car's north pole was facing each other an repelled, pushing the car to B.

\section*{Incorrectly answered feedback}

X's north pole and the magnet on the car's north pole was facing each other an repelled, pushing the car to B
```

$\mathbf{*}^{\pi}$ Answers | Edit | Duplicate| $\mathbf{4}$ Used In $\mid \stackrel{\rightharpoonup}{*}$ Reorder

```

The toy car below moves along the wooden plank.


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.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,833\)
\end{tabular}

\section*{Correctly answered feedback}

Thus, Y exerted a greater magnetic force of attraction than the force of repulsion exerted by X on the magnet on the car.

\section*{Incorrectly answered feedback}

Thus, Y exerted a greater magnetic force of attraction than the force of repulsion exerted by X on the magnet on the car.

\section*{}

\section*{Question 51}

Ashlynn rubbed her eraser on a piece of paper. She saw some eraser shavings on the piece of paper.
State another observation she would made of the eraser. (1 mark)
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.
```

Question Type: Essay

```

Correctly answered feedback
The eraser will decrease in size.

Incorrectly answered feedback
The eraser will decrease in size.

\section*{}

The diagram below shows. Ashlynn doing abseiling where she was going down a vertical wall using a rope.


Ashlynn said wearing gloves to pull on the rope while going down the wall would protect her hand.
Explain why that was so. (1 mark)
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.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,846\)
\end{tabular}

Correctly answered feedback
The gloves prevent her palms from getting cut due to friction between her palms and the rope.

\section*{Incorrectly answered feedback}

The gloves prevent her palms from getting cut due to friction between her palms and the rope.
```

*^Answers | Edit E|Duplicate| 4 Used In | है Reorder

The diagram below shows Ashlynn doing abseiling where she was going down a vertical wall using a rope.


Name another force that was acting on Ashlynn.

Accepted answers:
Gravitation Force

| Question Type: | Free Text |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,851$ |

[^1]Remove From Test

Question 54

Ketvin had three wooden frames, S, T and U.


The set-up below shows light shining on the three wocden frames, $\mathrm{S}, \mathrm{T}$ and U . They were plaoed at different positions from the torch.


The diagram below shows the shadow of the objects on the screen.


Which wooden frame, S, T or U, was at position C? (1 mark)

Accepted answers:
$\checkmark s$
wooden frame S

Question Type: Free Text
Date Added: $\quad$ Fri 8th Oct 2021
Last Modified: N/A
QID\#:

Kelvin had three wooden frames, S, T and U.
$\underset{\sim}{\text { Frame } \mathrm{S}}$

The sel-up below shows light shining on the three wooden frames, S, T and U.
They were plaoed at different positions from the sorch.


The diagram below shows the shadow of the objects on the screen.


Another piece of wood measuring $16 \mathrm{~cm} \times 16 \mathrm{~cm}$ is placed at position M ss shown below.


Will Kelvin still be able to observe the shadow that was cast on the screen earlier? Explain your answer. (1 mark)

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.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Fri 8th Oct 2021 |
| Last Modified: | N/A |
| QID\#: | $29,269,870$ |

Correctly answered feedback
Yes as light travels in a straight line, the other piece of wood at M did not block light to form a shadow.

Incorrectly answered feedback
Yes as light travels in a straight line, the other piece of wood at M did not block light to form a shadow.

```
**Answers

Ketvin had three wooden frames, S, T and U.


The set-up below shows light shining on the three wocden frames, \(\mathrm{S}, \mathrm{T}\) and U .
They were placed at different positions from the torch.


The diagram below shows the shadow of the objects on the screen.


Another piece of wood measuring \(16 \mathrm{~cm} \times 16 \mathrm{~cm}\) is placed at position M ss shown below.


Which of the shadows will Kelvin observe if frames \(S, U\) and \(T\) are placed at positions \(A, B\) and \(C\) respectively?
\(\checkmark\) A.

B.

Question Type: Multiple Choice
Randomize Answers: No
Date Added:
Fri 8th Oct 2021
Last Modified:
N/A
QID\#:
29,269,885

Martha used the set-up below to find out the heat conductivity of materials P, Q and \(R\). The materials were of the same length and thickness. They were placed below a beaker of water with the same amount of heat applied to the sel-ups.


The heat conductivity of materials P, Q and R is as follows.
poorest heat conductor best heat conductor
\begin{tabular}{|l|l|l|}
\hline \(\mathbf{Q}\) & \(\mathbf{P}\) & \(\mathbf{R}\) \\
\hline
\end{tabular}

She recorded the time taken for the water in each set up io boil in the table below.
\begin{tabular}{|c|c|}
\hline Materials & Time taken for water to start boiling (minutes) \\
\hline P & 10 \\
\hline Q & 10 \\
\hline R & 10 \\
\hline
\end{tabular}

Martha's teacher told her that her experiment was not a falr test as the time taken for water to start boiling should not be 10 minutes for all the three containers as the heat conductivity of the materiats are different.

Identify one of the constant variables which was not kept the same during the experiment and describe what she could have done to arrive at the result shown in the table above. (2 marks)

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.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,893\)
\end{tabular}

\section*{Correctly answered feedback}

She could put the greatest amount of water in the beaker when \(R\) was used and the amount of water in the beaker was the least when \(Q\) was used.

\section*{Incorrectly answered feedback}

She could put the greatest amount of water in the beaker when R was used and the amount of water in the beaker was the least when \(Q\) was used.

Martha used the set-up below to find out the heat conductivity of materials \(P, Q\) and \(R\). The materisls were of the same length and thickness. They were placed below a beaker of water with the same amount of hest applied to the set-ups.


The heat conductivity of materials P, Q and R is as follows.
poorest heat conductor best heat conductor
\begin{tabular}{|l|l|l|}
\hline \(\mathbf{Q}\) & \(\mathbf{P}\) & \(\mathbf{R}\) \\
\hline
\end{tabular}

She recorded the time taken for the water in each set up io boil in the table below.
\begin{tabular}{|c|c|}
\hline Materials & Time taken for water to start boiling (minutos) \\
\hline P & 10 \\
\hline Q & 10 \\
\hline R & 10 \\
\hline
\end{tabular}

Martha's teacher told her that her experiment was not a falr test as the time taken for water to start boiling should not be 10 minutes for all the three containers as the heat conductivity of the materiats are different.

What would be the temperature of water if Martha continued to heat the beakers of boiling water for another five minutes?
\begin{tabular}{|l|l|}
\hline Material & Temperature of water \(\left({ }^{\circ} \mathrm{C}\right)\) \\
\hline P & \\
\hline
\end{tabular}

Accepted answers:
\(\checkmark 100\) degree celcius
100 degrees celcius
Question Type: Free Text
\begin{tabular}{ll} 
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & Fri 8th Oct 2021 \\
QID\#: & \(29,269,910\)
\end{tabular}

Correctly answered feedback
\(100^{\circ} \mathrm{C}\)

Incorrectly answered feedback
\(100^{\circ} \mathrm{C}\)

Martha used the set-up below to find out the heat conductivity of materials P, Q and \(R\). The materials were of the same length and thickness. They were placed below a beaker of water with the same amount of hest applied to the sel-ups.


The heat conductivity of materials \(P, Q\) and \(R\) is as follows.
poorest heat conductor best heat conductor


She recorded the time taken for the water in each set up io boil in the table below.
\begin{tabular}{|c|c|}
\hline Materials & Time taken for water to start boiling (minutos) \\
\hline P & 10 \\
\hline Q & 10 \\
\hline R & 10 \\
\hline
\end{tabular}

Martha's teacher told her that her experiment was not a falr test as the time taken for water to start boiling should not be 10 minutes for all the three containers as the heat conductivity of the materiats are different.

What would be the temperature of water if Martha continued to heat the beakers of boiling water for another five minutes?
\begin{tabular}{|l|l|}
\hline Materials & Temperature of water \(\left({ }^{\circ} \mathrm{C}\right)\) \\
\hline Q & \\
\hline
\end{tabular}

Accepted answers:
100 degree celcius
100 degrees celcius
\begin{tabular}{ll} 
Question Type: & Free Text \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & Fri 8th Oct 2021 \\
QID\#: & \(29,269,921\)
\end{tabular}

Correctly answered feedback
\(100^{\circ} \mathrm{C}\)

\section*{Question 60}

Martha used the set-up below to find out the heat conductivity of materials P, Q and \(R\). The materials were of the same length and thickness. They were placed below a beaker of water with the same amount of hest applied to the sel-ups.


The heat conductivity of materials \(P, Q\) and \(R\) is as follows.
poorest heat conductor best heat conductor
\begin{tabular}{|l|l|l|}
\hline \(\mathbf{Q}\) & \(\mathbf{P}\) & \(\mathbf{R}\) \\
\hline
\end{tabular}

She recorded the time taken for the water in each sct up io boil in the table below.
\begin{tabular}{|c|c|}
\hline Materials & Time taken for water to start boiling (minutos) \\
\hline P & 10 \\
\hline Q & 10 \\
\hline R & 10 \\
\hline
\end{tabular}

Martha's teacher told her that her experiment was not a falr test as the time taken for water to start boiling should not be 10 minutes for all the three containers as the heat conductivity of the materials are different.

What would be the temperature of water if Martha continued to heat the beakers of boiling water for another five minutes?
\begin{tabular}{|l|l|}
\hline Materials & Temperature of water \(\left({ }^{\circ} \mathrm{C}\right)\) \\
\hline\(R\) & \\
\hline
\end{tabular}

Accepted answers:
100 degree Celcius
100 degrees Celcius
\begin{tabular}{ll} 
Question Type: & Free Text \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,938\)
\end{tabular}

Correctly answered feedback
\(100^{\circ} \mathrm{C}\)

Incorrectly answered feedback
\(100^{\circ} \mathrm{C}\)

Question 61

Two identical containers were each filled with three lifires of water at \(60^{\circ} \mathrm{C}\).
Each container was then placad in identical larger tanks trled with cotton wool.
A tube and a pump were attached to each container to allow a continuous flow of water out of the container end then back again. Set-up A has a shorter tube than set-up B.



Given that the set-ups were placed together int he same room, in which set-up would the water reach room temperature first? Explain your answer clearly. (2 marks)

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.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,950\)
\end{tabular}

Correctly answered feedback
B. The metal tubes are longer thus is a larger surface area exposed to the surrounding air. Thus, it conduct more than heat from the water to the surrounding air.

Incorrectly answered feedback
B. The metal tubes are longer thus is a larger surface area exposed to the surrounding air. Thus, it conduct more than heat from the water to the surrounding air.

Two identical containers were each fillod with three lifes of water at \(60^{\circ} \mathrm{C}\). Each container was thon placed in identical larger tanks trled with cotton wool. A tube and a pump were attached to each container to allow a continuous flow of water out of the container end then back again. Set-up A has a shorter tube than set-up B.


Set-up \(A\)


Set-up B

It was found that the cotton wool is filled with air spaces, as shown in the diagram below.


Explain the purpose of placing the containers into a larger tank filled with cotton wool.

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.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,269,960\)
\end{tabular}

\section*{Correctly answered feedback}

Air in the cotton wool is a poor conductor of heat. This slows down reduced heat loss from the water in the container to the surrounding air. This allows a more accurate measurement of rate of heat loss of the water through the metal tube to the surrounding air most of the heat loss takes place at the metal tube.

\section*{Incorrectly answered feedback}

Air in the cotton wool is a poor conductor of heat. This slows down reduced heat loss from the water in the container to the surrounding air. This allows a more accurate measurement of rate of heat loss of the water through the metal tube to the surrounding air most of the heat loss takes place at the metal tube.

\section*{}

Remove From Test

\section*{Question 63}

The roller coaster is brought to the highest point \(A\).


Write down the energy conversion for the roller cosster as it moves from
A to B .


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.
\begin{tabular}{ll} 
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A
\end{tabular}

Last Modified: N/A
QID\#: 29,269,972

\section*{Correctly answered feedback}

Gravitational potential ---> kinetic + heat + sound

Incorrectly answered feedback
Gravitational potential ---> kinetic + heat + sound

\section*{Question 64}

The roller coaster is brought to the highest point \(A\).


Fill in the blanks with 'increase' or 'decrease' as the roller coaster moves down from point A to point B.

Clue
Match
\begin{tabular}{|l|l|}
\hline Points & Potential Energy \\
\hline A to \(B\) & \\
\hline
\end{tabular}

Points: +1 - 0
\begin{tabular}{|l|l|}
\hline Points & Kinetic Energy \\
\hline A to \(B\) & \\
\hline
\end{tabular}

Increase

Points: + 0.5 - 0
\begin{tabular}{|l|l|}
\hline Points & Speed \\
\hline A to \(B\) & \\
\hline
\end{tabular}

Points: + \(0.5-0\)
\begin{tabular}{ll} 
Question Type: & Matching \\
Shuffle Mode: & Shuffle Matches Only \\
Date Added: & Fri 8th Oct 2021 \\
Last Modified: & N/A \\
QID\#: & \(29,270,091\)
\end{tabular}```


[^0]:    

[^1]:    $\mathbf{k}^{\text { Answers | Edit | E Duplicate | } 4 \text { Used In | 合 Reorder }}$

