## ClassMarker

## Primary 5 Science (Term 1) - Nan Hua

| Add Questions |  |  | Assign | Settings | Review |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cub Duplicate | B Print | © Delete |  |  | $\hookrightarrow$ Assign Test |
| Test Introduction |  |  |  |  |  |

63 Questions (60 Points)


Question 2
2 pts

The diagram below shows a cell.


Which of the parts, A, B, C and D, are usually present in plant cells but not in animal cells?
A) A and B
B) A and C
C) B and D
D) C and D

## Question Type:

## Multiple Choice

Randomize Answers:
Date Added: Wed 4th Aug 2021
Last Modified:
QID\#:
N/A
28,615,631

## Question 3

The diagram below shows cell $X$ taken from a ilving thing-


Which of the following correctly describes the functions of parts $P$ and $Q$ ?
(1)
(2)
(3)
(4)

| P | Q |
| :---: | :---: |
| Makes food | Controls all the activities in the cell |
| Controls all the activities in the cell | Makes food |
| Controls the movernent of <br> substances in and cut of the cell | Controls all the activities in the call |
| Controls all the activities in the cell | Controls the movement of <br> substances in and out of the cell |

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

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
N/A
QID\#:
28,615,632

## 

Question 4

The diagram below shows the reproductive parts of a flower.


## At which part is the egg cell produced?

A) A
B) $B$
C) C
D) D

Question Type:
Randomize Answers:
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#:

The arrows in the diagrams below show the transfer of pollen grains.


Besed on the diagrams above, which of the following flowers is likely to be pollinated?
A) W
B) $x$
C) Y
D) Z

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
QID\#:

N/A
28,615,634
$\qquad$


Question 6

The diagram below shows a flower that has not been polinated. The flower is able to develop into a frut even though two parts of the flower are removed.


Which two parts of the flower are removed and still allow the flower to develcp into a frut?
A) $A$ and $B$
B) A and C
C) B and C
D) C and D

## Question Type:

Randomize Answers: N
Date Added: Wed
Last Modified: N/A
QID\#:
28,615,635

## 

## Question 7

## The diagram below shows a fruit.



How are the seeds of the fruit likely to be dispersed?
A) By wind
(B) By water
C) By animal
D) By splitting

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
QID\#:
N/A
28,615,636


#### Abstract

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


## Question 8

The characteristios of three organisms are shown below.

| Characteristics | Organisms |  |  |
| :---: | :---: | :---: | :---: |
|  | R | $\mathbf{S}$ | T |
| Makes its own food | Yes | No | Yes |
| Produces polen grains | No | No | Yes |
| Produces spores | Yes | Yes | No |

## What could orgeniems R, S and T bo?

|  |  | R | S |
| :--- | :---: | :---: | :---: |
| (1) | fungi | non-flowering plant | flowering plant |
|  |  |  |  |
| (2) | non-flowering plant | fungi | flowering plant |
| (3) | non-flowering plant | flowering plant | fungi |
|  |  |  |  |
| (4) | flowering plant | fungi | non-flowering plart |

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

## Question Type:

Multiple Choice
Randomize Answers:
Date Added: -
Last Modified:
QID\#:
Wed 4th Aug 2021
N/A
28,615,637

## 

Question 9

## The freezing point and boiling point of substances $X$ and $Y$ are shown below.

| Substance | X | Y |
| :--- | :---: | :---: |
| Froezzing point $\left.{ }^{\circ} \mathrm{C}\right)$ | 43 | 6 |
| Boiling point $\left({ }^{\circ} \mathrm{C}\right)$ | 181 | 80 |

## Based on the given information, which of the following statements are true?

A X is a solid at $40^{\circ} \mathrm{C}$.
B $Y$ ls a solid at $90^{\circ} \mathrm{C}$.
C $X$ is a gas at $100^{\circ} \mathrm{C}$.
D $Y$ is a liquid at $10^{\circ} \mathrm{C}$.
A) A and B only
B) A and D only
C) C and B only
D) C and D only

## Question Type:

Randomize Answers: No
Date Added: Wed 4th Aug 2021

Last Modified: N/A
QID\#:
28,615,638

## 

## Question 10

Sara lists down some activities which she will like to take in order to conserve water. Which one of the activities below will not allow her to conserve water?
A) Leaving the tap on when washing the vegetables
B) Filling water in a tumblr while brushing her teeth
C) Turning off the shower when applying soap on her body
D) Washing her father's car using a pail of water instead of using a hose

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: $\quad 28,615,639$

## 

Question 11

Alex filled two glasses, A and B, with the same amount of water at different temperature.

He then poured all the water from both glasses into a large container. He immediately took the temperature of water in the large container.


Which one of the following statements about the temperature of the water in the large container is true immediately after the water from the fwo glasses was first mixed?
A) The temperature of the water in the large container is the same as the temperature of water in Glass A
B) The temperature of the water in the large container is the same as the temperature of water in Glass B
C) The temperature of the water in the large container is higher than the temperature of water in Glass A
D) The temperature of the water in the large container is higher than the temperature of water in Glass B

```
Question Type: Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID#: 28,615,640
```

Question 12

The graph below shows the relationship between the number of cells and the age of a heality thman from birth to age 5


Which one of the lines likely represents the number of colls of the heman?
A) A
$\checkmark$ B) B
C) C
D) $D$

## Question Type:

Multiple Choice
Randomize Answer
Date Added:
Last Modified:
QID\#:
Wed 4th Aug 2021
N/A
28,615,641


#### Abstract

$«^{\star}$ Answers | Edit | 㧮Duplicate | 1 Used In | 气 Reorder


Question 13

Which one of the following statement(s) is/are definitely true about cell $X$ and cell $Y$ ?


A $\checkmark$ Both have only one nucleus.
B $\times$ Both can maintain a regular shape.
C $J$ Cell $X$ cannot make food but call $Y$ can make food.
A) A only
(B) A and C only
C) B and C only
D) A, B and C

## Question Type:

Randomize Answers: N
Date Added: No

Last Modified: Wed 4th Aug 2021 N/A
QID\#:
28,615,642

## $k^{x}$ Answers | Edit | enduplicate | 1 Used In | $\hat{*}$ Reorder

Question 14

## - The diagram below shows a crose-section of fruit K .



Which of the following statement(s) lelare most likely true about the fower which fruit $K$ has developed from?
-A it has many ovulas.
B thas many ovaries.
C It has many stigmas.
A) A only
B) A and B only
C) C and B only
D) A, B and C

> Question Type:

Multiple Choice
Randomize Answers:
Date Added: Wed 4th Aug 2021
Last Modified:
QID\#:
N/A
28,615,643


#### Abstract




Question 15

Ben wanted to find out if insects are attracted to the colour of flowers Which of the following set-ups should he chocse to conduct his experiment?
A) 1
B) 2
C) 3
D) 4

Question Type:
Randomize Answers:
Date Added: Multiple Choice

Last Modified:
QID\#:

## Question 16

The diagram below shows the processes, A, B, C and D, involved in the llfo cyole of a tomato plant.


Which one of the following idensites the processes of garmination, fertisation and seed Gispersal in the diagram correctly?

|  | Seed dispersal | Germination | Fertilisation |
| :--- | :---: | :---: | :---: |
| (1) | A | B | D |
| (2) | B | C | A |
| (3) | C | A | D |
| (4) | D | C | B |

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

The diagram below shows the young of a butterfly and a cockroach.


## How are they similar?

A They do not have wings.
B They moult in order to grow bigger.
C They do not resemble their parents.
D They have the same number of stages in their life cycle.
A) A and B only
B) C and D only
C) A, B and C only
D) A, B, C and D

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: 28,615,646

## $k^{\star}$ Answers

## Question 18

The diagram below shows the changes of state of water, $\mathrm{A}, \mathrm{B}$ and C represent different states of water.


Which one of the following identifies A, B and C correctly?

|  | A | B | C |
| :--- | :---: | :---: | :---: |
| $(1)$ | gas | liquid | solid |
| $(2)$ | gas | solid | liquid |
| $(3)$ | liquid | gas | solid |
| $(4)$ | solid | liquid | gas |

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

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
QID\#:

N/A
28,615,647

## $\boldsymbol{*}^{\star}$ Answers | Edit | 约Duplicate | $\boldsymbol{\uparrow}$ Used In | 领 Reorder

Question 19

Three identical cups, $\mathrm{X}, \mathrm{Y}$ and Z , were filled with 100 ml of water.

X

$\mathbf{Y}$

Z

They were left at three places with different conditions, as shown in the table below.

| Cup | $X$ | $Y$ | $Z$ |
| :--- | :---: | :---: | :---: |
| Conditions | sunny, not windy | sunny, windy | cloudy, not windy |

Which one of the following graphs best represents the volume of water left in the cups after six hours?
A)

## Volume of water (ml)


B)

Volume of water (ml)

C)

Volume of water (ml)

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


Question Type:
Randomize Answers:
Date Added:
Multiple Choice
No
Wed 4th Aug 2021
Last Modified:
QID\#:
N/A
28,615,648

Study the flow chart below carefully.


Which of the following best represents $P, Q, R$ and $S$ ?

|  | $\mathbf{P}$ | $\mathbf{Q}$ | $\mathbf{R}$ | S |
| :---: | :---: | :---: | :---: | :---: |
| $(1)$ | milk | air | paper | steam |
| $(2)$ | paper | air | milk | steam |
| $(3)$ | ruler | paper | steam | shadow |
| $(4)$ | paper | steam | mik | shadow |

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

Question Type:
Randomize Answers:
Date Added:
Last Modified:
Wed 4th Aug 2021
QID\#:

N/A
28,615,649

Donald used a pump to fill up a basketball with air,
He observed that he was able to pump more air into the basketball even when it was filled.


Which one of the followingpestexplains his observation?
A) Air takes up space
B) Air can be compressed
C) The basketball has a fixed shape
D) The basketball has indefinite volume

## Question Type:

Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
QID\#:
N/A
28,615,650

Question 22

Fiona placed three objects $P, Q$ and $R$, on a balance.


## What can she conclude from the observation above?

A) Object $R$ has the greatest mass
B) Objects P and Q have the same mass
C) Object $Q$ has a smaller mass than Object $P$
D) Object $P$ has a greater mass than Object $R$

## Question Type: Multiple Choice

Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: $\quad 28,615,651$

## 

## Question 23

Which one of the following correctly shows the path of light that makes it possible for the soldier to see the car?
A)

B)

C)

$\checkmark$ D)


## Question Type:

Multiple Choice
Randomize Answers:
Date Added:
Wed 4th Aug 2021
Last Modified:
N/A
QID\#:
28,615,652

## Question 24

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

## Question Type:

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

Multiple Choice
No
Wed 4th Aug 2021
N/A
28,615,653

John placed a torch at position $A$ and an object at position $D$ to cast a shadow on the screen as shown in the diagram below.


At which positions, A, B, C and D, should the torch and the object be placed such that John can cast thelargest shadow, on the screen?

|  | Position of torch | Position of object |
| :--- | :---: | :---: |
| $(1)$ | A | C |
| (2) | B | D |
| $(3)$ | B | A |
| $(4)$ | C | D |

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

Question Type:
Randomize Answers:
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#:
28,615,654

## $«^{\pi}$ Answers Edit | Duplicate | 1 Used In | 合 Reorder

Question 26

Daisy poured some hot soup into a ceramic bowl with a metal spoon as shown below.


Which one of the following options correctly shows the heat transfer that took place between the hot soup, ceramie bowl and metal spoon affer the hot soup was poured into the bowl for five minutes?

|  | Heat Loss | Heat Gain |
| :--- | :---: | :---: |
| (1) | hot soup | ceramic bowl |
| $(2)$ | ceramic bowl | hot soup |
| (3) | metal spoon | hot soup |
| (4) | ceramic bow | metal spoon |

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

## Question Type: Multiple Choice

Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: $\quad 28,615,655$

## 

## Question 27

Ginny heated a rod made of material $X$ for 20 minutes.


Which of the following changes had taken place in the rod?

|  | Mass of rod | Volume of rod |
| :--- | :---: | :---: |
| (1) | Increased | Increased |
| (2) | Increased | Remained the same |
| (3) | Remained the same | Increased |
| (4) | Remained the same | Remained the same |

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

```
Question Type: Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#:
28,615,656
```


#### Abstract




## Question 28

David heated objects X and Y . He recorded the change in temperature of both objects in the graph below.

Temperature $\left({ }^{\circ} \mathrm{C}\right)$


Which one of the following statements best explains the results shown in the graph above?
A) Object $Y$ is not a conductor of heat
B) Object $Y$ gains heat faster than Object $X$
C) Object X is a better conduct of heat than Object Y
D) Object $X$ takes a longer time to lose the same amount of heat than Object $Y$

## Question Type:

Randomize Answers:
: No
Wed 4th Aug 2021
Last Modified: N/A
QID\#: $\quad 28,615,657$
$x^{n}$ Answers

## Question 29

The flow chart below shows the characteristics of the life cycle of animals.

(a) Write a suitable question for X in the flow chart above.

```
Question Type: Essay
Date Added: Wed 4th Aug }202
Last Modified: N/A
QID#: 28,615,662
```

Correctly answered feedback
three-stage

Incorrectly answered feedback
three-stage


Question 30

Draw a diagram of the life cycle of the mosquito and label the stages

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,663$ |

## Correctly answered feedback


$\star^{\star}$ Answers | Edit | erg Duplicate | 1 Used ln | $\hat{*}$ Reorder

## Question 31

Name another insect that has the same number of stages in its life cycle as the mealworm beetle and the mosquito.

Accepted answers:
$\checkmark$ butterfly

$$
\begin{array}{ll}
\text { Question Type: } & \text { Free Text } \\
\text { Date Added: } & \text { Wed 4th Aug } 2021 \\
\text { Last Modified: } & \text { N/A } \\
\text { QID\#: } & 28,615,691
\end{array}
$$

## Study the diagram below.



## (a) Explain how the water droplets are formed in the above set-up.

```
Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID#: 28,615,664
```

Correctly answered feedback
Hot water evaporates into water vapour in the set-up. Water vapour touches the cooler surface of the metal cover and condense into water droplet.

Incorrectly answered feedback
Hot water evaporates into water vapour in the set-up. Water vapour touches the cooler surface of the metal cover and condense into water droplet.

## Question 33

Lesser water droplets was formed in the set-up below.

(b) Explain why lesser water droplets were formed in the set-up.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,665$ |

Correctly answered feedback
The layer of oil above the water prevent4ed all the water from evaporation. Therefore, there was lesser water vapour in the set-up to condense into water droplets.

Incorrectly answered feedback
The layer of oil above the water prevent4ed all the water from evaporation. Therefore, there was lesser water vapour in the set-up to condense into water droplets.

## $*^{\star}$ Answers | Edit | ED Duplicate | 1 Used In | $\hat{\boldsymbol{*}}$ Reorder

## Question 34

Lisa set up an experiment as shown below.
lighted bulb

cardboard with diamond-shape cut-out
(a) A shadow was cast on the white screen when a lighted bulb was placed in front of the cardboard. Shade the diagram below to show how the shadow would look like.

```
Question Type: Essay
Date Added: Wed 4th Aug }202
Last Modified: N/A
QID#: 28,615,666
```


## Correctly answered feedback



Incorrectly answered feedback



Remove From Test

## Question 35

Lisa placed a glass sheet in front go the cardboard. Will the same shadow in (a) be formed on the screen? Explain your answer.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,667$ |

## Correctly answered feedback

Yes. Glass is a transparent material. Thus most of the light from the lighted bulb passes through the glass sheet.

Incorrectly answered feedback

Yes. Glass is a transparent material. Thus most of the light from the lighted bulb passes through the glass sheet.


## Question 36

What would happen to the size of the shadow if Lisa moved the cardboard nearer to the light bulb without changing other parts to the set-up?

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,668$ |

Correctly answered feedback
The size of the shadow will increase

Incorrectly answered feedback
The size of the shadow will increase

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


## Question 37

Explain your answer in part (c)

Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: $\quad 28,615,669$

Correctly answered feedback
When the cardboard was moved nearer to the bulb, more light from the bulb would be block by the cardboard so the size of the shadow increased.

Incorrectly answered feedback
When the cardboard was moved nearer to the bulb, more light from the bulb would be block by the cardboard so the size of the shadow increased.


## Question 38

Devi set up an experiment as shown below to find out if light is needed for seed germination. Her teacher told her that her experiment is not a fair test.

(a) What change should Devi make to,set-up B so as to ensure a fair test?

| Date Added: | Wed 4th Aug 2021 |
| :--- | :--- |
| Last Modified: | N/A |

QID\#: 28,615,671

Correctly answered feedback
Take away 2 seeds from set-up B to make the number of seeds equal

Incorrectly answered feedback
Take away 2 seeds from set-up B to make the number of seeds equal
$«^{\pi}$ Answers | Edit | C Duplicate | 1 Used In | $\stackrel{\text { Reorder }}{ }$

## Question 39

In which set-up(s) will the seeds germinate? Explain your answer

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,672$ |

Correctly answered feedback
Both set-ups. Water, oxygen and warmth are present in both set-ups, thus the conditions for germination to occur are present

Incorrectly answered feedback
Both set-ups. Water, oxygen and warmth are present in both set-ups, thus the conditions for germination to occur are present

```
**Answers | Edit | E{D Duplicate | { Used In | \hat{* Reorder}
```


## Question 40

Devi then messured the mass of the soed leaves as the seeds gemminate. The table
below shows how the mass of the seed leaves changed over time.

| Mumber of <br> days | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Mass of seed <br> loaves (gram) | 8 | 7 | 5 | 2 | 2 | 2 |

(c) What is the relationship between the number of days and the mass of seed leaves?

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,673$ |

## Correctly answered feedback

When the number of days increases from day 1 to 4 , the mass of seed leaves decreases. When the number of days increases from day 4 to 6 , the mass of seed leaves remains the same

Incorrectly answered feedback
When the number of days increases from day 1 to 4 , the mass of seed leaves decreases. When the number of days increases from day 4 to 6 , the mass of seed leaves remains the same
$\varkappa^{\star}$ Answers Edit Euplicate| 1 Used $\ln \mid \stackrel{\rightharpoonup}{\text { R Reorder }}$ Remove From Test

## Question 41

How many days do the seedlings take to develop its first pair of green leaves? Explain your answer

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,674$ |

Correctly answered feedback
4 days. After 4 days, the mass of seed leaves remains the same as the seeding has leaves to make food

Incorrectly answered feedback
4 days. After 4 days, the mass of seed leaves remains the same as the seeding has leaves to make food

## $«^{\star}$ Answers | Edit | EDuplicate | 1 Used In | $\hat{\text { R Reorder }}$

## Question 42

While walking to school. Tim found a fruit as shown below.

(a) Label and name the structure of the fruit abowe that enables the seeds of the fruit to be dispersed.

Tim brought it to school and drew a diagram below to show how the frut would be dispersed.


Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#:
28,615,675


Incorrectly answered feedback

(b) His teacher told him that his diagram was drawn wrongly. Using the symbols given in the key, draw 4 seedings to show how the seeds will be dispersed in the box below.


Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#:
28,615,676


Incorrectly answered feedback


What is the advantage of dispersing the seeds of the fruit?

Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: 28,615,677

Correctly answered feedback
The seeds can be spreader further apart can can prevent cover crowding

Incorrectly answered feedback
The seeds can be spreader further apart can can prevent cover crowding

```
* Answers | Edit & EDDPlicate | Used In | * Reorder
```

Question 45

Jack filled three containers, A, B and C, with an equal volume of water and placed them under the Sun. He measured the volume of water left in each of the containers after 30 minutes.

(a) What is the independent variable (variable changed) in this experiments.

Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: 28,615,678

Correctly answered feedback
The exposed surface area of water

Incorrectly answered feedback
The exposed surface area of water
$\square$
$\mathbf{k}^{\wedge}$ Answers Edit Duplicate| 1 Used $\ln \mid \stackrel{\rightharpoonup}{*}$ Reorder

The graph below shows the results of his experiment.

(b) Fill in the boxes in the graph above with the letters A, B and C to show the correct containers.


## volume of water left in the container


$\square$

Question 47

After a heavy rain, Jack and his friends from the basketball team were spreading out the puddies of water on the baskethall court. Due to safety reason, the school does not allow students to play at the basketball court if the ground is wet.

(c) Explain how spreading out the puddles of water will allow Jack and his friends to shorten the waiting time to play at the basketball court. [2]

Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: $\quad 28,615,680$

## Correctly answered feedback

By spreading out the puddles of water, the exposed surface area of the puddle water increases, and it will take a shorter time to evaporate.

## Incorrectly answered feedback

By spreading out the puddles of water, the exposed surface area of the puddle water increases, and it will take a shorter time to evaporate.

## Question 48

You are given a lighted candle, a metal ball and a metal ring as shown below. The metal ball is able to pass through the ring before being heated.

(a) Using the apparatus given, describe the steps you would take to show that metal expands when heated.

## Question Type: Essay

Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: $\quad 28,615,683$

## Correctly answered feedback

1. Put the metal ball in the metal ring, the metal ball was able to pass through the metal ring
2. Heat the metal ball
3. Put the metal ball into the metal ring again, the metal ball could not pass through the metal ring as it gained heat and expanded

Incorrectly answered feedback

1. Put the metal ball in the metal ring, the metal ball was able to pass through the metal ring
2. Heat the metal ball
3. Put the metal ball into the metal ring again, the metal ball could not pass through the metal ring
as it gained heat and expanded

## Question 49

In another experiment, Mary heated a bimetalic strip for 5 minutes. The strip is made up of two different metals, A and B , which expand at different rates.


Metal B


Bimetallic strip when hot
(b) Why did the bimetallic strip bend after being heated?

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |

## Correctly answered feedback

The side which metal A was at was heated. Metal A expanded more than metal B and so it bent

Incorrectly answered feedback
The side which metal A was at was heated. Metal A expanded more than metal B and so it bent

## $k^{\wedge}$ Answers | Edit | EDDuplicate | 4Used In | 合 Reorder

## Question 50

Ioe cream pudding is prepared by placing ioe croam oovered in beaten egg whites on top of a sponge cake as shown in the diagram below.


The pudding is then baked in a hot oven for a few minutes. The ice cream will not melt in the process of baking.

## (a) Based on the diagram above, explain why the ice cream did not melt?

QID\#: $\quad 28,615,685$

## Correctly answered feedback

The air bubbles in the beaten egg white and sponge cake are poor conductors of heat, thus the transfer of hear from the hot oven to the ice-cream is slowed down.

## Incorrectly answered feedback

The air bubbles in the beaten egg white and sponge cake are poor conductors of heat, thus the transfer of hear from the hot oven to the ice-cream is slowed down.

## 

## Question 51

Explain why the ice cream melted quickly when the pudding was cut into smaller sections when served.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,686$ |

Correctly answered feedback
When the pudding was cut into smaller pieces, the ice-creams will have a greater exposed surface area with the surrounding air. The ice-creams will gain more heat from the surrounding causing the ice-cream to melt.

Incorrectly answered feedback
When the pudding was cut into smaller pieces, the ice-creams will have a greater exposed surface area with the surrounding air. The ice-creams will gain more heat from the surrounding causing the ice-cream to melt.

## $\mathbf{k}^{\boldsymbol{x}}$ Answers Edit Duplicate| $\mathbb{1}$ Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$

## Question 52

The diagram below shows Flower X which is found in a garden.


Flower X
(a) Identify the parts of the flower that carry out the functions stated in the table bolow.

| (1) | , (i). |
| :---: | :--- |
| Contains pollen grains | Receives pollen grains during polination |

## Question Type: Essay

Date Added: Wed 4th Aug 2021

Last Modified: N/A
QID\#:
28,615,689

Correctly answered feedback
(i)
anther
(ii) stigma

Incorrectly answered feedback
(i) anther
(ii) stigma

Based on the diagram above, what is the likely method of pollination of Flower X ?

Question Type: Essay

| Date Added: | Wed 4th Aug 2021 |
| :--- | :--- |
| Last Modified: | N/A |

QID\#: 28,615,690

Correctly answered feedback
By wind

Incorrectly answered feedback
By wind

## Question 54

Explain how the position of the stigma helps the flower to be pollinated.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,661$ |

Correctly answered feedback
The stigma is hanging out of the flower. It allows the pollen grains carried by the wind to be deposited easily.

Incorrectly answered feedback
The stigma is hanging out of the flower. It allows the pollen grains carried by the wind to be deposited easily.

## $\mathbf{k}^{\boldsymbol{x}}$ Answers | Edit | E Duplicate | 4 Used In | $\stackrel{\bullet}{\text { Reorder }}$

Remove From Test

Question 55

The diagrams below show Cell S and Cell T.


Amanda conducts an experiment to find out what happens when both of the cells absorb too much water.

Both cells are placed in water for 5 minutes so that they can absort as much water as possible. After 5 minutes, Amanda recorded her observations in the table below.

| Cell S placed in wator | Cell T placod in wator |
| :---: | :---: |
| The cell stiffens but <br> maintains its regular shape | The cell burst and <br> becomes out of shape |

(a) Explain the diflerence in the observations of Cell S and Call T after 5 minutes.

```
Question Type: Essay
Date Added: Wed 4th Aug }202
Last Modified: N/A
QID#: 28,615,670
```

Correctly answered feedback
There is a cell wall around the cell membrane of cell $S$ and the cell wall helps the cell maintain its regular shape, Cell T had no cell wall around its cell membrane so it absorbed too much water, burst and becomes out of shape.

Incorrectly answered feedback
There is a cell wall around the cell membrane of cell $S$ and the cell wall helps the cell maintain its regular shape, Cell T had no cell wall around its cell membrane so it absorbed too much water, burst and becomes out of shape.

## 

## Question 56

Besides the parts labelled in the diagrams above, name another part that is found in both cells.

Accepted answers:
Cytoplasm

```
Question Type: Free Text
Date Added: Wed 4th Aug }202
Last Modified: N/A
QID#: 28,615,692
```


## Observe the diagrams below.


(a) Identify the states of the matter forssalt and milk.
(i) Salt

Accepted answers:
solid

Question Type: Free Text
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: 28,615,693
$«^{n}$ Answers | Edit | 局Duplicate | 1 Used $\ln \mid$ 合 Reorder

## Question 58

a(ii) Milk: $\qquad$

Accepted answers:
liquid

Question Type: Free Text
$\begin{array}{ll}\text { Date Added: } & \text { Wed 4th Aug } 2021 \\ \text { Last Modified: } & \text { N/A }\end{array}$
QID\#: 28,615,694

Question 59

State one similar property between the two matters shown above.

Last Modified：
QID\＃：

Correctly answered feedback
Both have a definite volume

Incorrectly answered feedback
Both have a definite volume

## 

Question 60

Tasha then filled a syringe with rice grains and tried to push the plunger in as shown in the diagram below．

She managed to push the plunger in slightly for a fow milimetres（ev）．

（c）Explain why Tasha was able to push the plunger in slightily．

## Question Type：Essay

Date Added：Wed 4th Aug 2021
Last Modified：N／A
QID\＃：$\quad 28,615,682$

## Correctly answered feedback

Air can be compressed．There were air spaces in between the rice grains that the plunger can push and so she was able to push the plunger in slightly．

## Incorrectly answered feedback

Air can be compressed．There were air spaces in between the rice grains that the plunger can push and so she was able to push the plunger in slightly．
$x^{\star}$ Answers｜Edit｜级Duplicate｜〒Used In｜仑 Reorder

## Question 61

For each question，write your answers in the space provided．
（44 Marks）

Mary used an apparatus to observe some cells taken from a part of a plant as shown in the dlagram below.

(a) Name the goparatus that is used to observe these cells.

## Accepted answers:

Microscope

## Question Type: Free Text

Date Added: Wed 4th Aug 2021

Last Modified: N/A
QID\#: $\quad 28,615,695$
$*^{\pi}$ Answers | Edit | 纪Duplicate | 1 Used $\ln \mid \hat{*}$ Reorder

## Question 62

Label and name the part of the cel that contains genetic information.
Question Type: Essay
Date Added: Wed 4th Aug 2021

Last Modified: N/A
QID\#:
28,615,687


Incorrectly answered feedback


## Question 63

Are these cells taken from the green leaves of the plant? Give a reason to support your answer.

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,688$ |

Correctly answered feedback
No. There are no chloroplasts in the cell

Incorrectly answered feedback
No. There are no chloroplasts in the cell

