## ClassMarker

## Primary 5 Science (Term 1) - St Nicholas



## Test Introduction

+ Add Introduction

32 Questions
(31 Points)

```
Test Questions 0 Test Assignments
```


## Question 1

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

The diagram below shows how the breathing rate of an average healthy adalt changes during different activities.


Which graph A, B, C or D best describes how the breathing rate changes as a person does the following activities? Explain your answer.

Runs very fast for 3 minutes

Question Type: Essay
$\begin{array}{ll}\text { Date Added: } & \text { Wed 4th Aug } 2021 \\ \text { Last Modified: } & \text { N/A }\end{array}$
QID\#: 28,615,767

## Correctly answered feedback

B. The breathing rate is increasing as running very fast for 3 minutes require more energy. Graph A is not possible as the breathing rate starts from zero.

Incorrectly answered feedback
B. The breathing rate is increasing as running very fast for 3 minutes require more energy. Graph A
is not possible as the breathing rate starts from zero.


## Question 2

Rests after a brisk walk

| Question Type: | Essay |
| :--- | :--- |
| Date Added: | Wed 4th Aug 2021 |
| Last Modified: | N/A |
| QID\#: | $28,615,768$ |

Correctly answered feedback
The breathing rate is decreasing as resting after a brisk walk requires lesser energy. Graph $D$ is not possible as breathing rate ends at zero

## Incorrectly answered feedback

The breathing rate is decreasing as resting after a brisk walk requires lesser energy. Graph $D$ is not possible as breathing rate ends at zero

```
**Answers | Edit | & Duplicate | 4 Used In | 仓ि Reorder

\section*{Question 3}

Name an activity during which the breathing rate of a person remains at the normal rate.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,769\)
\end{tabular}

Correctly answered feedback
Eating

Incorrectly answered feedback
Eating
```

«* Answers | Edit | \& Duplicate| \ Used In | 仑 Reorder Remove From Test

```

The diagrams below show the flow of blood in the circulatory systems of a fish and a buman.


State ons difference between the blood flow in the circulatory systems of a fish and in a human.

Question Type: Essay
Date Added: \(\quad\) Wed 4th Aug 2021
Last Modified: N/A
QID\#: 28,615,770

Correctly answered feedback
The circulatory system of a fish transports blood from the gills to the other parts of the circulatory system while humans transport blood from the lungs to the heart and then to the other parts of the body.

Incorrectly answered feedback
The circulatory system of a fish transports blood from the gills to the other parts of the circulatory system while humans transport blood from the lungs to the heart and then to the other parts of the body.
```

```
* Answers | Edit | & Duplicate | \ Used In | ज Reorder
```

```
```

```
* Answers | Edit | & Duplicate | \ Used In | ज Reorder
```

```

\section*{Question 5}

Both the lungs and gills are surrounded by many blood vessels. Explain why

Question Type: Essay
Date Added: \(\quad\) Wed 4th Aug 2021
Last Modified: \(\quad\) N/A

QID\#: 28,615,771

Correctly answered feedback
It helps to ensure there is a greater rate of exchange of gases into the blood stream

Incorrectly answered feedback
It helps to ensure there is a greater rate of exchange of gases into the blood stream
```

$\boldsymbol{*}^{\star}$ Answers | Edit | E Duplicate | 1 Used In | $\stackrel{\rightharpoonup}{\text { Reorder }}$

```

State the function of the heart in the circulatory system of a human

Question Type: Essay
\begin{tabular}{ll} 
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A
\end{tabular}

Last Modified: N/A
QID\#:
28,615,772

Correctly answered feedback
The heart pumps blood to provide more oxygen; remove carbon dioxide and other waste materials from the other parts of the body.

Incorrectly answered feedback
The heart pumps blood to provide more oxygen; remove carbon dioxide and other waste materials from the other parts of the body.
```

**Answers | Edit | \&DDuplicate | \ Used In | * Reorder

```

The diagram below shows plant \(A\) with an edible underground root \(P\).

plant A

P-stgres food made by the leaves of plant \(A\). Describe how the food made by the leaves gets stored in \(P\).
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,773\)
\end{tabular}

\section*{Correctly answered feedback}

The food carrying tubes will transport food produced from the leaves to the roots and root \(P\) will store some of the food from the leaves

\section*{Incorrectly answered feedback}

The food carrying tubes will transport food produced from the leaves to the roots and root \(P\) will store some of the food from the leaves

Question 8
-Four parts of a plant are shown below, Draw arrows ( \(\longrightarrow\) ) in the diagram below to show how water is transported in a plant.


Please type "done" to proceed to the next question

Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: \(\quad 28,615,774\)

Correctly answered feedback


Roots

\section*{Flower}

Incorrectly answered feedback


Roots
Flower

The graph below shows the amount of food eaten by an organism \(T\) at different stages of ita life cycle.


Narre stage C to D of the life cycle of the organism T. Suggest a reason why there is no change in the mass of the food eaten.-

Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: \(\quad 28,615,775\)

Correctly answered feedback
Pupa, because at the pupa stage it will not eat anything so when it is at stages \(B\) to \(C\), it ate a lot to provide energy for the pupa stage.

Incorrectly answered feedback
Pupa, because at the pupa stage it will not eat anything so when it is at stages \(B\) to \(C\), it ate a lot to provide energy for the pupa stage.

\section*{\(\mathbf{*}^{\wedge}\) Answers | Edit | EODuplicate | 4Used In | 合 Reorder}

\section*{Question 10}

Explain why it is beneficial for organism \(T\) to lay many eggs at one tome as shown below.


Correctly answered feedback
It is to increases the chances of the eggs hatching and growing into adults and to ensure the continuity of its own kind.

Incorrectly answered feedback
It is to increases the chances of the eggs hatching and growing into adults and to ensure the continuity of its own kind.
```

$k^{\star}$ Answers | Edit | EDuplicate | 1 Used In | $\stackrel{\bullet}{ }$ Reorder

```

\section*{Question 11}

In the set-up below, the bar magnet is repelled by the electromagnet. A pointer attached to the spring moves when the circuit is closed.

(a) How will the pointer move when only one battery is used?
A) upwards
B) downwards
C) towards the ruler
D) away from the ruler
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,791\)
\end{tabular}
\(*^{\pi}\) Answers | Edit | E? Duplicate | 1 Used In | \(\hat{\nabla}\) Reorder
Question 12

Explain your answer in (a) above

Question Type: Essay
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: \(\quad 28,615,777\)

Correctly answered feedback
when one battery is used, the electromagnet will repel with less force so the pointer will move downwards since magnetic force of electromagnet is weaker.

Incorrectly answered feedback
when one battery is used, the electromagnet will repel with less force so the pointer will move downwards since magnetic force of electromagnet is weaker.

\section*{\(*^{\star}\) Answers | Edit | ED Duplicate | 1 Used In | \(\hat{\boldsymbol{*}}\) Reorder}

\section*{Question 13}

James filed a measuring cylinder with \(50 \mathrm{~cm}^{3}\) of sand. He poured \(50 \mathrm{~cm}^{3}\) of water into the same cylinder.

(a) Draw a line in the diggram below to show the water level when the beaker of water is poured into the measuring cylinder with sand.

Please type "done" to proceed to the next question
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,778\)
\end{tabular}

Correctly answered feedback

\section*{a) Line drawn below \(100 \mathrm{~cm}^{3}\) but minimally higher than \(50 \mathrm{~cm}^{3}\)}

Incorrectly answered feedback

\section*{a) Line drawn below \(100 \mathrm{~cm}^{3}\) but minimally higher than \(50 \mathrm{~cm}^{3}\)}

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

\section*{Question 14}
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,779\)
\end{tabular}

\section*{Correctly answered feedback}

The water level in the cylinder will be lower than the 100 cm 3 mark as there are air spaces in between the grains of sand and some water will occupy the space left by the air.

\section*{Incorrectly answered feedback}

The water level in the cylinder will be lower than the 100 cm 3 mark as there are air spaces in between the grains of sand and some water will occupy the space left by the air.


\section*{Question 15}

Lily had two similar sheets X and Y made of the same material. She placed the sheets on a heater as shown below.


At the start, sheets \(X\) and \(Y\) were of the same length. After a while, sheet \(Y\) became longer than sheet \(X\).
(a) Give a reascn why sheet Y became longer than sheet X .
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,780\)
\end{tabular}

Correctly answered feedback
Sheet \(Y\) gained more heat and expanded more than Sheet \(X\)

Incorrectly answered feedback
Sheet \(Y\) gained more heat and expanded more than Sheet \(X\)


Lily had a glass cup with thick wralls as shown.

(i) When she poured sorne hot tea into the cup, the outer wall felt cooler than the inner wall. Give a reason for this.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,781\)
\end{tabular}

Correctly answered feedback
The outer wall is further away from the hot tea, hence it gained heat slower than the inner wall.

Incorrectly answered feedback
The outer wall is further away from the hot tea, hence it gained heat slower than the inner wall.
```

**Answers | Edit | ED Duplicate | 4 Used In | \hat{* Reorder}

```

\section*{Question 17}

When Lily filled the cup with boiling water, the cup cracked. Explain why.
\begin{tabular}{ll} 
Question Type: & Essay \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,782\)
\end{tabular}

Correctly answered feedback
The inner wall gained more heat from the hot boiling water and expanded more than the outer wall, causing the cup to crack

Incorrectly answered feedback
The inner wall gained more heat from the hot boiling water and expanded more than the outer wall, causing the cup to crack
```

*^Answers | Edit | \&~Duplicate | { Used In | \& Reorder

```

Section a ( \(15 \times 2\) marks \(=30\) Marks)
The graph below shows the changes in the composition of ais in a lift in which 10 people are trapped.

\section*{Amount of Gas \(\left(\mathrm{cm}^{2}\right)\)}


Based on the graph above, which one of the following best represents \(\mathrm{W}, \mathrm{X}\) and Y respectively?
(1)
\begin{tabular}{|c|c|c|}
\hline W & X & Y \\
\hline oxygen & water vapour & carbon dioxide \\
\cline { 3 - 4 } & nitrogen & carbon dioxide \\
\hline carbon dioxide & nitrogen & water vapour \\
\hline carbon dioxide & water vapour & oxypen \\
\hline
\end{tabular}
A) 1
B) 2
C) 3
(D) 4

\section*{Question Type:}

\section*{Multiple Choice}

Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
N/A
QID\#:
28,615,796

\section*{Question 19}

Which of the following statements are functions of the blood?
A lt keeps te heart pumping
\(B\) It carries nutrients and waste materials
C It excrete waste materials from the body
D It carries oxygen and carbon dioxide in the body
A) A and B only
B) B and C only
C) B and D only
D) B, C and d only

Question Type:
Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
QID\#:
N/A
28,615,783

Question 20

Mrs lee renoved an outer ring from the stem of plant \(O\) as shown below. The food-carrying tubes were removed while the water-carrying lubes remaineti in the stem.


Which one of the following diagrams represents the appearance of tie stem after a few days?
(1)

(2)

(3)

(4)

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

Question Type:
Randomize Answers:
Date Added: Multiple Choice

Last Modified:
QID\#:

No
Wed 4th Aug 2021
N/A
28,615,784

Stuay the set-ups below, Divid wants to find out how the numbar of loaves affects the absogption of water by the piant.


Ater a wesk, he recorded the volume of water in each pot. Howcver, tavid's father pointed out that he had made a mistake with one of the volumes of waler recorded, Which of his ohservations is incorrect?
\begin{tabular}{|c|c|c|}
\hline Set-up & \begin{tabular}{c} 
Volume of water on Dify 1 \\
(ml)
\end{tabular} & \begin{tabular}{c} 
Volume of water after weck 1 \\
(mi)
\end{tabular} \\
\hline (1) & 500 & 250 \\
\hline A & 5101 & 360 \\
\hline (3) & B & 500 \\
(4) & D & 500 \\
\hline
\end{tabular}
A) 1
B) 2
(C) 3
D) 4
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,785\)
\end{tabular}

\footnotetext{
\(\mathbf{k}^{\star}\) Answers | Edit EDDicate| 1 Used In | \(\stackrel{\rightharpoonup}{\text { R }}\) Reorder
Remove From Test
}

Question 22

The graph below shows the number of days for esch stage of the life cycle of organisms W and X .


Which of the following shows the stages that organisms \(W\) and \(X\) would be on the \(20^{\circ}\) day after the eggs havg been hatched?
\begin{tabular}{l|c|c|}
\cline { 2 - 2 } & Organism W & Organism \(X\) \\
\cline { 2 - 3 } (1) & adut & larval \\
\cline { 2 - 3 } (2) & tarval & pupal \\
\hline (3) & pupal & tarval \\
\cline { 2 - 3 } & adut & adult \\
\hline
\end{tabular}
A) 1
B) 2
\(\checkmark\) C) 3
D) 4
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,786\)
\end{tabular}
\(\varkappa^{\pi}\) Answers | Edit | D Duplicate | \(\mathcal{1}\) Used \(\operatorname{In} \mid \stackrel{\text { Reorder }}{\text { Remove From Test }}\)

\section*{Question 23}
\begin{tabular}{|c|c|}
\hline Organism F & Organism G \\
\hline 3-stage life cycle & \(-\quad\). \\
\hline Its young resembles the parent & Its young dons not resembla,the parent \\
\hline
\end{tabular}

What could organisms \(F\) and \(G\) be?
\begin{tabular}{c|c|c|}
\cline { 2 - 3 } & Organism F & Organism G \\
(1) & Cockroach & dragonfly \\
\cline { 2 - 3 } (2) & goldfish & grasshopper \\
(3) & rabbit & beesfe \\
\cline { 2 - 3 } & housefly & frog \\
\hline
\end{tabular}
A) 1
B) 2
C) 3
D) 4

\section*{Question Type: \\ Multiple Choice}

Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified:
N/A
QID\#:
28,615,787
\(«^{\pi}\) Answers | Edit | D Duplicate | 1 Used In | \(\stackrel{\text { Reorder }}{ }\)
Question 24

Study the flow chart below.


Which one of the following sets of questions can \(X, Y\) and \(Z\) represent?
\begin{tabular}{|c|c|c|c|}
\hline & X & Y & z \\
\hline (1) & Does it conduct electricity? & Is it magnetic? & Is it a solid? \\
\hline (2) & Is it a solid? & Does it conduct electricity? & Is it magnetic? \\
\hline (3) & Does it occupy space? & Does it conduct electricity? & Is it a meta? \\
\hline (4) & Does it have a definite shape? & Is it a solid? & Does it conduct electricity? \\
\hline
\end{tabular}
A) 1
B) 2
C) 3
D) 4
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,788\)
\end{tabular}

\section*{Question 25}

A beaker of ice cubes was left in a classroom for 30 minutes. Which one of the graphs below correctly shows the change in the temperature of the ice cubes?
(1)
(2)


(3)

(4)

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

\section*{Question Type:}

Randomize Answers: No
Date Added:
Wed 4th Aug 2021
Last Modified:
N/A
QID\#:
28,615,789
\(\boldsymbol{*}^{\pi}\) Answers | Edit | 约Duplicate | 4 Used In | 领Reorder

The table below shows the lenglhs of metals P, Q and R when heated to \(100^{\circ} \mathrm{C}\).
\begin{tabular}{|c|c|c|c|}
\hline Key & Metal & Length of metal at room temperature (mm) & \[
\begin{aligned}
& \text { Length of metal } \\
& \text { at } 100^{\circ} \mathrm{C} \\
& (\mathrm{~mm}) \\
& \hline
\end{aligned}
\] \\
\hline  & P & 100 & 111 \\
\hline & Q & 100 & 102 \\
\hline  & R & 100 & 106 \\
\hline
\end{tabular}

Metats \(P\), \(Q\) and \(R\) were used to make rings as shown below. The ringe were immersed in cold water at \(10^{\circ} \mathrm{C}\) for 10 minutes.
Which of the inner rings could be easily removed at the end of 10 minutes?
A.


G

A) A only
(B) A and C only
C) B and D only
D) C and D only

\section*{Question Type:}

Randomize Answers:

Last Modified: N/A
QID\#:

\section*{}

Question 27

Bala conducted an experiment by placing two rods A and B of similar lengths and sizes but made of different materials into a beaker of hot water as shown below.


Which one of the following helped Bala to arrive at the conclusion that rod B is a better condurtnr of heat than rod A after 10 minutes?
A) Rod A felt cooler than \(\operatorname{rod} B\)
B) \(\operatorname{Rod} A\) expanded more than \(\operatorname{rod} B\)
C) \(\operatorname{Rod} B\) had a lower temperature than \(\operatorname{rod} A\)
D) The mass of rod B increased more than the mass of \(\operatorname{rod} A\)

\section*{Question Type:}

Multiple Choice
Randomize Answers: No
Date Added: Wed 4th Aug 2021
Last Modified: N/A
QID\#: \(\quad 28,615,792\)

\section*{}

\section*{Question 28}

Mr Tan sot up the experiment shown in the diagram below. When he poured some water into the funnel, a few droplets of water flowed into the flask while the rest of the water remained in the funnel.


John then set up a similar experiment. When he poured the same amount of water into the funnel, all the water flowed into the flask as shown below.


Which one of the following could have caused the result oblainsed by John to be different from that by Mr Tan?
A) John poured the water in too quickly
(B) John had fixed the stopper loosely
C) The water that John used was cold
D) John did the experiment on a cooler day
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,793\)
\end{tabular}

\section*{\(«^{\star}\) Answers | Edit | 呴Duplicate | Used In | \(\stackrel{\rightharpoonup}{\text { Reorder }}\)}

Question 29

Aminah stroked each of the four metal bars A, B, C and D with a magnet for 30 times. She then hung them next to one another from a support. If was observed that only one of the bars remained stationary while the rest either swung away from or towards one ancther as shown below.


Based on the abowe observations, which one of the following shows the most likaly materials that bars \(A, B, C\) and \(D\) are made of?
(1)
\begin{tabular}{|c|c|c|c|}
\hline bar A & bar B & bar C & bar D \\
\hline steel & copper & iron & iron \\
\hline ron & iron & steel & aluminum \\
\hline aluminium & stoel & copper & iron \\
\hline copper & steel & iron & steel \\
\hline
\end{tabular}
A) 1
B) 2
C) 3
D) 4
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,794\)
\end{tabular}

\footnotetext{
\(\mathbf{k}^{\boldsymbol{\wedge}}\) Answers Edit| Duplicate \(\mathbb{4}\) Used In | \(\stackrel{-}{\text { Reorder }}\)
}

Question 30

The diagram below shows the arrangements of some magnets.
A

B

C

D


\section*{Which of the above arrangements isfare not possible?}
A) C only
B) A and B only
C) C and D only
D) B and D only
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,795\)
\end{tabular}

\section*{}

\section*{Question 31}

Which is the correct route taken by blood travelling from a leg to an arm in the human body?
A) leg -> heart -> lungs -> arm
B) leg -> lungs ->heart -> arm
C) leg -> lungs ->heart -> lungs -> arm
D) leg -> heart -> lungs -> heart -> arm
\begin{tabular}{ll} 
Question Type: & Multiple Choice \\
Randomize Answers: & No \\
Date Added: & Wed 4th Aug 2021 \\
Last Modified: & N/A \\
QID\#: & \(28,615,797\)
\end{tabular}

Which one of the following diagrars shows the exchange of gases betwoen living organisms and the surroundings during the day?
(1)

(2)

(3)

(4)

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

\section*{Question Type:}

Randomize Answers: No
Date Added:
Wed 4th Aug 2021
Last Modified: N/A
QID\#:
28,615,798
www.classmarker.com```

