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Primary 6 Science (Prelim) - Tao Nan (Y0)

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Test Introduction

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63 Questions (66 Points) **Question Bank:** 12,655 Questions

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Question 1

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

For each question, four options are given. One of them is the correct answer. (28 x 2 marks)

The process of photosynthesis is shown below.

carbon dioxide + water $\xrightarrow{\text{energy P}}$ food + Q

Identify energy P and substance Q.

A.

Energy P	Q
light	water

✓ B.

Energy P	Q
light	oxygen

C.

Energy P	Q
heat	water

D.

Energy P	Q
heat	oxygen

Question Type: *Multiple Choice*
Randomize Answers: *No*
Date Added: *Mon 4th Oct 2021*

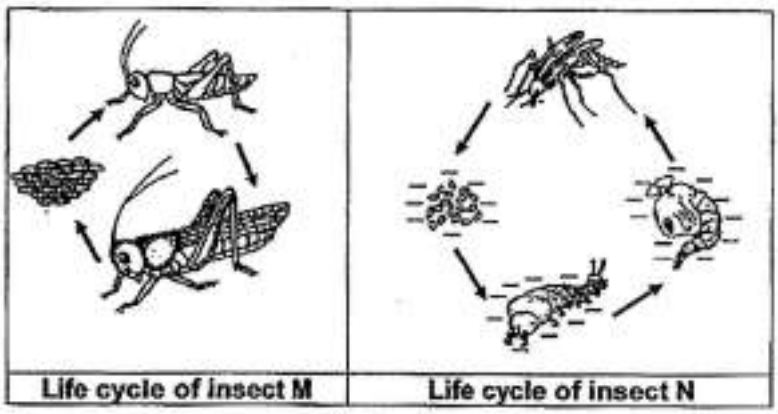
Last Modified: *N/A*
QID#: *29,220,734*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 2

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Study the life cycles of the insects, M and N, as shown below.



Based on the diagrams above, which of the following statements is true?

A. Both life cycles have the larval stage.

B. Insect M has more stages in its life cycle than insect N.

C. Insect M and insect N can live on land and in water.

✓ **D.** The young of insect M looks like its adult but the young of insect N does not look like its adult.

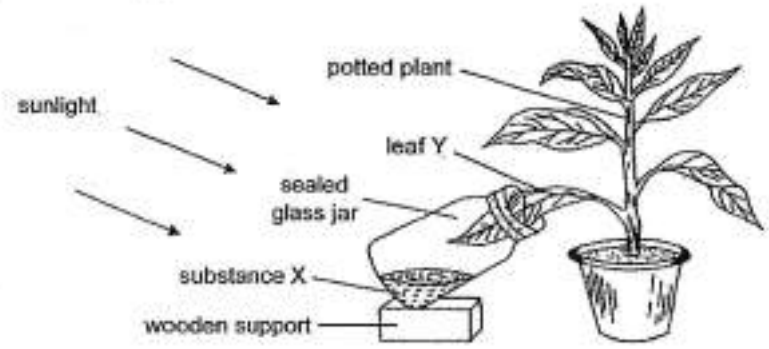
Question Type: *Multiple Choice*
Randomize Answers: *No*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,220,783*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 3

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Sarah placed one half of leaf Y in a sealed glass jar containing substance X and placed the set-up in the sun for a few hours.



She then conducted a food test on leaf Y and the result of her experiment is shown below.

What is the purpose of substance X in the experiment?

A. To absorb oxygen

B. To produce nitrogen

C. To give out water vapour

✓ **D.** To absorb carbon dioxide

Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,794*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 4

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Nadia made the following observations about Organism Z over a period of time. The observations are stated in the box below.

- feeds on insects
- has webbed feet
- lays its eggs in water
- breathes through its moist skin

Which of the following groups of animals does Organism Z belong to?

A. fish

B. insect

C. reptile

✓ **D.** amphibian

Question Type: Multiple Choice
Randomize Answers: No
Date Added: Mon 4th Oct 2021
Last Modified: N/A
QID#: 29,220,798

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 5

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

There were three types of flowering plants, R, S and T, grown in fields near a river as shown in Diagram 1.

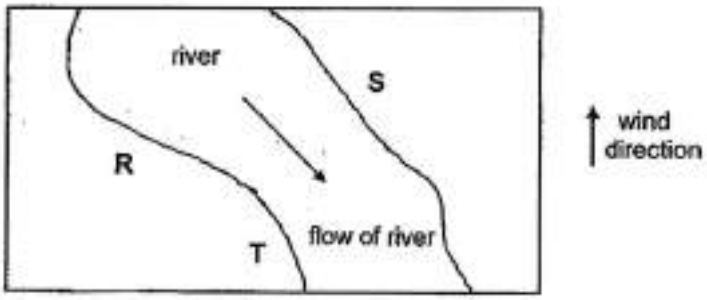


Diagram 1

A few years later, more of each plant, R, S and T, were found growing in the fields as shown in Diagram 2.

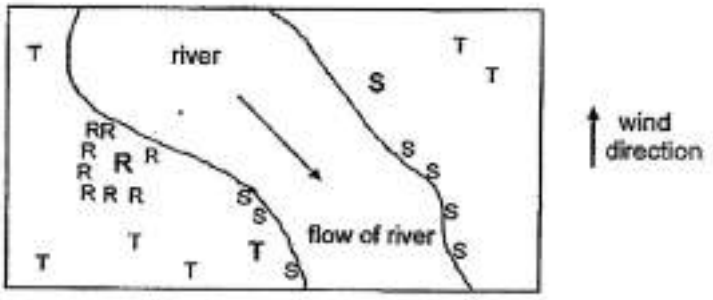


Diagram 2

Based on the distribution of plants in Diagram 2, which of the following are likely the characteristics of the fruits, R, S and T?

A.

Plant R	Plant S	Plant T
fleshy and brightly coloured	fibrous husk	hook-like structures

B.

Plant R	Plant S	Plant T
splits open when ripe	hook-like structures	wing-like structure

✓ C.

Plant R	Plant S	Plant T
splits open when ripe	fibrous husk	fleshy and brightly coloured

D.

Plant R	Plant S	Plant T
fibrous husk	fleshy and brightly coloured	wing-like strucutre

Question Type: Multiple Choice

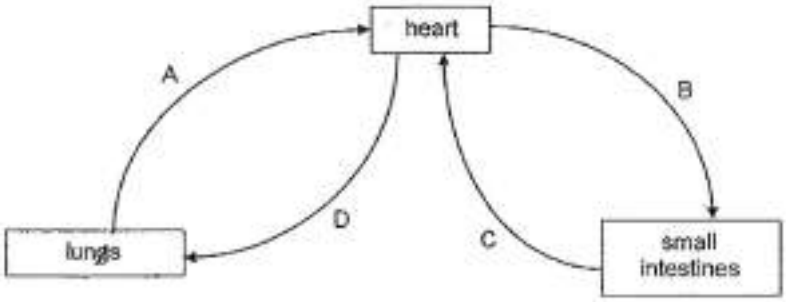
Randomize Answers: No
Date Added: Mon 4th Oct 2021
Last Modified: N/A
QID#: 29,220,814

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 6

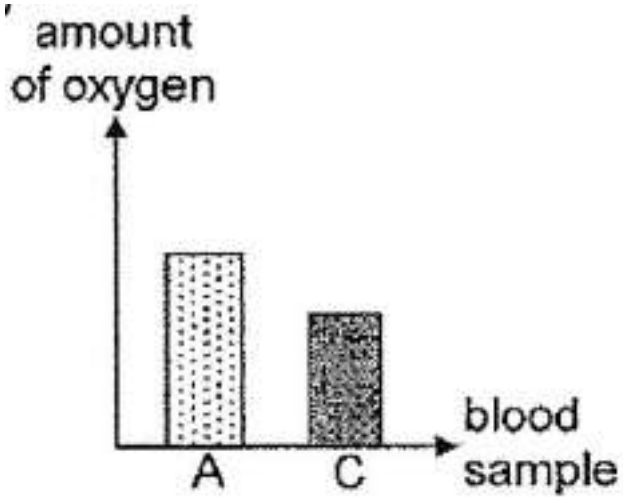
Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The diagram below shows the directions of blood flow in some parts of the body.

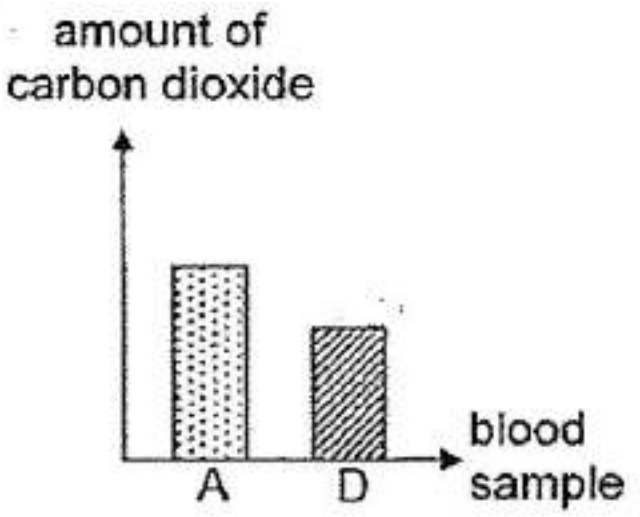


The same amount of blood samples was taken from A, B, C and D after a meal.
Which chart shows the correct comparison of substances in the blood samples?

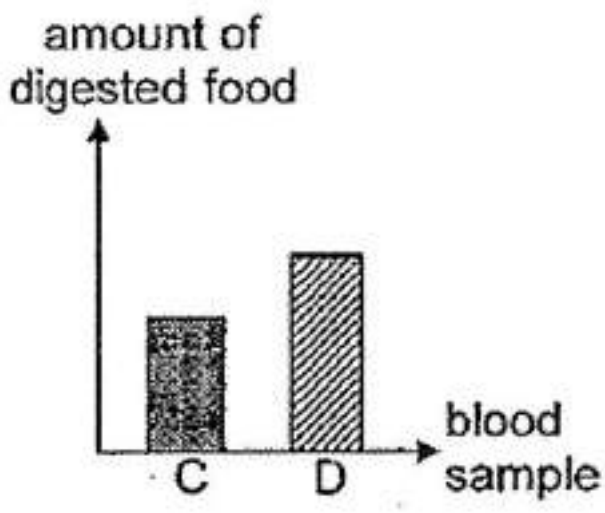
✓ **A.**



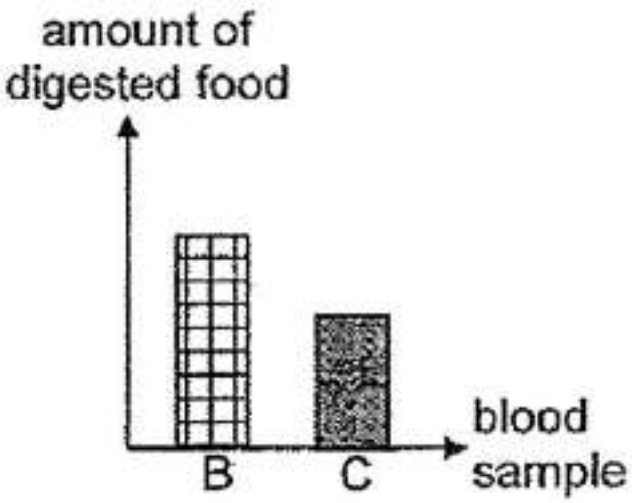
B.



C.



D.



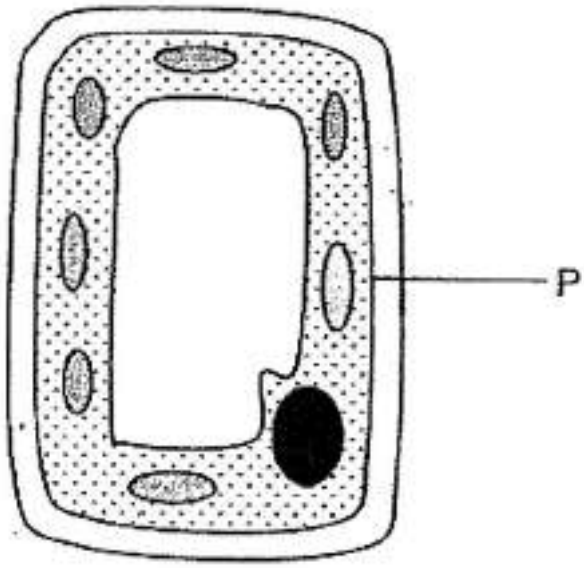
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,822*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 7

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The diagram shows a plant cell.



Which of the following statements is correct about P?

A. P gives the cell its shape.

B. P makes food for the cell.

C. P does not allow light to pass through.

✓ **D.** P controls substances from entering and leaving the cell.

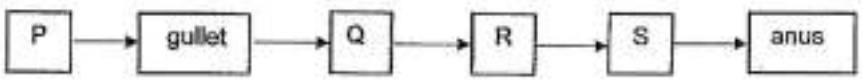
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,833*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 8

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The diagram below shows how food passes through the digestive system of a human body.



Where does digestion take place?

A. R only

B. Q and R only

C. Q, R and S only

✔ **D.** P, Q and R only

Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,836*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 9

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The table below shows some physical characteristics of both father and mother in a family.

Parent	Pointed Nose	Long Hair	Detached Earlobe
Father	√		
Mother		√	√

They have four children with the following physical characteristics.

Child	Pointed Nose	Long Hair	Detached Earlobe
Alan	√		√
Betty		√	
Charles	√		√
Daren		√	

Based only on the information above, which of the following statements are definitely true?

A Betty and Daren are twins.

B Betty inherited at least one physical characteristics from her mother.

C Alan inherited one physical characteristics from his father.

D Charles inherited at least one physical characteristics from his parents.

A. A and D only

B. B and C only

✔ **C.** C and D only

D. B, C and D only

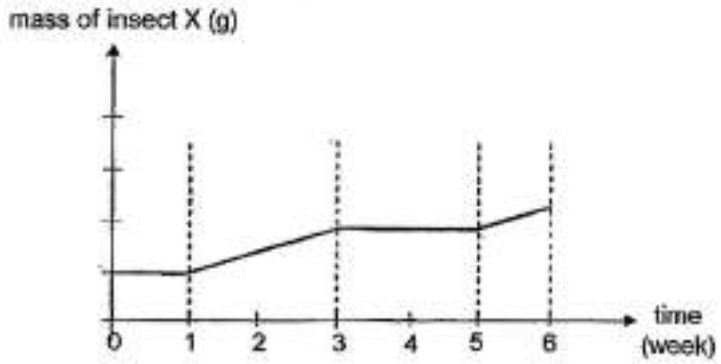
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,839*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 10

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The graph below shows the life cycle of insect X.



Based on the graph, how long does insect X take to develop into an adult after hatching?

A. two weeks

B. three weeks

✓ **C.** four weeks

D. five weeks

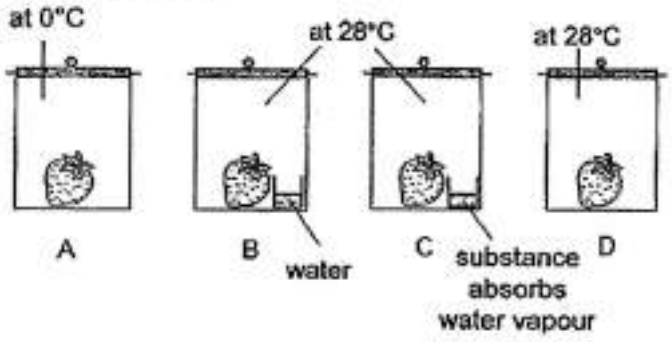
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,843*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 11

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Ted has the following set-ups.



Based on the experiment, in which two set-ups would Ted most likely find mould on the strawberry after a few days?

A. A and C only

B. A and D only

C. B and C only

✓ **D.** B and D only

Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,844*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

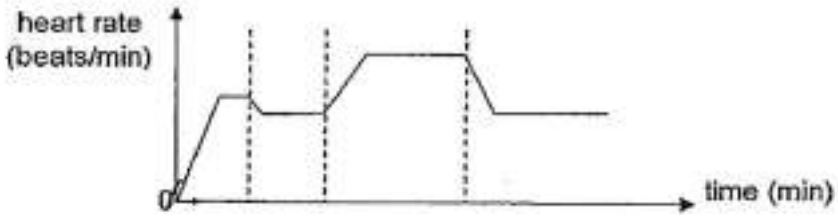
Question 12

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

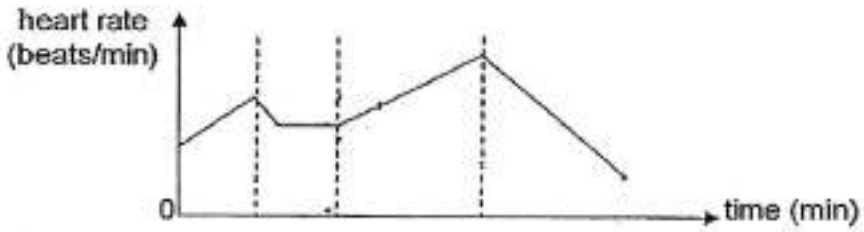
Ali took a 10-minute slow walk from his house to a nearby park and rested on a bench for 10 minutes before he jogged home at a constant speed for 20 minutes. He then rested on his sofa.

Which of the following graphs best shows Ali's heart rate from the time he left home to the time he rested at home?

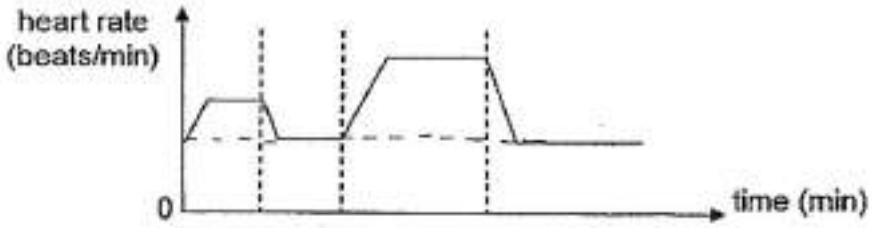
A.



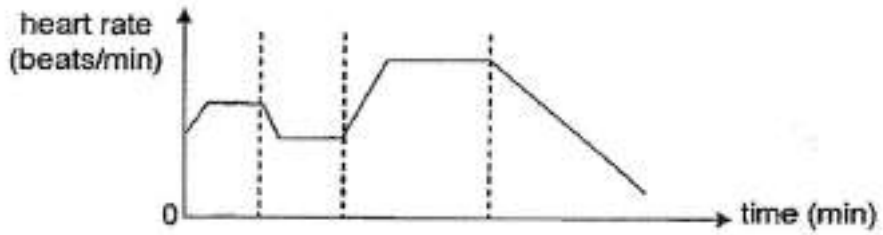
B.



✓ **C.**



D.



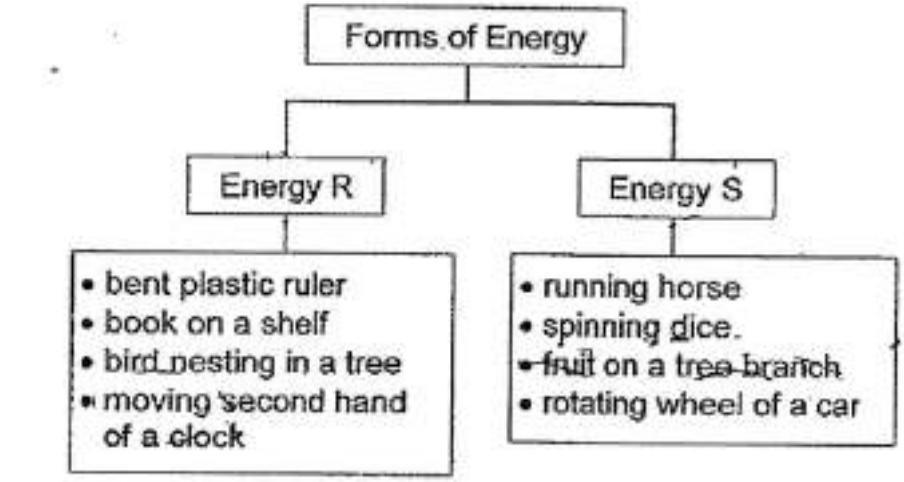
Question Type: *Multiple Choice*
Randomize Answers: *No*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,220,856*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 13

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Study the classification chart below.



Which of the objects have been incorrectly classified?

A.

Energy R	Energy S
bent plastic ruler	spinning dice

✓ **B.**

Energy R	Energy S
moving second hand of a clock	fruit on a tree branch

C.

Energy R	Energy S
bird nesting in a tree	rotating wheel of a car

D.

Energy R	Energy S
book on a shelf	running horse

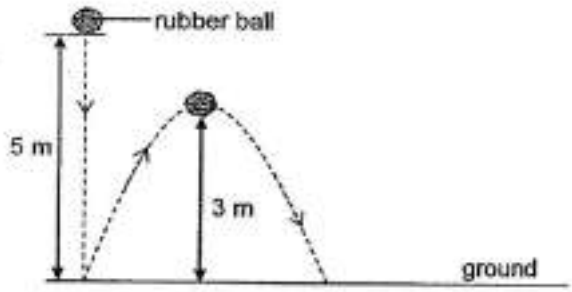
Question Type: *Multiple Choice*
Randomize Answers: *No*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,220,866*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 14

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Ginny used rubber balls of identical material but of different masses to carry out the experiment below. She dropped a 20 g rubber ball from a height of 5 m. The ball then bounced up 3 m after hitting the ground as shown below.



Which of the following should Ginny choose if she wants the ball to bounce higher than 3 m?

A.

Rubber Ball (g)	Height dropped from (m)
10	2

B.

Rubber Ball (g)	Height dropped from (m)
10	5

C.

Rubber Ball (g)	Height dropped from (m)
20	2

✔ D.

Rubber Ball (g)	Height dropped from (m)
50	10

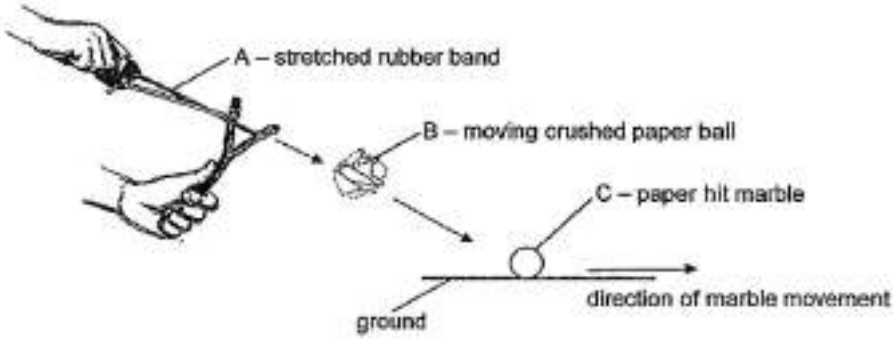
Question Type: *Multiple Choice*
Randomize Answers: *No*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,220,873*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 15

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Johari was playing with his slingshot. He pulled the rubber band with a crushed paper ball as far as he could before he released the stretched rubber band as shown below. The crushed paper ball hit a marble so the marble moved.



Which of the following correctly shows the energy conversion from point A to point C?

A. potential energy ----> kinetic energy ----> potential energy

B. kinetic energy ----> potential energy ----> heat energy + sound energy

✓ **C.** potential energy ----> kinetic energy ----> kinetic energy + sound energy

D. potential energy ----> kinetic energy ----> potential energy + sound energy

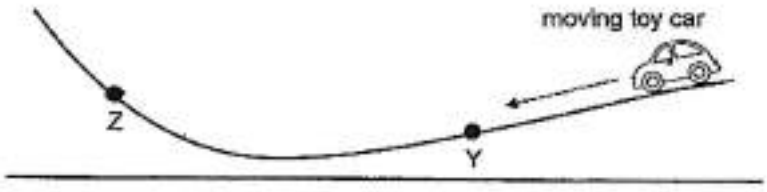
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,883*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 16

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

A toy car moved down a slope, past point Y and moved up beyond point Z before coming to a stop. After which, the toy car slid back down.



The amount of kinetic energy and potential energy of the toy car at points Y and Z are compared. Which of the following is correct?

A.

Kinetic energy at Z compared to Y	Potential energy at Z compared to Y
less	less

✓ **B.**

Kinetic energy at Z compared to Y	Potential energy at Z compared to Y
less	more

C.

Kinetic energy at Z compared to Y	Potential energy at Z compared to Y

more	the same

D.

Kinetic energy at Z compared to Y	Potential energy at Z compared to Y
the same	less

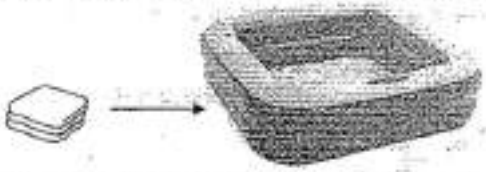
Question Type: Multiple Choice
Randomize Answers: No
Date Added: Mon 4th Oct 2021
Last Modified: N/A
QID#: 29,220,925

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 17

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Mary has an inflatable swimming pool which can be folded when deflated and inflated with air to contain water as shown in diagrams below.



The table below shows the possible properties of the inflatable swimming pool. A tick (✓) indicates the presence of the property.

Which of the following are the properties necessary to make the above inflatable swimming pool?

✓ A.

Properties		
Flexible	Strong	Waterproof
✓	✓	✓

B.

✓		

C.

✓	✓	

D.

		✓

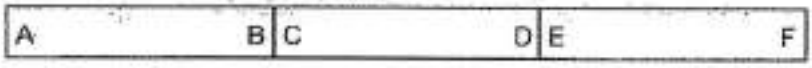
Question Type: Multiple Choice
Randomize Answers: No
Date Added: Mon 4th Oct 2021
Last Modified: N/A
QID#: 29,220,942

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 18

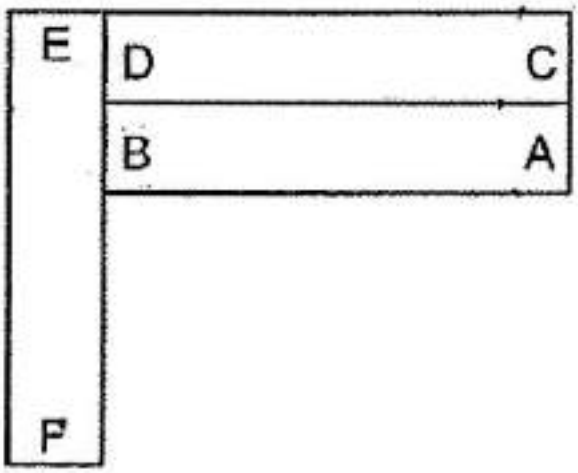
Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Three bar magnets, AB, CD and EF, can be arranged as shown below.

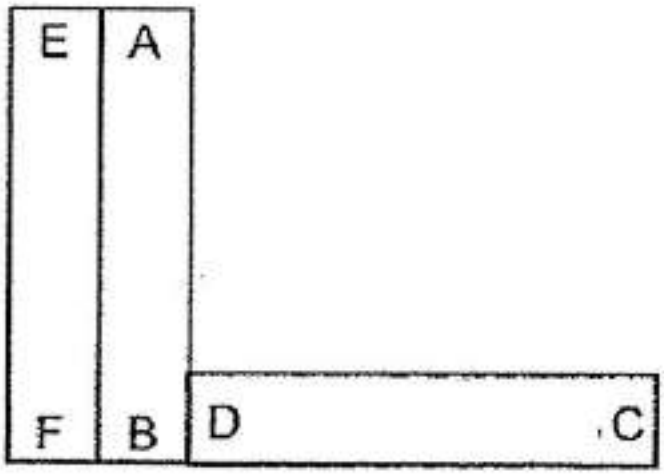


Which of the following arrangements of the magnets is possible?

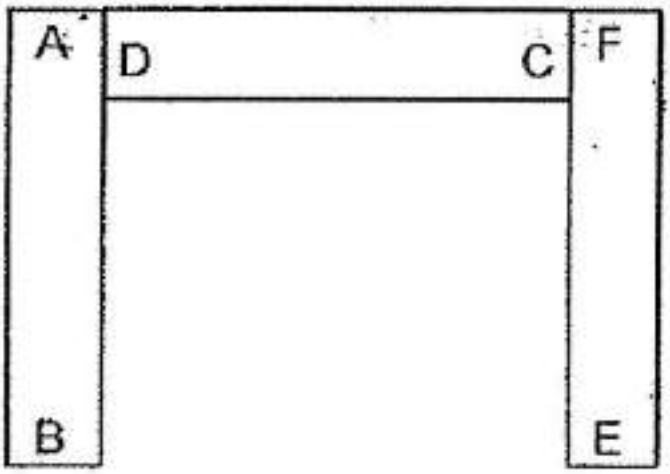
A.



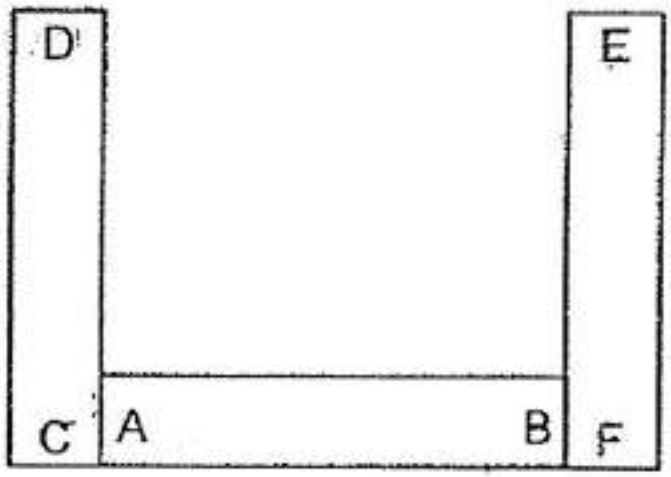
B.



✓ C.



D.



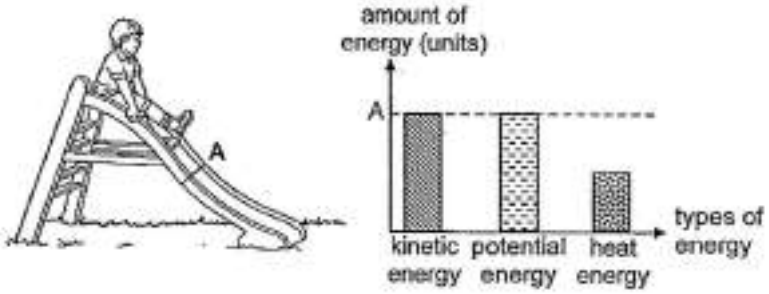
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,950*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 19

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

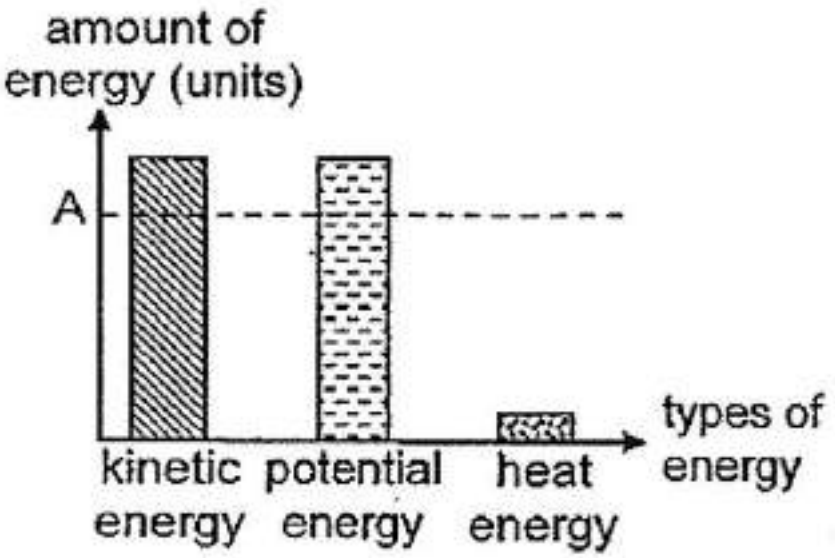
The diagram below shows a child sliding down a slide. The graph next to the diagram shows the amount of different types of energy at Point A as the child slides down the slide.



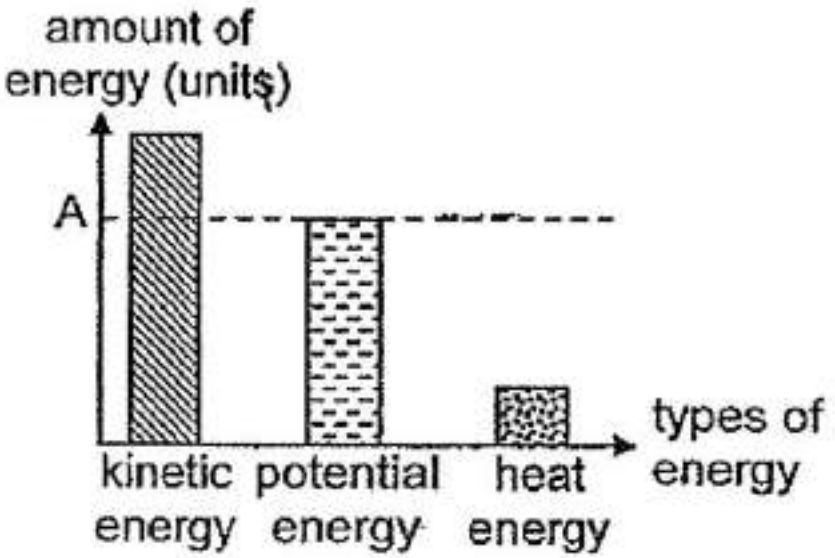
After a sudden downpour, the slide was wet but the child still continued to play.

Which graph correctly shows the change in the amount of different types of energy at A as the child slid down the wet slide?

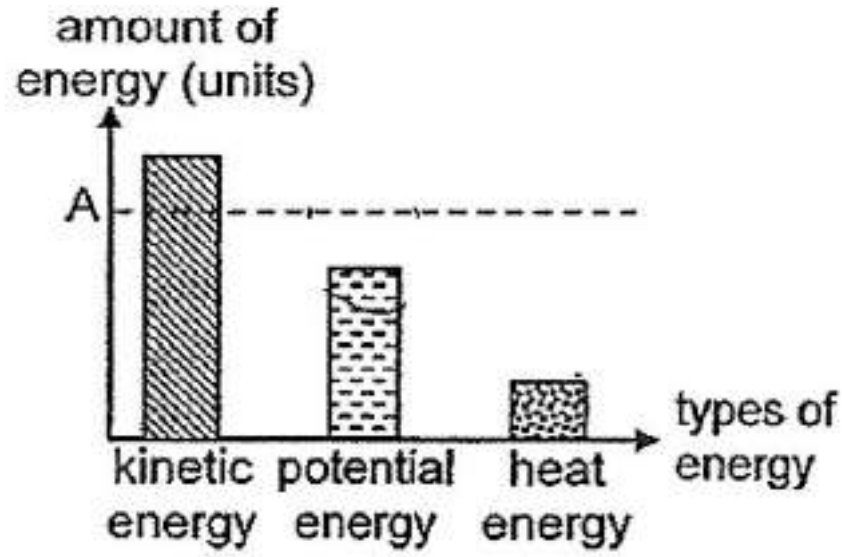
A.


amount of
energy (units)
A
types of
energy
kinetic
energy
potential
energy
heat
energy

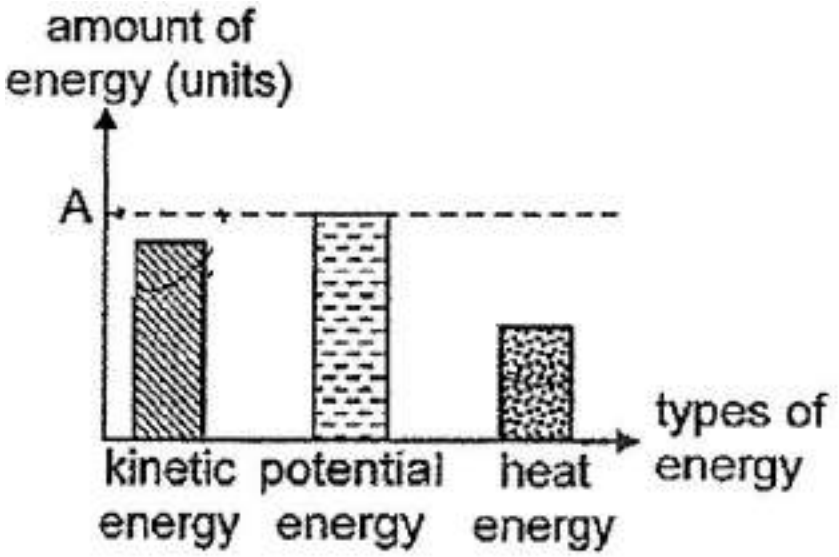
✓ **B.**


amount of
energy (units)
A
types of
energy
kinetic
energy
potential
energy
heat
energy

C.


amount of
energy (units)
A
types of
energy
kinetic
energy
potential
energy
heat
energy

D.



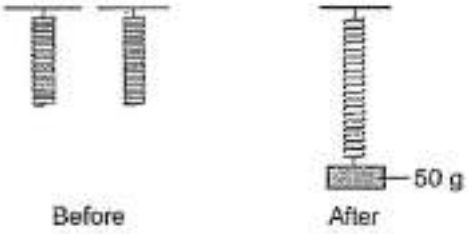
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,962*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 20

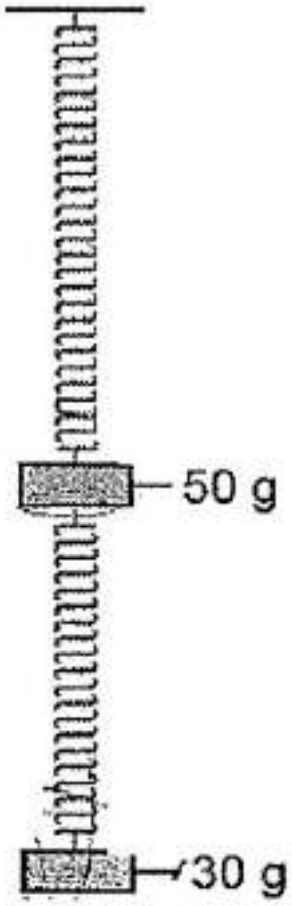
Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Chitra had 2 similar springs. When a 50 g mass was hung on one spring, she noticed that it extended.

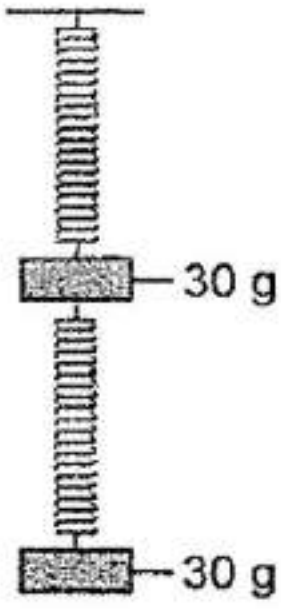


Which of the following will correctly show the extensions of the springs when different masses are hung on them?

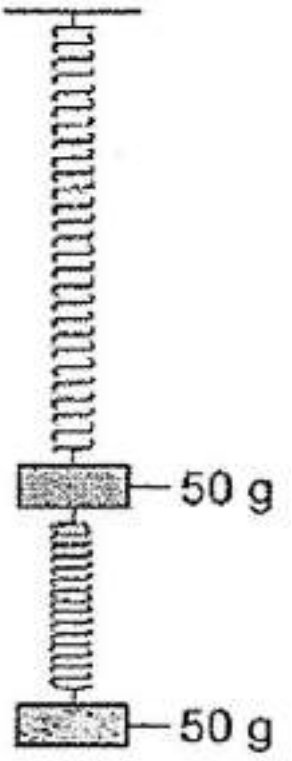
A.



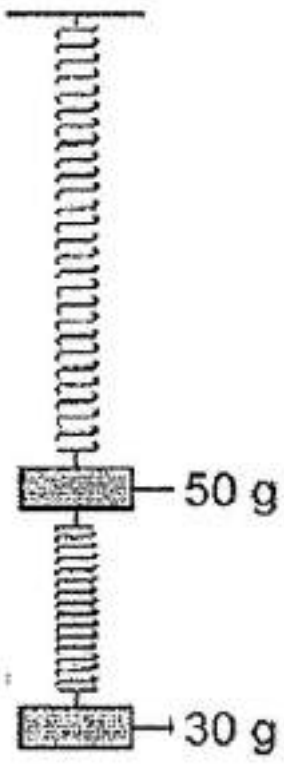
B.



C.



✔ **D.**



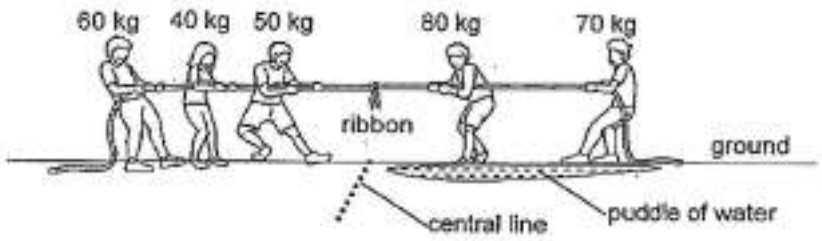
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,971*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 21

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Two groups of people were playing 'tug-of-war' as shown below. Both teams had to pull at opposite ends of a rope. The winning team would be the one that managed to pull the centre ribbon across a central line towards themselves.



Which of the following explains why the game was not played fairly?

A The number of participants in each team was different.
B The frictional force between the shoes and the ground was different.
C The difference in the total mass of each team affected the force exerted on the rope.

✓ **A.** A and B only

B. A and C only

C. B and C only

D. A, B and C only

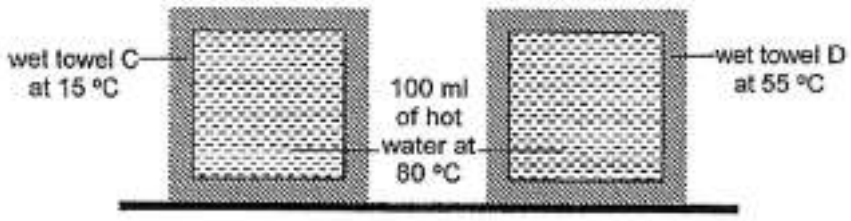
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,975*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 22

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Shaun fully filled two identical containers with hot water. He then wrapped them in identical wet towels, C and D, of different temperatures as shown below.



Which of the following observations did he make after 10 minutes?

A.

Heat gained by towels	Heat flow from
D gained more heat than C	towel to hot water

✓ **B.**

Heat gain by towels	Heat flow from
C gained more heat than D	hot water to towel

C.

Heat gain by towels	Heat flow from
C and D did not gain heat	hot water to towel

D.

Heat gain by towels	Heat flow from
C and D gained the same amount of heat at any given time	towel to hot water

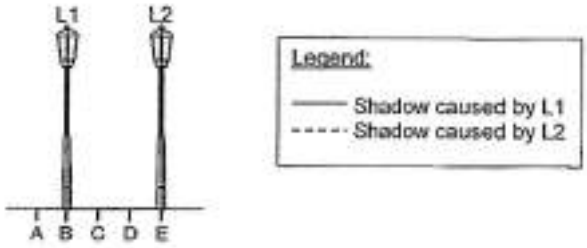
Question Type: *Multiple Choice*
Randomize Answers: *No*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,220,981*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 23

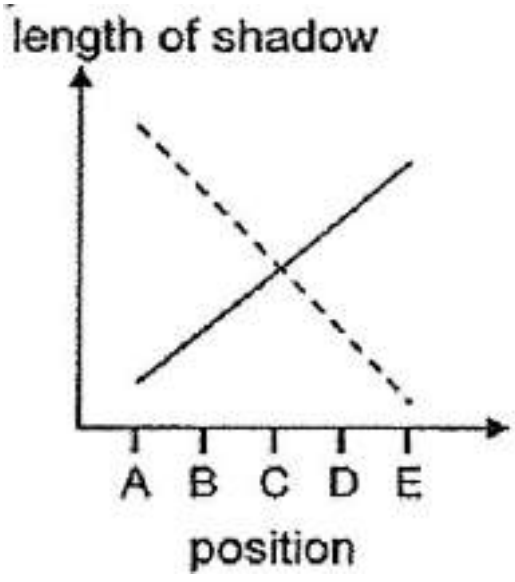
Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Sarah was walking along a path from A to E with two street lamps, L1 and L2, positioned at B and E respectively.

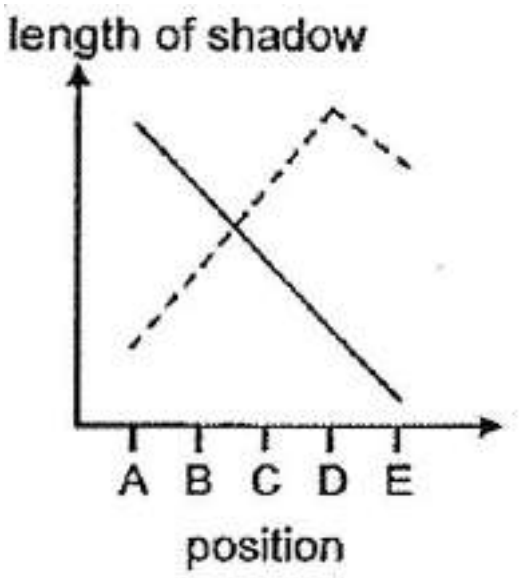


Which of the following graphs shows the correct changes in the length of her shadows as she walked from A to E?

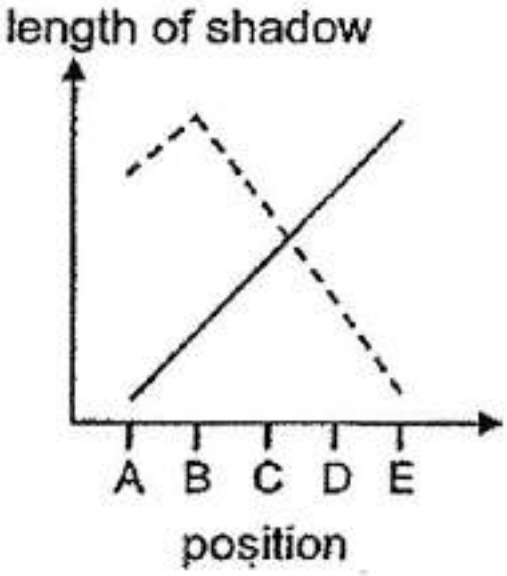
A.



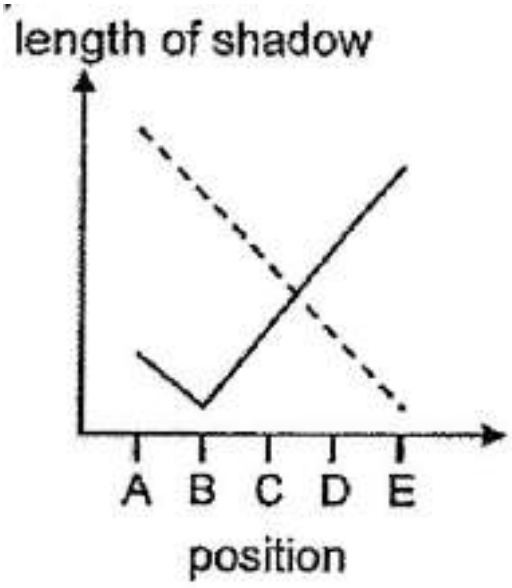
B.



C.



✓ D.



Question Type: *Multiple Choice*

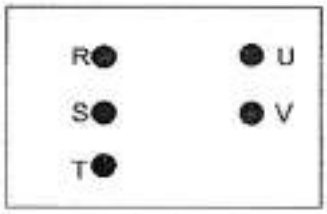
Randomize Answers: No
Date Added: Mon 4th Oct 2021
Last Modified: N/A
QID#: 29,220,989

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

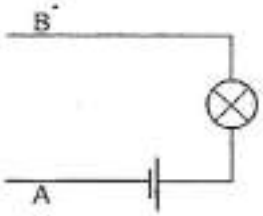
Question 24

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The diagram below shows a wooden board and a circuit tester. There are five metal pins, R, S, T, U and V, fixed onto the board. There are some hidden wires connected to the pins.



wooden board



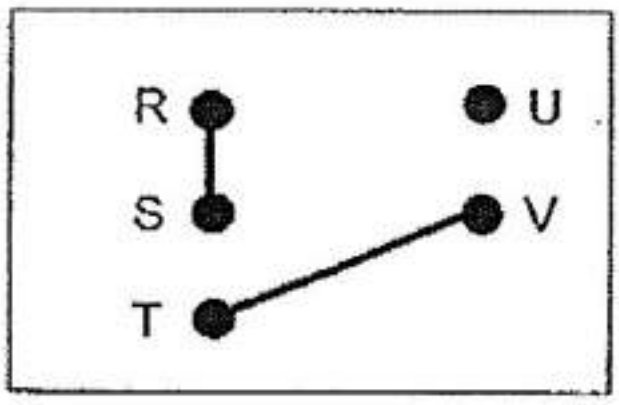
circuit tester

The bulbs would light up when some of the pins formed a closed circuit with the circuit tester. The results were recorded in the table below.

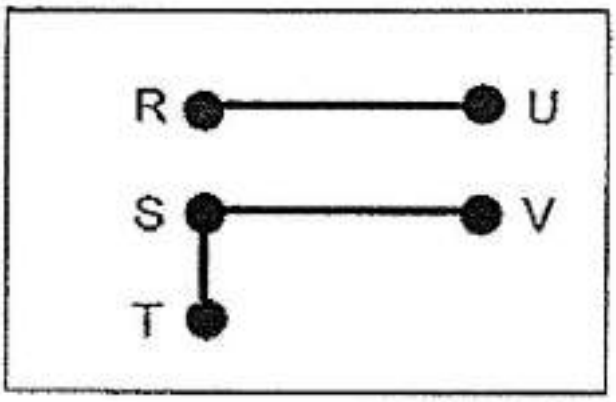
Pin connected to A	Pin connected to B	Did the bulb light up?
R	S	No
R	T	Yes
S	U	No
U	V	Yes

Which of the following shows the correct arrangement of the hidden wires on the wooden board?

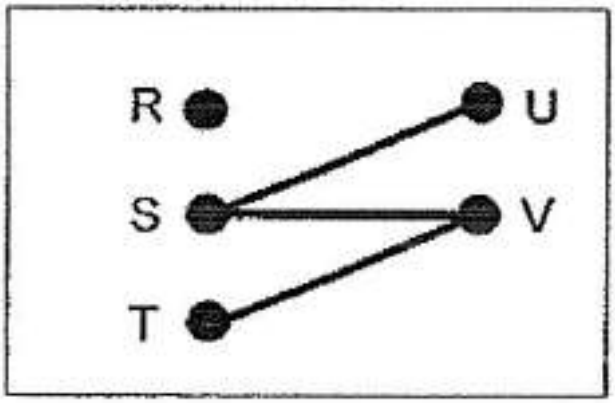
A.



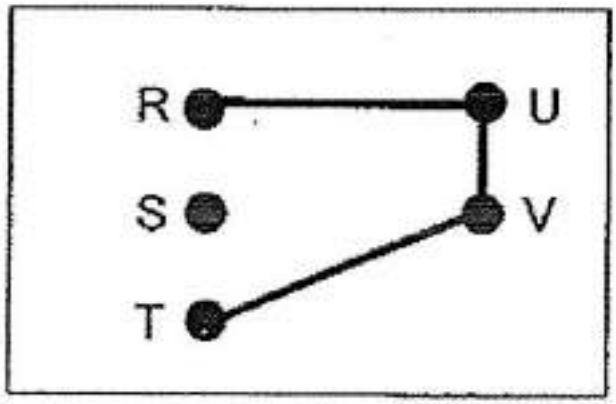
B.



C.



✔ D.



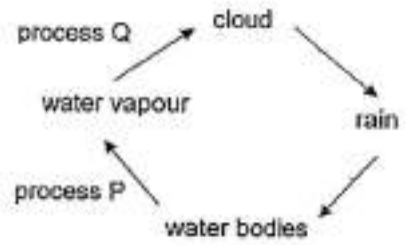
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,220,997*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 25

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The diagram below shows the water cycle.



Based on the diagram above, which of the following statements is correct?

A. Heat is lost in process P.

B. Heat is gained in process Q.

✓ **C.** Process P does not take place at a fixed temperature.

D. There is a change in state in process P but not in process Q.

Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,221,005*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 26

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

The table below shows the melting points and boiling points of two substances, A and B.

Substance	Melting point (°C)	Boiling point (°C)
A	64	760
B	212	440

Which of the following shows the correct state(s) of substances A and B at 100°C?

A.

A	B
solid	liquid

✓ **B.**

A	B
liquid	solid

C.

A	B
solid	solid

D.

A	B
liquid	gas

Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,221,011*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 27

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Ring magnets S and T, were slipped through a wooden pole as shown below in diagram A. *d* is the distance between magnets S and T.

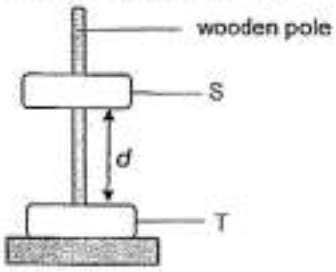


Diagram A

Different masses of load were placed above magnet S and distance *d* was measured as shown in diagram B.

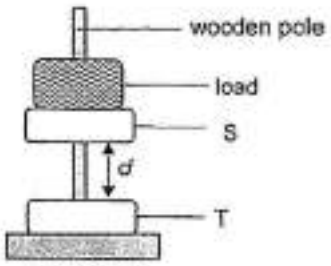


Diagram B

The results were recorded in the table below.

Mass of load (g)	Distance *d* (cm)
0	15.0
10	12.2
20	7.3
50	0

Based on the results, which of the following statements is definitely true?

A. Magnet S is lighter than magnet T.

B. Unlike poles of magnet S and T are facing each other.

✓ **C.** With increasing mass of load, greater gravitational force is acting against the magnetic force.

D. There is no magnetic force of repulsion between magnet S and T when the mass of load in 50g.

Question Type:	*Multiple Choice*
Randomize Answers:	*No*

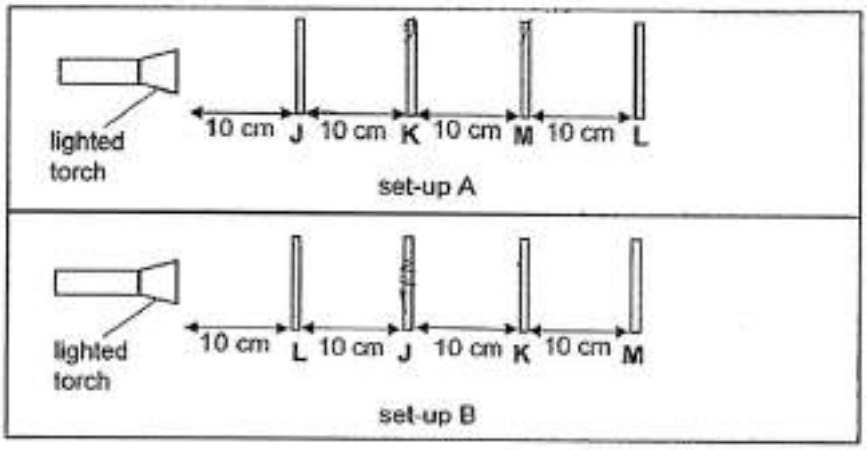
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,221,019*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

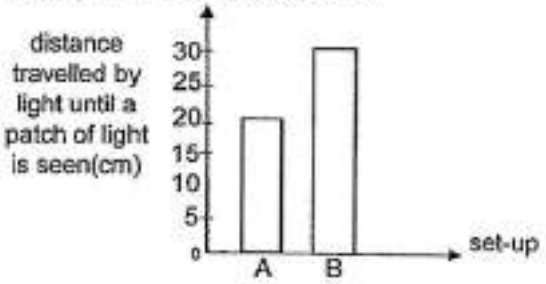
Question 28

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Four sheets of materials, J, K, L and M, are arranged in the two set-ups as shown below. One of the sheets is coloured. A non-coloured patch of bright light is seen on one of the sheets in set-up A but a coloured patch of dim light is seen on one of the sheets in set-up B.



The distance travelled by the light for each set-up until a patch of light is seen is shown in the bar graph below.



Which of the following correctly describes materials J, K, L and M?

A.

Allows most light to pass through	Does not allow light to pass through	Coloured sheet
K	M	J

B.

Allows most light to pass through	Does not allow light to pass through	Coloured sheet
L	K	M

✔ **C.**

Allows most light to pass through	Does not allow light to pass through	Coloured sheet
J	K	L

D.

Allows most light to pass through	Does not allow light to pass through	Coloured sheet
J	L	K

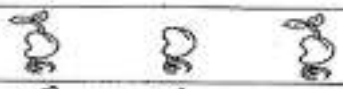
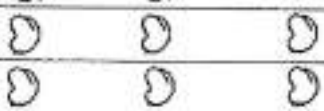
Question Type: *Multiple Choice*
Randomize Answers: *No*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,221,045*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 29

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

Xiao Ming set up an experiment to find out the conditions required for seeds to germinate. The experimental conditions and results are shown below.

Tray	Soil	Presence of light	Observations on Day 7
A	wet	yes	
B	wet	no	
C	dry	yes	
D	dry	no	

From the above results, what condition(s) needed for germination can Xiao Ming conclude?

Accepted answers:

- ✓ Water
- ✓ moisture
- ✓ dampness
- ✓ moist
- ✓ Wetness
- ✓ Wet condition
- ✓ Wet

Question Type: *Free Text*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,221,056*

Correctly answered feedback

Water / moisture / dampness / moist / wetness / wet condition / wet is needed for germination to take place.

Incorrectly answered feedback

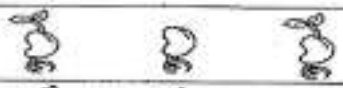
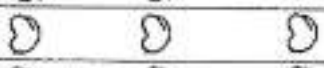
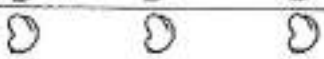
Water / moisture / dampness / moist / wetness / wet condition / wet is needed for germination to take place.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

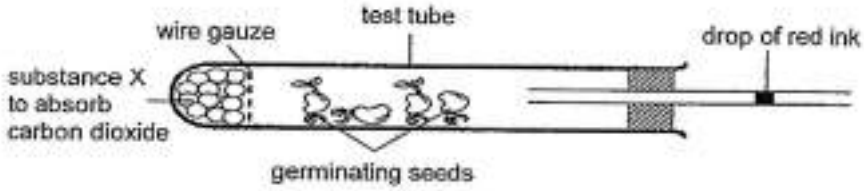
Question 30

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Xiao Ming set up an experiment to find out the conditions required for seeds to germinate. The experimental conditions and results are shown below.

Tray	Soil	Presence of light	Observations on Day 7
A	wet	yes	
B	wet	no	
C	dry	yes	
D	dry	no	

Using the germinating seeds, Xiao Ming set up the apparatus at room temperature as shown below. In the set-up, the drop of red ink prevented air from entering the test tube.



Explain why the drop of red ink moved towards the test tube after a few days.

[2]

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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,530*

Correctly answered feedback

The germinating seeds take in / need oxygen / respire (giving out carbon dioxide which would be absorbed by substance X) so the volume of air inside the test tube decreased / there would be less air occupying the space in the test tube.

Incorrectly answered feedback

The germinating seeds take in / need oxygen / respire (giving out carbon dioxide which would be absorbed by substance X) so the volume of air inside the test tube decreased / there would be less air occupying the space in the test tube.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 31

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Amy conducted an experiment using two similar pots of plants, P and Q, to find out if the number of leaves affects the amount of water absorbed by the roots. She placed the potted plants in a garden and watered each of them with 300 ml of water at the start of the experiment.

After a few days, Amy lifted pots P and Q with both her hands to compare their masses. However, Amy's teacher disagreed with Amy's method of measurement.

Explain how Amy should have measured the masses of the pots P and Q. (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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,569*

Correctly answered feedback

She should use a weighing machine/ (weighing) scale.

Incorrectly answered feedback

She should use a weighing machine/ (weighing) scale.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

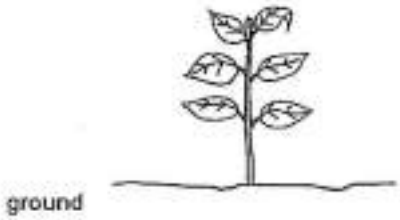
Question 32

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Amy conducted an experiment using two similar pots of plants, P and Q, to find out if the number of leaves affects the amount of water absorbed by the roots. She placed the potted plants in a garden and watered each of them with 300 ml of water at the start of the experiment.

After a few days, Amy lifted pots P and Q with both her hands to compare their masses. However, Amy's teacher disagreed with Amy's method of measurement.

Amy discovered many tiny insects using their mouths to pierce into the stem of a plant in her garden. They were feeding on the stem.



After a few days, the roots of the plant died. Explain why. [1]

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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,580*

Correctly answered feedback

The tiny insects fed on/ate/damaged the food-carrying tubes so no/insufficient food was transported to the roots/the roots cannot receive food.

Incorrectly answered feedback

The tiny insects fed on/ate/damaged the food-carrying tubes so no/insufficient food was transported to the roots/the roots cannot receive food.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

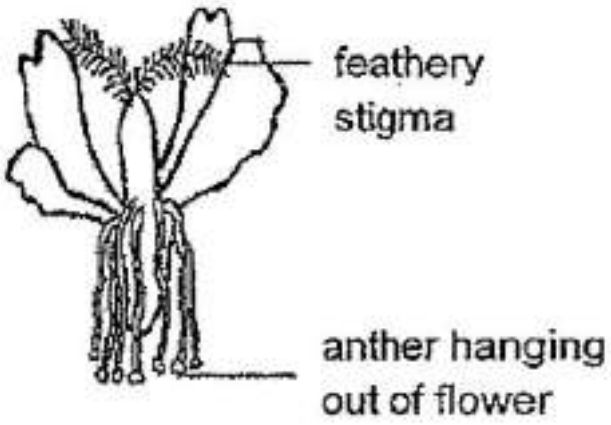
Question 33

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

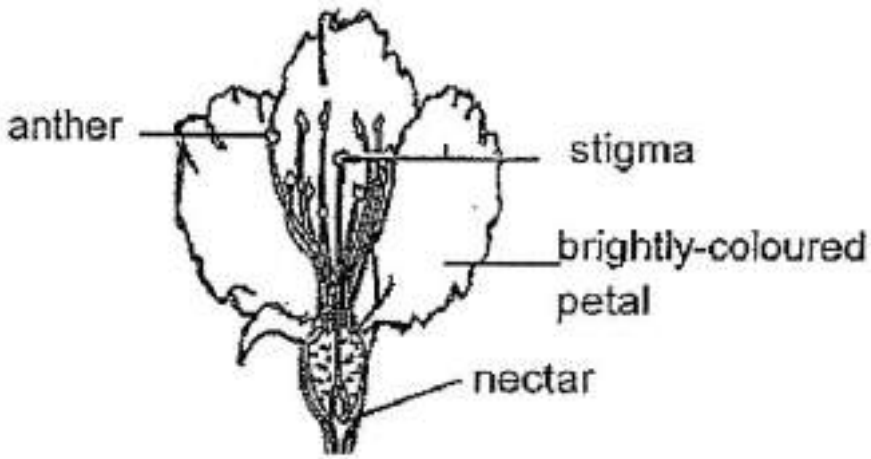
Below are four flowers.

Choose the correct answer to indicate the flower(s) that is/are pollinated by animals.

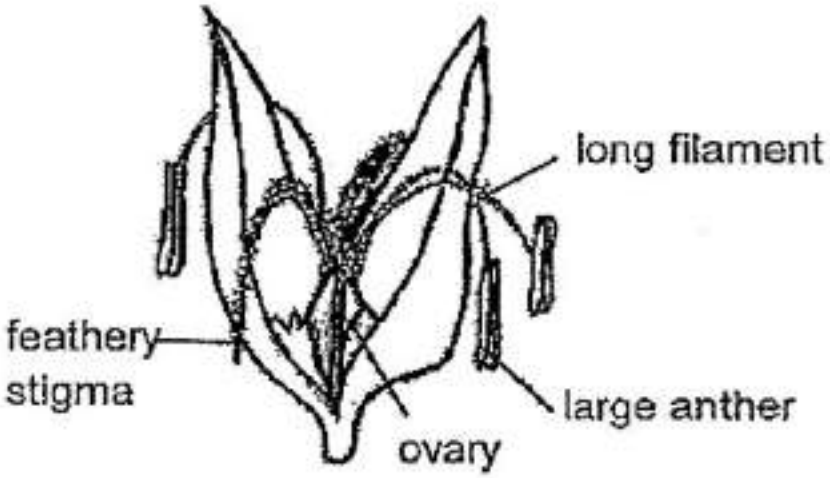
✔ **A.**


feathery
stigma
anther hanging
out of flower

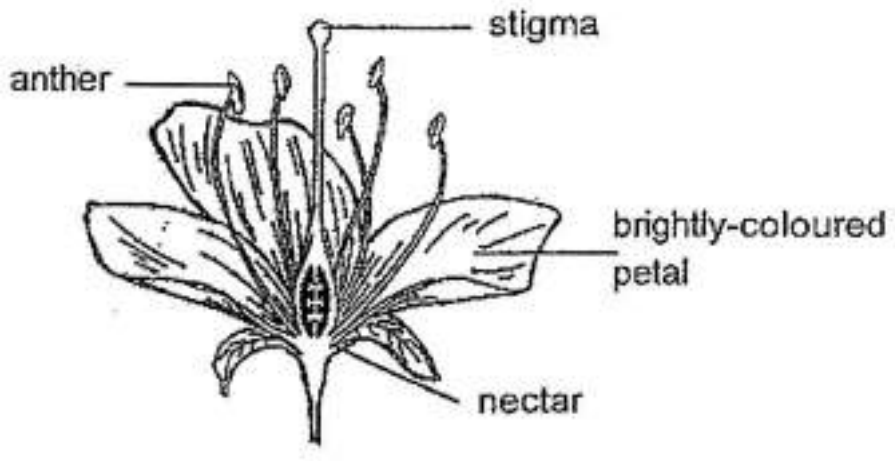
B.


anther
stigma
brightly-coloured
petal
nectar

✓ C.


long filament
feathery
stigma
large anther
ovary

D.



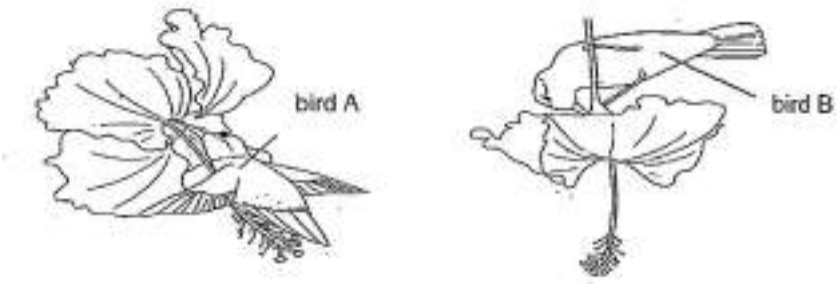
Question Type:	*Multiple Response*
Randomize Answers:	*No*
Grade style:	*Full points if all answers are correct*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,610*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 34

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Birds A and B fly from flower to flower.



Give a reason why birds A and B fly from flower to flower. (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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,625*

Correctly answered feedback

To feed on the nectar/obtain food from the flowers.

Incorrectly answered feedback

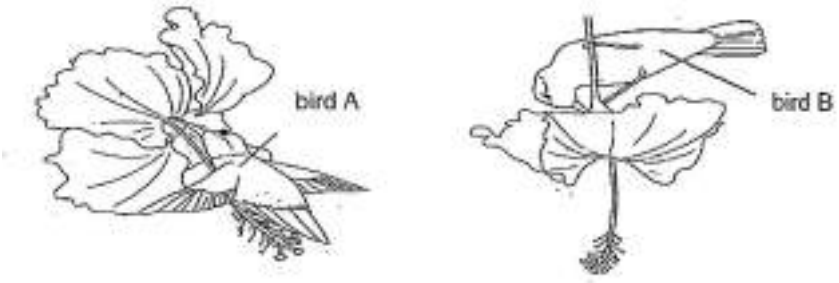
To feed on the nectar/obtain food from the flowers.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 35

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Birds A and B fly from flower to flower.



Which bird, A or B will most likely cause the flower to develop into a fruit? Explain how the bird helps in the fruit development. (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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,639*

Correctly answered feedback

Bird A/B picked up the pollen grains (from the anther) or Pollen grains were stuck/stick/cling on/brushed on the feather/bird dropping off pollen grains onto a stigma.

Incorrectly answered feedback

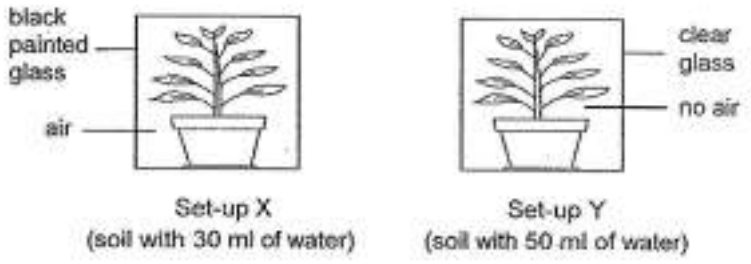
Bird A/B picked up the pollen grains (from the anther) or Pollen grains were stuck/stick/cling on/brushed on the feather/bird dropping off pollen grains onto a stigma.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 36

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Kaixin left two set-ups, X and Y, of similar potted plants placed in glass containers under the sun for some time.



Kaixin wants to use set-ups X and Y to test if plants need sunlight to make food. Describe the two

changes that she must make to the set-ups in order for one of them to be the control set-up. (2 marks)

i) One change to set-up X: _____

ii) One change to set-up Y: _____

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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,655*

Correctly answered feedback

i) Add 20ml of water to the soil.

ii) Introduce air into the container.

Incorrectly answered feedback

i) Add 20ml of water to the soil.

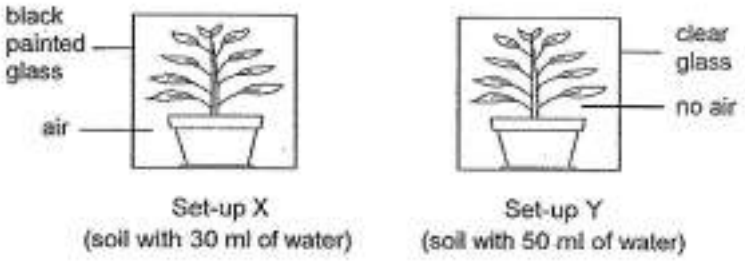
ii) Introduce air into the container.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

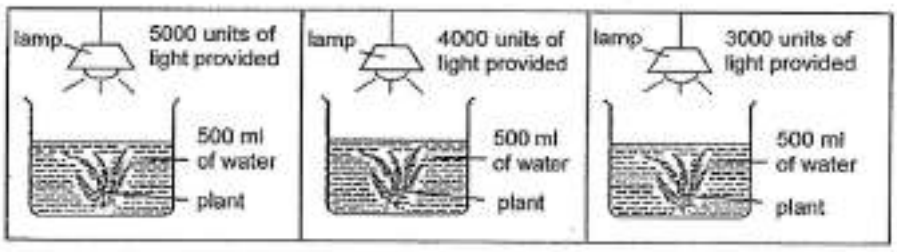
Question 37

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Kaixin left two set-ups, X and Y, of similar potted plants placed in glass containers under the sun for some time.



Then, Kaixin wanted to find out how the intensity of light would affect the rate of photosynthesis of plants. She carried out the following experiment.



She recorded the time each plant took to produce 50 bubbles in the table below.

Light intensity (units)	Time taken for 50 bubbles to be produced (s)
5000	40
4000	45
3000	58

The time taken for 50 bubbles to be produced decreases as light intensity increases. Explain why. (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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,674*

Correctly answered feedback

The rate of photosynthesis of the water plant increases / the water plant photosynthesises faster / the water plant absorbs more light for photosynthesis / the water plant make more food (cause) so more oxygen is produced / oxygen is produced faster. (effect)

Incorrectly answered feedback

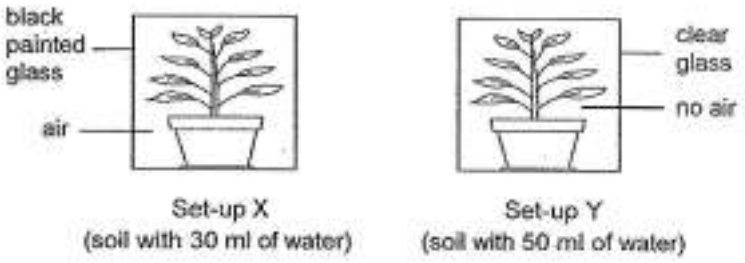
The rate of photosynthesis of the water plant increases / the water plant photosynthesises faster / the water plant absorbs more light for photosynthesis / the water plant make more food (cause) so more oxygen is produced / oxygen is produced faster. (effect)

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 38

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

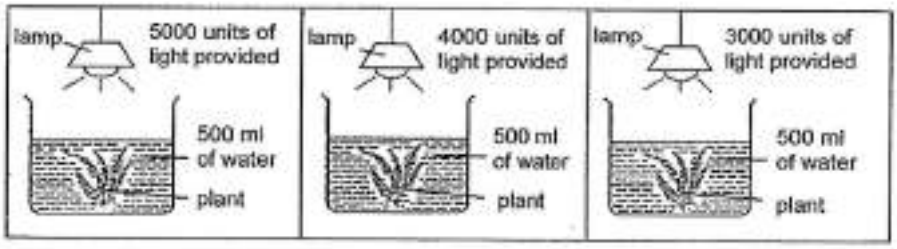
Kaixin left two set-ups, X and Y, of similar potted plants placed in glass containers under the sun for some time.



Set-up X
(soil with 30 ml of water)

Set-up Y
(soil with 50 ml of water)

Then, Kaixin wanted to find out how the intensity of light would affect the rate of photosynthesis of plants. She carried out the following experiment.



She recorded the time each plant took to produce 50 bubbles in the table below.

Light intensity (units)	Time taken for 50 bubbles to be produced (s)
5000	40
4000	45
3000	58

Kaixin conducted the experiment in a dark room. Give a reason why this helped to make the test a fair one. (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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,696*

Correctly answered feedback

This is to ensure that no other source of light would affect the results / the time taken for 50 bubbles to be produced. (link incorrect variable to results)

OR

This is to ensure that the lamp is the only source of light that would affect the results / the time taken for 50 bubbles to be produced. (link correct variable to results)

Incorrectly answered feedback

This is to ensure that no other source of light would affect the results / the time taken for 50 bubbles to be produced. (link incorrect variable to results)

OR

This is to ensure that the lamp is the only source of light that would affect the results / the time taken for 50 bubbles to be produced. (link correct variable to results)

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 39

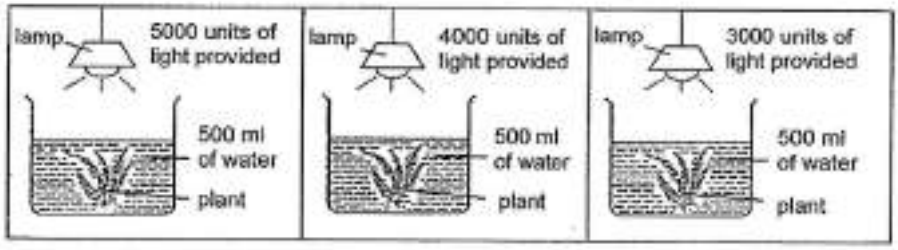
Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Kaixin left two set-ups, X and Y, of similar potted plants placed in glass containers under the sun for some time.

Set-up X
(soil with 30 ml of water)

Set-up Y
(soil with 50 ml of water)

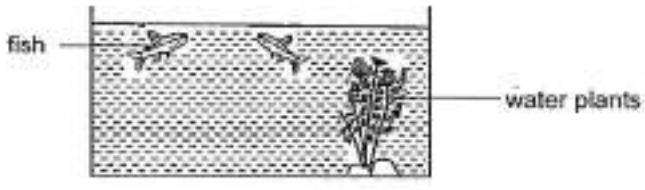
Then, Kaixin wanted to find out how the intensity of light would affect the rate of photosynthesis of plants. She carried out the following experiment.



She recorded the time each plant took to produce 50 bubbles in the table below.

Light intensity (units)	Time taken for 50 bubbles to be produced (s)
5000	40
4000	45
3000	58

Kaixin realised that the fishes in her aquarium with water plants had been swimming to the surface of the water frequently.



Based on the results of her experiment above, what should she do to ensure that the fishes do not need to swim to the surface of the water anymore? (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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,715*

Correctly answered feedback

She should place a (lit) lamp near / above / beside the water plants in the aquarium.

Move the aquarium beside/near a window with sunlight.
Put the aquarium at a location with higher light intensity.

Incorrectly answered feedback

She should place a (lit) lamp near / above / beside the water plants in the aquarium.

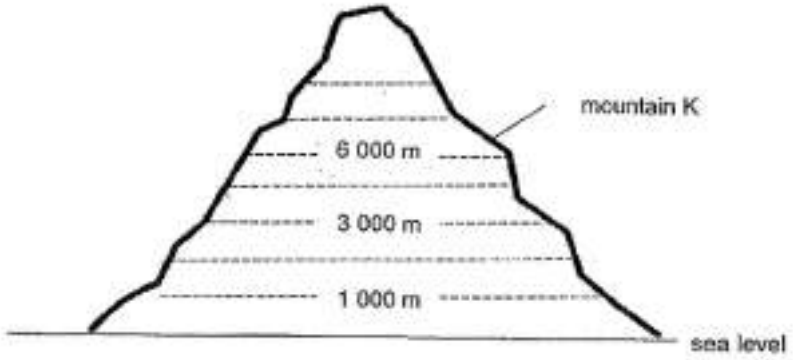
Move the aquarium beside/near a window with sunlight.
Put the aquarium at a location with higher light intensity.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

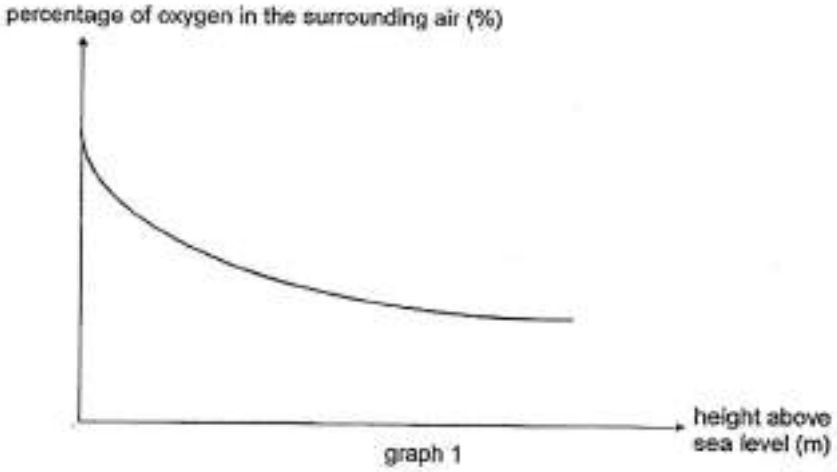
Question 40

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Mountain K has a height of 8 840 m.



Graph 1 below shows how the percentage of oxygen in the surrounding air changes with the height above sea level.



graph 1

Based on the results in graph 1, what is the relationship between the height above sea level and the percentage of oxygen in the surrounding air? (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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,735*

Correctly answered feedback

As the height above sea level increases (cause), the (percentage of) oxygen in the surrounding air decreases (effect).

OR

As the height above sea level decreases (cause), the (percentage) of oxygen in the surrounding air increases (effect).

Incorrectly answered feedback

As the height above sea level increases (cause), the (percentage of) oxygen in the surrounding air decreases (effect).

OR

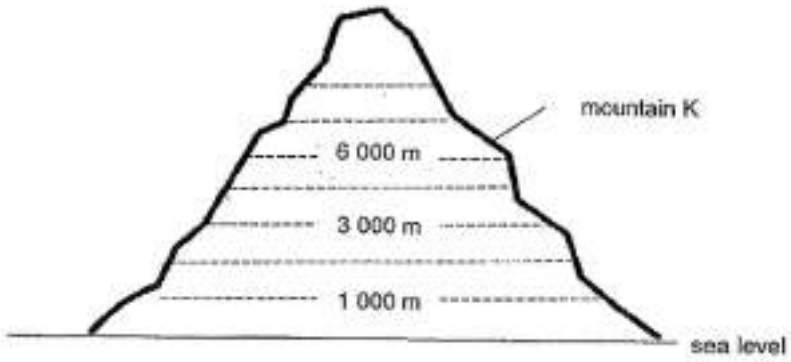
As the height above sea level decreases (cause), the (percentage) of oxygen in the surrounding air increases (effect).

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

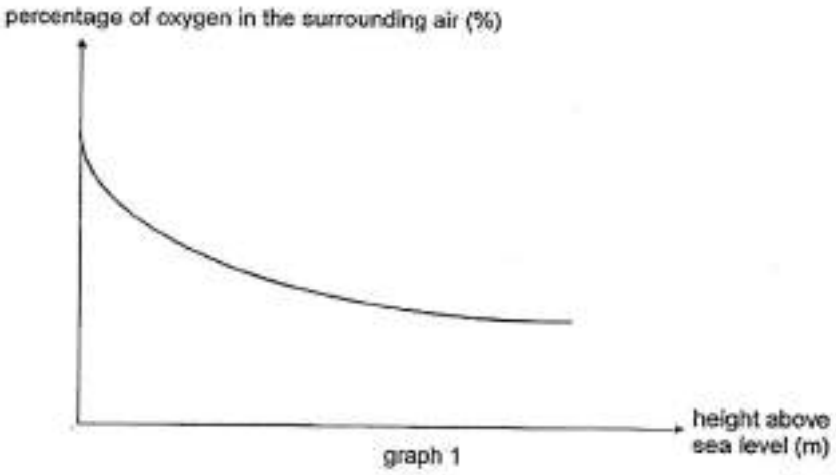
Question 41

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

Mountain K has a height of 8 840 m.



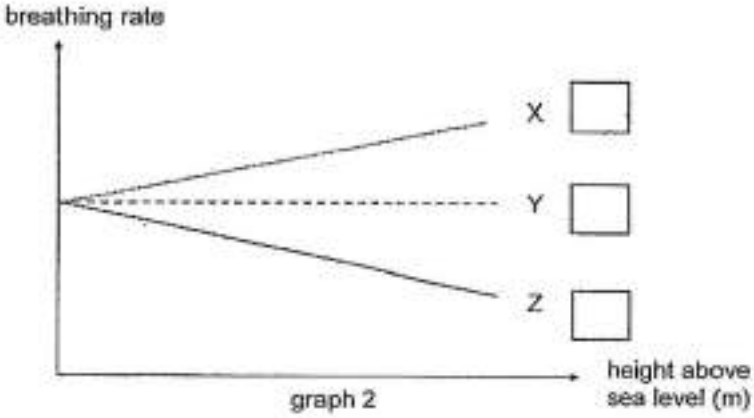
Graph 1 below shows how the percentage of oxygen in the surrounding air changes with the height above sea level.



graph 1

Mr Gopal attempts to climb mountain K. Based on the results in graph 1, which line graph, X, Y or Z, in graph 2 shown below, correctly represents the change in Mr Gopal's breathing rate as he climbs up mountain K?

Tick the correct answer in one of the boxes provided.



graph 2

✔ **A.** X

B. Y

C. Z

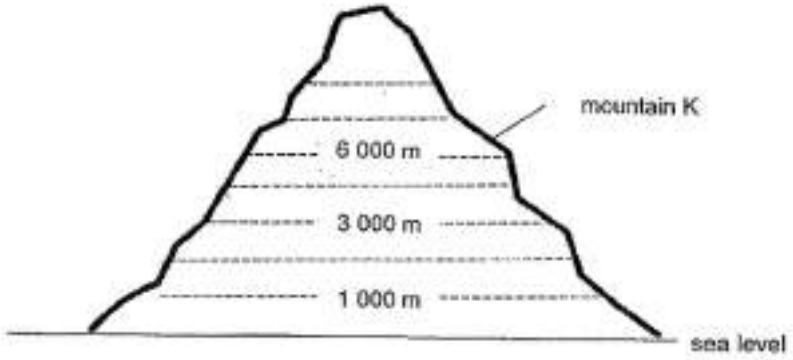
Question Type:	*Multiple Choice*
Randomize Answers:	*No*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,800*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

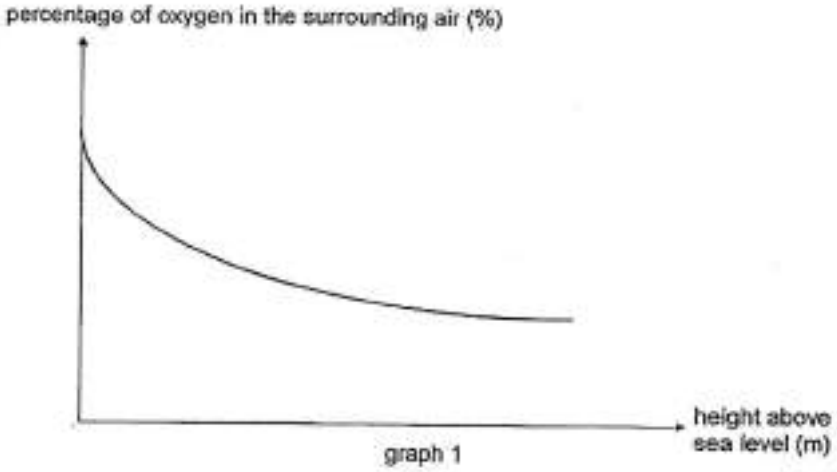
Question 42

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Mountain K has a height of 8 840 m.



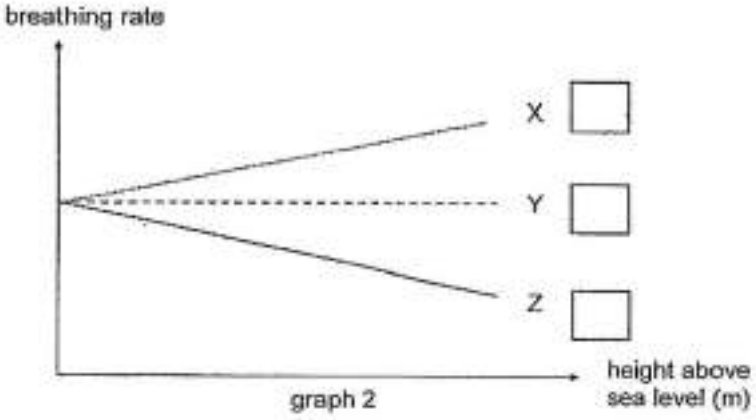
Graph 1 below shows how the percentage of oxygen in the surrounding air changes with the height above sea level.



graph 1

Mr Gopal attempts to climb mountain K. Based on the results in graph 1, which line graph, X, Y or Z, in graph 2 shown below, correctly represents the change in Mr Gopal's breathing rate as he climbs up mountain K?

Tick the correct answer in one of the boxes provided.



graph 2

Explain your choice in the previous question. (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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,804*

Correctly answered feedback

Moving up the mountain, there is less oxygen (cause) so Mr Gopal will breathe faster / more times / breathing rate increases to take in sufficient / same / enough / more oxygen (effect).

Incorrectly answered feedback

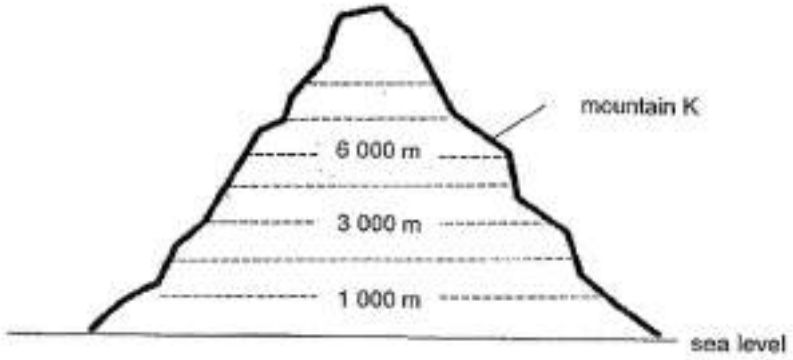
Moving up the mountain, there is less oxygen (cause) so Mr Gopal will breathe faster / more times / breathing rate increases to take in sufficient / same / enough / more oxygen (effect).

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

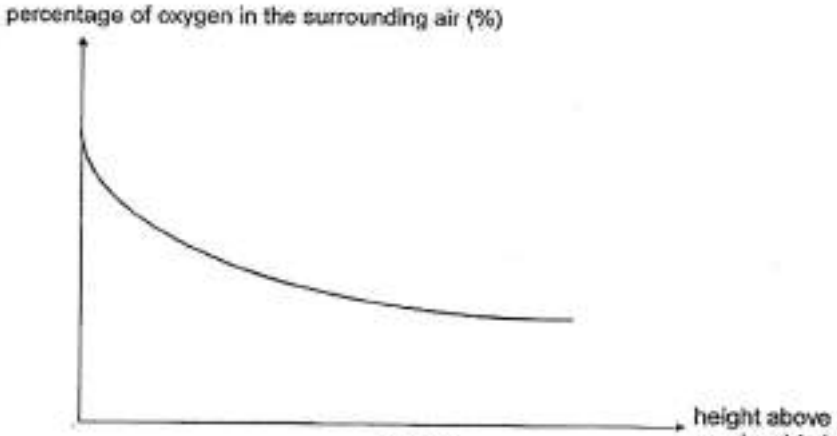
Question 43

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Mountain K has a height of 8 840 m.



Graph 1 below shows how the percentage of oxygen in the surrounding air changes with the height above sea level.



graph 1

The table below shows Mr Gopal's heart rates at rest, when he is at different heights above sea level.

Location	Heart rate (beats per min)
Top of the mountain K	80
Bottom of the mountain K	70

Explain why Mr Gopal's heart rate is faster when he is at the top of the mountain K. [1]

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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,811*

Correctly answered feedback

Mr Gopal's heart pumps faster so that blood with oxygen moves faster to body parts / oxygen reaches faster to the body parts / enough oxygen is sent to body parts.

Incorrectly answered feedback

Mr Gopal's heart pumps faster so that blood with oxygen moves faster to body parts / oxygen reaches faster to the body parts / enough oxygen is sent to body parts.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 44

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Michael was snowboarding on the top of a snow mountain. Mist was seen near his mouth whenever he breathed out as shown below.

Explain how the mist was formed. (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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,822*

Correctly answered feedback

The water vapour from his breath / mouth / him comes into contact with the cooler surrounding air and condensed.

OR

The warmer water vapour from this breath comes into contact into the surrounding air lost heat to form water droplets.

Incorrectly answered feedback

The water vapour from his breath / mouth / him comes into contact with the cooler surrounding air and condensed.

OR

The warmer water vapour from this breath comes into contact into the surrounding air lost heat to form water droplets.

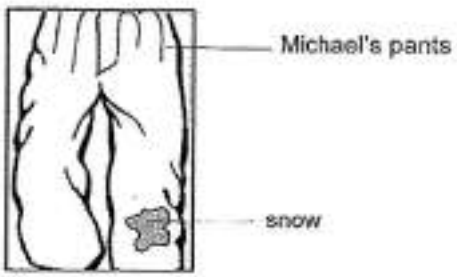
Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 45

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

Michael was snowboarding on the top of a snow mountain. Mist was seen near his mouth whenever he breathed out as shown below.

On his way home, Michael noticed that there was snow on his pants. After some time, the snow disappeared and his pants was wet.



State the process that explains why his pants was wet when the snow on his pants disappeared. [1]

Accepted answers:

✓ Melting

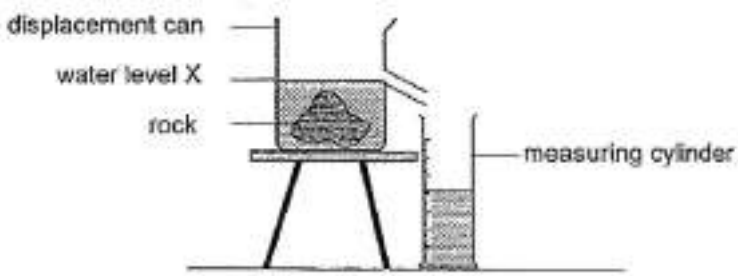
Question Type:	*Free Text*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,825*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 46

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

The diagram below shows how the volume of a rock can be measured using a displacement can.



Arrange the following experimental steps in order by 1, 2, 3 and 4 in the options below for the above experiment.

Clue	Match
Measure the amount of water collected in the measuring cylinder. Points: +0.3 −0	4
Lower the rock slowly into the displacement can. Points: +0.3 −0	2
Pour water into the displacement can until the water reaches level X. Points: +0.2 −0	1
Allow the displaced water to flow into the measuring cylinder. Points: +0.2 −0	3

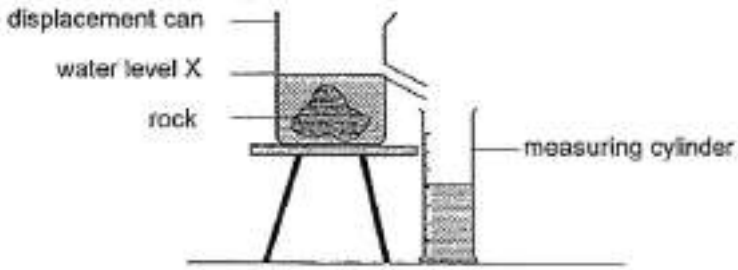
Question Type: *Matching*
Shuffle Mode: *Shuffle Matches Only*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,840*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

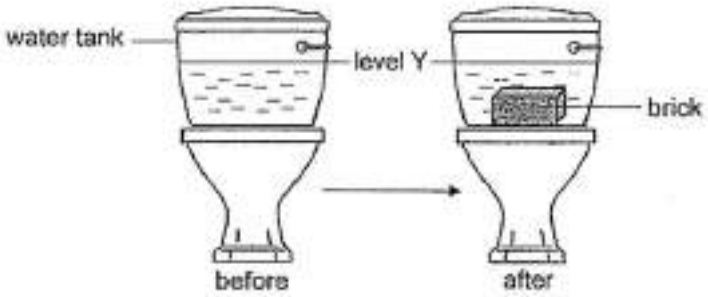
Question 47

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram below shows how the volume of a rock can be measured using a displacement can.



A water tank used for flushing a toilet bowl is shown below.



After flushing, water re-fills the water tank until the water reaches level Y. In order to conserve water, Ali put a block of brick into the water tank.

Explain how Ali's action would help to reduce the amount of water used to flush the toilet bowl. [1]

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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,849*

Correctly answered feedback

The brick takes up space (in the water tank) so less water is needed to refill the tank.

OR

The brick has fixed volume (in the water tank) so less water is needed to reach Y.

Incorrectly answered feedback

The brick takes up space (in the water tank) so less water is needed to refill the tank.

OR

The brick has fixed volume (in the water tank) so less water is needed to reach Y.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 48

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

Two poles of the same height, P and Q, were placed on the stage for a shadow performance. Diagram 1 below shows the top view of the stage, positions of the two poles and the audience.

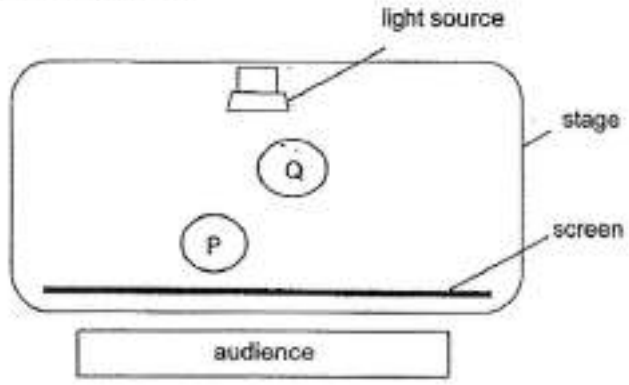


diagram 1

Which pole, P or Q will form a bigger shadow? Explain your answer. (1 mark)

Accepted answers:

✔ Pole Q

✔ Q

Question Type: *Free Text*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,859*

Correctly answered feedback

Pole Q as it is nearer to the light source / further from the screen.

Incorrectly answered feedback

Pole Q as it is nearer to the light source / further from the screen.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 49

Primary 6 Science » Primary 6 Science (Prelim) 2 pts

Two poles of the same height, P and Q, were placed on the stage for a shadow performance. Diagram 1 below shows the top view of the stage, positions of the two poles and the audience.

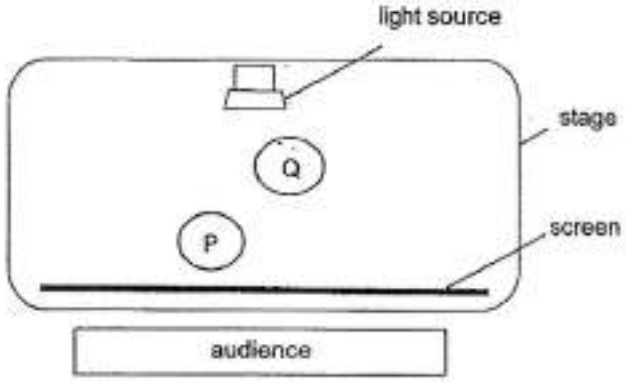


diagram 1

Two dancers, X and Y, who were of different heights, were dancing on the stage for a shadow performance. Diagram 2 below shows the top view of the stage, positions of the two dancers and the audience.

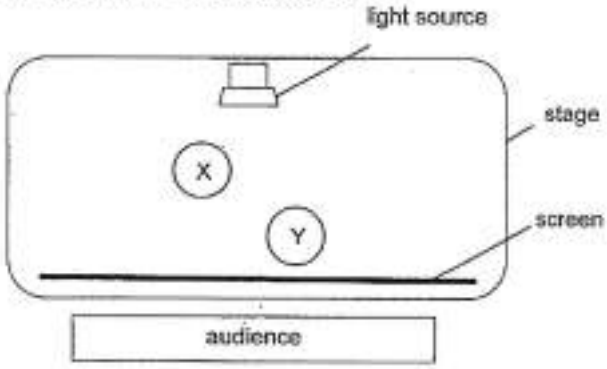
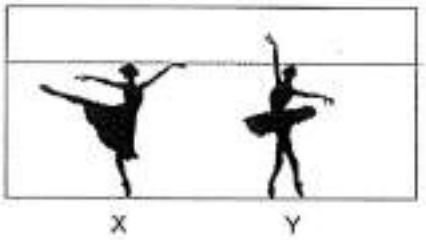


diagram 2

The diagram below shows the shadows of the dancers seen on the screen.



Which dancer, X or Y, is taller? Explain your answer. [2]

Accepted answers:

✔ Y

✔ Dancer Y

Question Type: *Free Text*
Date Added: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,872*

Correctly answered feedback

Y is taller. Y is further from the light source / nearer the screen but the shadows are of the same height / size.

Incorrectly answered feedback

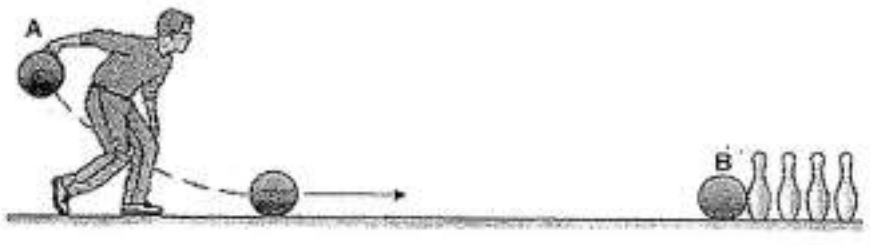
Y is taller. Y is further from the light source / nearer the screen but the shadows are of the same height / size.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 50

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram shows Mr Tan rolling a bowling ball along the lane to knock down some pins.



State the effect of forces on the pins when the bowling ball hits the pins at B. (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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,882*

Correctly answered feedback

The pins/object moved/fell/dropped/toppled.

Incorrectly answered feedback

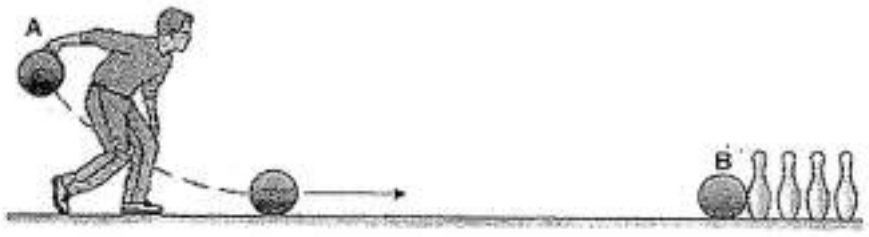
The pins/object moved/fell/dropped/toppled.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 51

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

The diagram shows Mr Tan rolling a bowling ball along the lane to knock down some pins.



Identify the force needed to help Mr Tan grip the bowling ball at A. (1 mark)

Accepted answers:

- ✓ Friction
- ✓ Frictional force

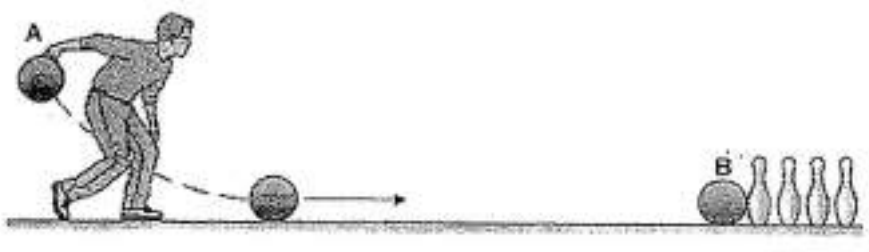
Question Type:	*Free Text*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,890*

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 52

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram shows Mr Tan rolling a bowling ball along the lane to knock down some pins.



After some time, Mr Tan's hands became sweaty. He wiped his hands with a dry cloth to absorb the sweat before he rolled the bowling ball forward.

Explain how the sweat affects his grip on the bowling ball. (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:	*Mon 4th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,222,902*

Correctly answered feedback

The sweat (is a lubricant which) reduces / decreases frictional force / friction between his hand and the bowling ball (cause) so the grip is weakened / may drop the ball. (effect)

Incorrectly answered feedback

The sweat (is a lubricant which) reduces / decreases frictional force / friction between his hand and the bowling ball (cause) so the grip is weakened / may drop the ball. (effect)

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 53

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram below shows two plates made of different materials, A and B, with 10 cm^3 of water each, placed in the sun.

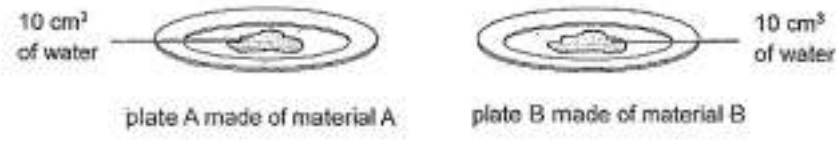


plate A made of material A plate B made of material B

The results are shown in the table below.

Plate	Time taken for water to evaporate completely (min)
A	30
B	45

How can the above results for the experiment be made more reliable? (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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,909*

Correctly answered feedback

Repeat the experiment several times / more times / take more readings.

Incorrectly answered feedback

Repeat the experiment several times / more times / take more readings.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 54

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram below shows two plates made of different materials, A and B, with 10 cm^3 of water each, placed in the sun.

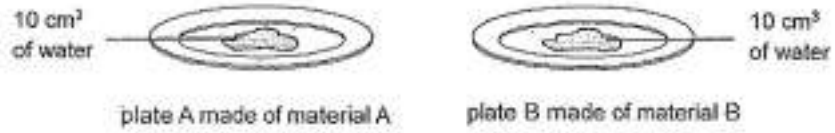


plate A made of material A plate B made of material B

The results are shown in the table below.

Plate	Time taken for water to evaporate completely (min)
A	30
B	45

The diagram below shows two containers made of materials A and B.

container A made of material A container B made of material B

Based on the results in the table above, which container, A or B, should be used to keep food warm for a longer time? Explain your answer. [2]

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: *Mon 4th Oct 2021*
Last Modified: *N/A*
QID#: *29,222,914*

Correctly answered feedback

Food container B (claim)

Material B takes a longer time for the water to evaporate completely. (evidence from experiment)
Therefore material B is a poorer conductor of heat (property)/ material B conducts heat slower from the surroundings to the water (still on reference to experiment)

and food container B will conduct heat away from the warm food to the surroundings slower. (approach from container) / food will lose less heat to the surroundings (approach from food)/ and food will lose heat slower to the surroundings (approach from food) - 3Application

Incorrectly answered feedback

Food container B (claim)

Material B takes a longer time for the water to evaporate completely. (evidence from experiment)
Therefore material B is a poorer conductor of heat (property)/ material B conducts heat slower from the surroundings to the water (still on reference to experiment)

and food container B will conduct heat away from the warm food to the surroundings slower. (approach from container) / food will lose less heat to the surroundings (approach from food)/ and food will lose heat slower to the surroundings (approach from food) - 3Application

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 55

Primary 6 Science » Primary 6 Science (Prelim) 1 pt

Suresh performed an experiment on springs P and Q, of the same length, using the set-up shown below.

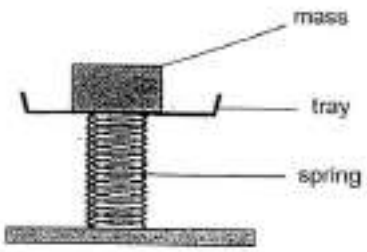


diagram 1

He measured the compression of each spring for different masses.

His results are shown in the table below.

Mass (kg)	Compression of spring P (cm)	Compression of spring Q (cm)
5	2.9	1.9
10	6.1	4.0
15	9.0	5.9
20	12.1	8.1

Diagram 2 below shows Suresh sitting on a rocking horse using spring Q.

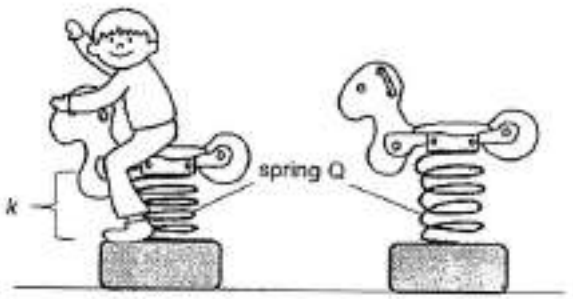


diagram 2

Identify the force(s) acting on Suresh as he sat on the rocking horse.

Accepted answers:

- ✓ Gravitational force and frictional force
- ✓ frictional force and gravitational force
- ✓ gravitational force and elastic spring force
- ✓ Frictional force and Elastic spring force
- ✓ elastic spring force and frictional force
- ✓ elastic spring force and gravitational force

Question Type:	*Free Text*
Date Added:	*Mon 4th Oct 2021*
Last Modified:	*Tue 5th Oct 2021*
QID#:	*29,222,935*

Correctly answered feedback

Any two:
gravitational force, frictional force, elastic spring force

Incorrectly answered feedback

Any two:
gravitational force, frictional force, elastic spring force

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 56

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Suresh performed an experiment on springs P and Q, of the same length, using the set-up shown below.

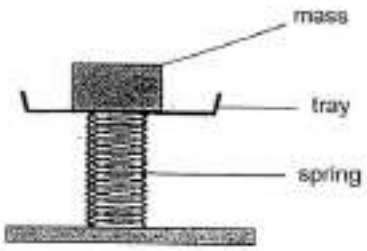


diagram 1

He measured the compression of each spring for different masses.

His results are shown in the table below.

Mass (kg)	Compression of spring P (cm)	Compression of spring Q (cm)
5	2.9	1.9
10	6.1	4.0
15	9.0	5.9
20	12.1	8.1

Diagram 2 below shows Suresh sitting on a rocking horse using spring Q.

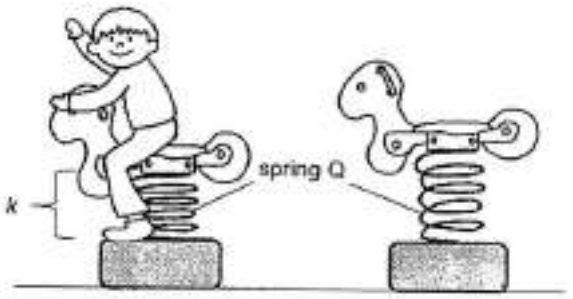


diagram 2

After Suresh alighted from the rocking horse, spring Q returned to its original length as shown in the diagram 2. Explain the change in length of spring Q in terms of forces. (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:	*Tue 5th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,229,169*

Correctly answered feedback

Less weight (of Suresh) / no weight acting on the spring.

Less / no gravitational force (of Suresh) acting on the spring.

Incorrectly answered feedback

Less weight (of Suresh) / no weight acting on the spring.

Less / no gravitational force (of Suresh) acting on the spring.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 57

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Suresh performed an experiment on springs P and Q, of the same length, using the set-up shown below.

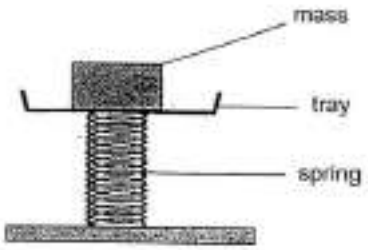


diagram 1

He measured the compression of each spring for different masses.

His results are shown in the table below.

Mass (kg)	Compression of spring P (cm)	Compression of spring Q (cm)
5	2.9	1.9
10	6.1	4.0
15	9.0	5.9
20	12.1	8.1

Diagram 2 below shows Suresh sitting on a rocking horse using spring Q.

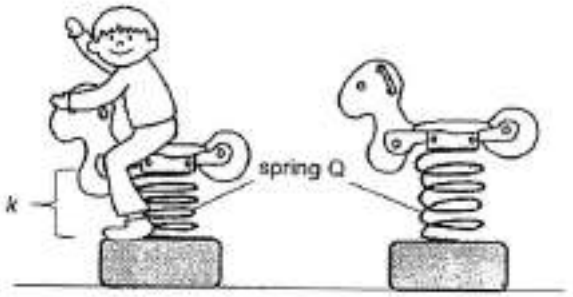


diagram 2

One day, a technician carelessly replaced spring Q with spring P in the rocking horse.

Based on the results in the table, would the height of spring P be more on less than *k* when Suresh sat on the rocking horse again? 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: *Tue 5th Oct 2021*
Last Modified: *N/A*
QID#: *29,229,201*

Correctly answered feedback

The height of spring P would be less than K as spring P compresses more when the same mass is hung on them / spring P is less stiff.

Incorrectly answered feedback

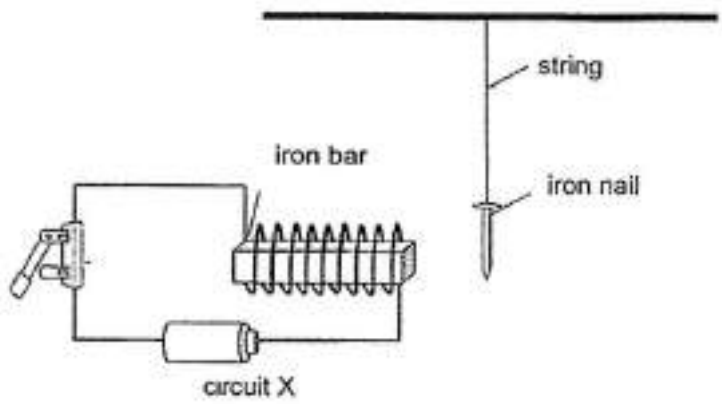
The height of spring P would be less than K as spring P compresses more when the same mass is hung on them / spring P is less stiff.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 58

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Mei Li conducted an experiment as shown below.



Describe what Mei Li would observe when she closed the switch in circuit X. 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: *Tue 5th Oct 2021*
Last Modified: *N/A*
QID#: *29,229,227*

Correctly answered feedback

The iron nail is attracted to the iron bar as iron is a magnetic material. When the switch is closed, a closed circuit is formed/electricity flows through the circuit and the iron bar turned into an electromagnet / is magnetised.

Incorrectly answered feedback

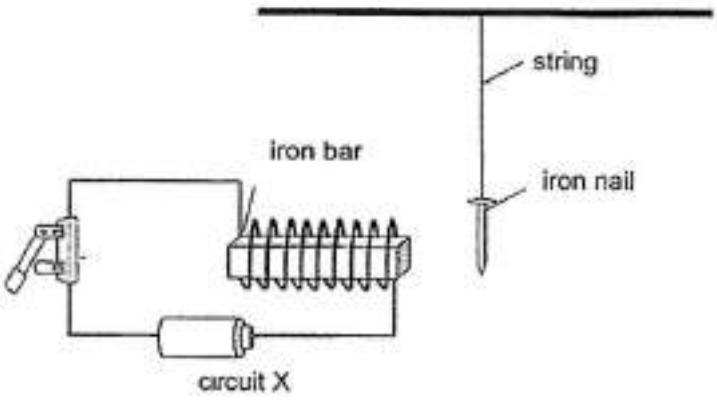
The iron nail is attracted to the iron bar as iron is a magnetic material. When the switch is closed, a closed circuit is formed/electricity flows through the circuit and the iron bar turned into an electromagnet / is magnetised.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

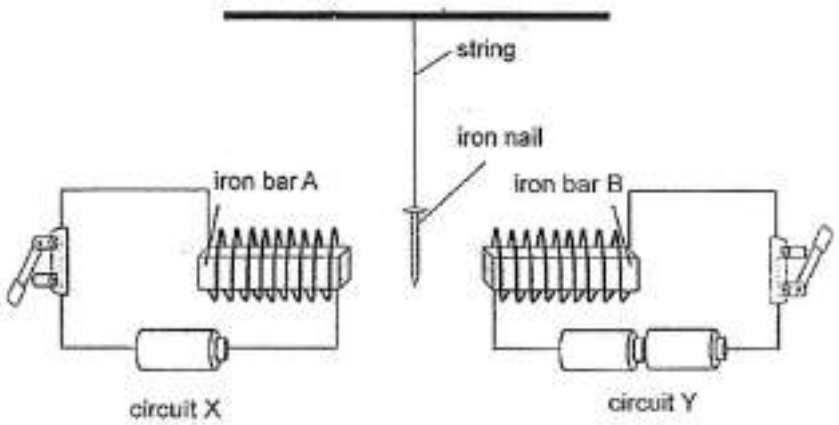
Question 59

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Mei Li conducted an experiment as shown below.



Mei Li added circuit Y to the experiment using similar batteries, wires and switches as shown below. The iron nail was suspended between the two similar iron bars A and B.



Mei Li observed that the iron nail was attracted to iron bar B when both switches in circuit X and Y were closed.

Without changing the number of batteries or iron nail, suggest two ways Mei Li could do to the above set-up so that the iron nail is attracted to iron bar A instead. (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:	*Tue 5th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,229,247*

Correctly answered feedback

Add more coils of wire around iron bar A / Open the switch in circuit Y / Shift circuit Y to the right / Shift circuit X nearer to the nail. / Move the string of the nail closer to X

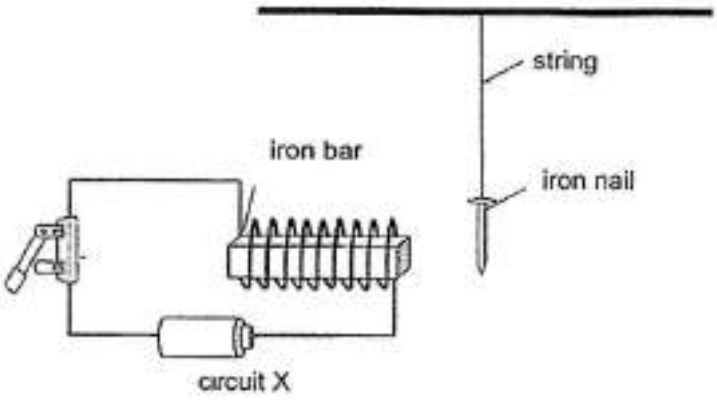
Incorrectly answered feedback

Add more coils of wire around iron bar A / Open the switch in circuit Y / Shift circuit Y to the right / Shift circuit X nearer to the nail. / Move the string of the nail closer to X

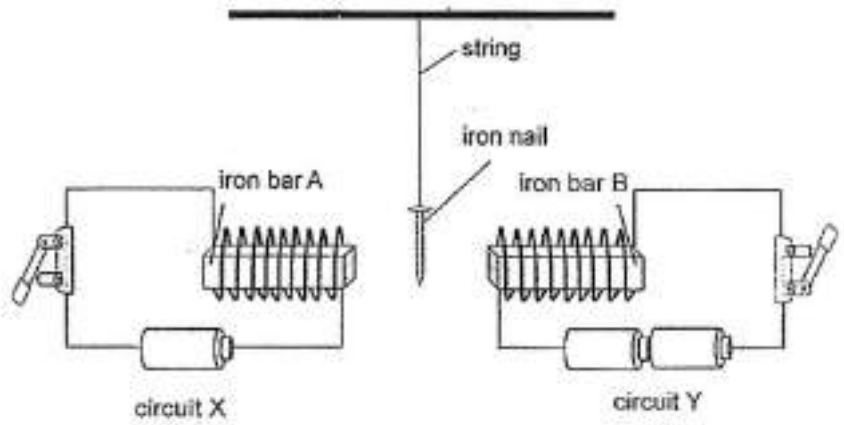
Question 60

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

Mei Li conducted an experiment as shown below.



Mei Li added circuit Y to the experiment using similar batteries, wires and switches as shown below. The iron nail was suspended between the two similar iron bars A and B.



Mei Li observed that the iron nail was attracted to iron bar B when both switches in circuit X and Y were closed.

Mei Li replaced the iron nail with a heavier iron nail. She observed that the nail did not move at all when the switches are closed. Explain her observation in terms of forces. (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:	*Tue 5th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,229,265*

Correctly answered feedback

Magnetic force is not strong enough (to attract the iron nail.)

Incorrectly answered feedback

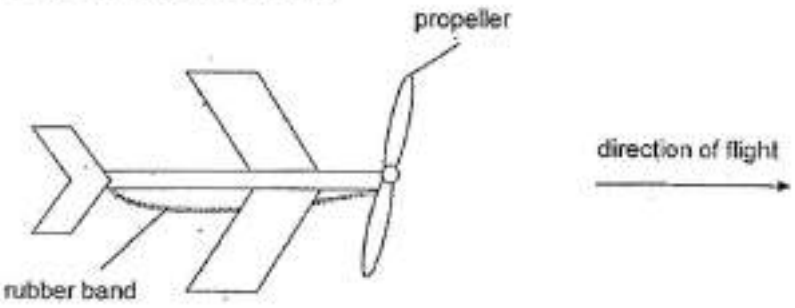
Magnetic force is not strong enough (to attract the iron nail.)

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 61

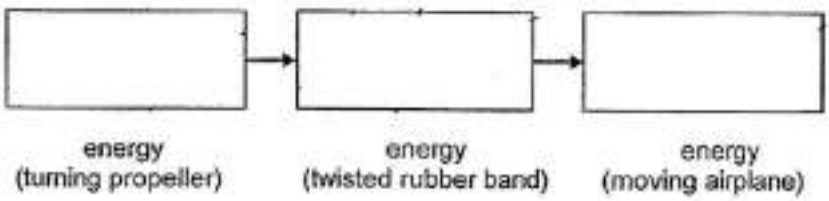
Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram shows a toy airplane.



When the propeller is turned twenty times, it twists the rubber band connected to it. As the propeller is released, the rubber band unwinds, enabling the airplane to fly.

Fill in the boxes to show the energy changes in the toy airplane. [1]



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:	*Tue 5th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,229,279*

Correctly answered feedback

kinetic energy ----> (elastic) potential energy ----> kinetic energy

Incorrectly answered feedback

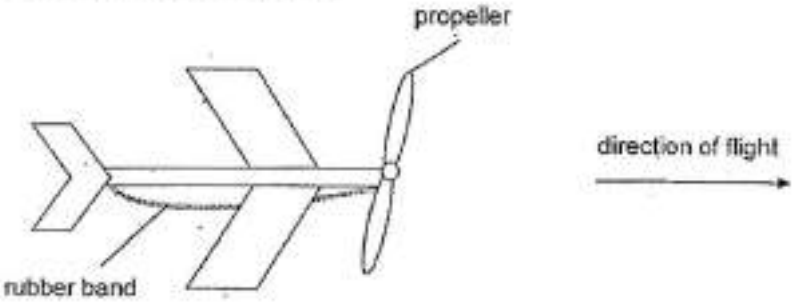
kinetic energy ----> (elastic) potential energy ----> kinetic energy

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 62

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram shows a toy airplane.



When the propeller is turned twenty times, it twists the rubber band connected to it. As the propeller is released, the rubber band unwinds, enabling the airplane to fly.

Using the same toy airplane another experiment is conducted using two rubber bands. How would the distance travelled by the airplane be affected when two rubber bands are used instead? (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:	*Tue 5th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,229,291*

Correctly answered feedback

The distance travelled by the airplane will be further/ longer / greater / more.

Incorrectly answered feedback

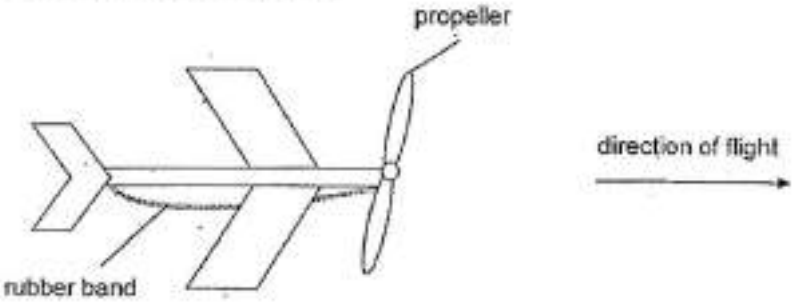
The distance travelled by the airplane will be further/ longer / greater / more.

Answers | Edit | Duplicate | Used In | Reorder Remove From Test

Question 63

Primary 6 Science » Primary 6 Science (Prelim) 0 pts

The diagram shows a toy airplane.



When the propeller is turned twenty times, it twists the rubber band connected to it. As the propeller is released, the rubber band unwinds, enabling the airplane to fly.

When carrying out the experiment for the previous question, what are two other variables that need to be kept constant for the test to be fair? (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:	*Tue 5th Oct 2021*
Last Modified:	*N/A*
QID#:	*29,229,319*

Correctly answered feedback

Any two of these:
How the toy airplane is released.
Height the toy airplane is released.
Speed of wind / Presence of wind
Number of times the propeller is turned
Direction of flight
Accept anything pertaining to rubber band

Incorrectly answered feedback

Any two of these:
How the toy airplane is released.
Height the toy airplane is released.
Speed of wind / Presence of wind
Number of times the propeller is turned
Direction of flight
Accept anything pertaining to rubber band

Answers | Edit | Duplicate | Used In | Reorder Remove From Test