

## ANSWER KEY

**SCHOOL : HENRY PARK PRIMARY SCHOOL**

**LEVEL : PRIMARY 6**

**SUBJECT : SCIENCE**

**TERM : 2021 PRELIM**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
3	3	4	4	1	4	3	3	1	4
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
2	3	2	4	3	2	4	2	3	1
<b>Q21</b>	<b>Q22</b>	<b>Q23</b>	<b>Q24</b>	<b>Q25</b>	<b>Q26</b>	<b>Q27</b>	<b>Q28</b>		
2	1	2	3	4	4	2	1		

2021 P6 Prelim Science – Suggested Answers

Qn No.	Suggested Answers										
29(a)	<table border="1" data-bbox="363 331 826 566"> <thead> <tr> <th data-bbox="363 331 459 383">Tick (✓)</th> <th data-bbox="459 331 826 383">Variable</th> </tr> </thead> <tbody> <tr> <td data-bbox="363 383 459 427">✓</td> <td data-bbox="459 383 826 427">Size of bread</td> </tr> <tr> <td data-bbox="363 427 459 472"></td> <td data-bbox="459 427 826 472">Amount of water added onto the bread</td> </tr> <tr> <td data-bbox="363 472 459 517">✓</td> <td data-bbox="459 472 826 517">Place to put the bread</td> </tr> <tr> <td data-bbox="363 517 459 562">✓</td> <td data-bbox="459 517 826 562">Duration of the experiment</td> </tr> </tbody> </table>	Tick (✓)	Variable	✓	Size of bread		Amount of water added onto the bread	✓	Place to put the bread	✓	Duration of the experiment
Tick (✓)	Variable										
✓	Size of bread										
	Amount of water added onto the bread										
✓	Place to put the bread										
✓	Duration of the experiment										
29(b)	Bread A had less water / moisture OR Bread B had more water / moisture.										
30(a)	Cell X does not have a cell wall.										
30(b)	Chloroplast(s)										
30(c)	It allows the <u>chlorophyll</u> to trap light and make food.										
31(a)	The tiny opening allows exchange of gases between the plant and the surrounding.										
31(b)	The leaf disc carries out photosynthesis in the presence of light and produces oxygen which fills up the air spaces OR is released as bubble(s) that bring(s) the leaf disc to the water surface as it floats up.										
31(c)	Plant M carries out photosynthesis faster as the time taken for its leaf discs to rise is shorter.										
32(a)	Some <u>water</u> will flow into the container as the <u>stone</u> displaces the water / as the stone takes up <u>space</u> in the can.										
32(b)	<u>Pour the water</u> collected in the container <u>into the measuring cylinder</u> and <u>measure its volume</u> .										
32(c)	In Hema's set-up, <u>water level is below the spout</u> so the <u>volume of water collected</u> in the container <u>will be smaller / lesser</u> than the <u>volume of the stone</u> .										
33(a)	Gill(s)										
33(b)	The <u>breathing rate is lower in cold water</u> and so, the <u>cold water contains more oxygen</u> .										
33(c)	<u>Fish of different sizes may need / use different amounts of oxygen</u> so their <u>breathing rates might be different</u> .										
34(a)	The <u>seeds will not be digested</u> when the animals feed on the fruits.										
34(b)	The appearance of the roots.										
34(c)	Seeds <u>kept in the dark germinated</u> so seeds <u>do not need light</u> . Seeds <u>kept in dry cotton did not germinate</u> so seeds <u>need water</u> .										

35(a)	(i) system – respiratory (ii) part Y – windpipe
35(b)	10 <sup>th</sup> minute
35(c)	His oxygen consumption increases which is needed to produce more energy.
36(a)	'X' should be marked on the line between point Y and point Z (inclusive).
36(b)	Battery
36(c)	Apply a lubricant to reduce the friction between the ramp and the boat. Less heat is produced when friction is reduced.
37(a)	To find out which material is the best / poorest conductor of heat.
37(b)	The hot water lost heat to the rod.
37(c)	Material X. The temperature of water with rod of material X decreased the slowest in 15 minutes. Hence, this shows that X is the poorest heat conductor and will conduct heat from the surroundings to the cold drinks the slowest.
38(a)	As the <u>height the iron ball was dropped from increases</u> , the <u>depth of the crater increases</u> .
38(b)	The ball has <u>more (gravitational) potential energy</u> which <u>converts to more kinetic energy</u> , so it goes <u>deeper into the sand</u> .
38(c)	Jack's <u>results are more reliable</u> as he conducted the experiment <u>more times</u> .
38(d)	<ul style="list-style-type: none"> <li>• The amount of force used to release the iron ball is kept the same.</li> <li>• The dropping height of the iron ball is kept the same.</li> </ul>
38(e)	The object has <u>more potential energy</u> that converts to (more) kinetic energy, <u>hitting a person with more force / impact</u> .
39(a)	
39(b)	When Dani <u>presses on switch 1</u> , only <u>one circuit with the motor is closed</u> and <u>the motor will turn on to produce cold air</u> . When <u>both switches are pressed</u> , <u>both circuits are closed</u> and the motor and heater will turn on to produce hot air.
40(a)	The <u>water vapour in the surrounding air loses heat</u> and <u>condenses</u> on the <u>cool(er) surface of the back</u> of organism Z to form water droplets.
40(b)	The <u>uneven surface of the ridges increases the surface area</u> so that <u>more water vapour can condense on it / it increases rate of condensation</u> .