

Answer



2024 Primary 5 Science Catholic high school End - of - Year Exam

Booklet B

29)	a) Similarity : Both J and K lay eggs in water [1m] Difference : Animal J has 3 stages in their life cycle but animal K has 4 stages in their life cycle. [1m] b) Pupa. Pupa <u>does not feed on any food</u>, hence mass is constant. [1m]
30)	a) As the <u>distance from parent plant increased, the number of young plants T increased</u>. [1m] b) 1 mark  ☒  ☐ c) The <u>hooks</u> on the fruit <u>cling onto the animal's body</u> which will <u>carry the fruit with seeds further away</u> [1m] from the parent plant. d) Water, oxygen(air), warmth [1m]
31)	a) System : Respiratory system [0.5m] Part W : windpipe / trachea [0.5m] b) 10 min [1m] c) Amount of oxygen increased. Joe <u>breathes in oxygen from the surroundings at a faster rate</u>, [1m] oxygen will then enter the blood. With <u>more oxygen, Joe can release more energy</u> [1m] for his exercise.
32)	NOT IN 2025 P5 SYLLABUS a) Green plants use carbon dioxide and water, with chlorophyll absorbing sunlight, to produce food and oxygen. [1m]

	b) As the <u>temperature of the water increased from 10°C to 30°C, the rate of photosynthesis increased</u>. [1m] As the <u>temperature of the water increased from 30°C to 50°C, the rate of photosynthesis decreased</u>. [1m] c) Ensure that <u>all the water plants in all set-ups are placed in a room of 30°C</u> [1m], which is the constant variable. <u>Change the light intensity of the lamp</u> [1m] and count the number of bubbles produced.								
33)	a) The water-carrying tubes are still intact, so <u>water can be transported to leaf B for B to make food</u>. [1m] b) The <u>food-carrying tubes are removed</u>. [0.5m] <u>Food made by leaf B cannot be transported pass the cut portion</u> [1m] of the branch. <u>More food will then be transported to the fruits</u>, [0.5m] causing them to be bigger.								
34)	a) Strength [1m] b) 1 mark <table border="1"> <thead> <tr> <th>Variable</th><th>Changed</th></tr> </thead> <tbody> <tr> <td>type of material</td><td></td></tr> <tr> <td>mass of blocks</td><td></td></tr> <tr> <td>thickness of material</td><td></td></tr> </tbody> </table> c) B. The mass of the blocks B can hold is the most. Table made of material B can <u>hold the most mass of objects</u> [0.5m] so that the table is <u>the strongest</u>. [0.5m]	Variable	Changed	type of material		mass of blocks		thickness of material	
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35)	a) Iron / steel [1m] b) Chitra can use <u>north-pole</u> (or south-pole) <u>of the bar magnet to stroke the nail in a clockwise</u> (or anti-clockwise) <u>direction</u>. [1m] He needs to <u>continue stroking in the same direction for about 30 to 50 times</u> [1m] to magnetise the nail temporary. c) The <u>nail could be attracted to the magnet because it is made of magnetic material</u>. [1m] To prove that the nail is a magnet, repulsion must be observed.								

36)	a) Group Y : gas [0.5m] Group Z : liquid [0.5m] b) Matter in group X has definite shape / volume but matter in group Y has no definite shape / volume. [1m] c) Q. The air is trapped inside flask Q. Since <u>air occupies space in the flask</u>, <u>water</u> from the funnel <u>flows in at a slower rate</u>. [1m]
37)	a) As the <u>distance between torch and cube increased</u>, the <u>length of the shadow decreased</u>. [1m] b) Same cube would mean the <u>size / shape of the object is the same</u>. [0.5m] This ensures that <u>only distance between torch and cube affects the length of shadow for a fair test</u>. [0.5m] c) Move the torch towards the cube / move the cube towards the torch [1m]
38)	a) Y. <u>The temperature of water in beaker B increased at a faster rate</u>, [0.5m] indicating that <u>material Y is a better conductor of heat</u>. [0.5m] When soup is placed in a pot made Y, <u>the soup gains heat faster from the heat source</u>. [1m] b) 100°C [1m]
39)	a) 1 mark The diagram shows a rectangular box divided into two sections. The left section is labeled 'living room (19 °C)' and the right section is labeled 'kitchen (35 °C)'. A vertical line in the center represents a 'glass door'. Three small circles are drawn on the glass door, with a line pointing to them from the label 'glass door' below the diagram. b) Glass door <u>lost heat to living room</u> to become <u>cold surface</u>. [0.5m] <u>Warm water vapour</u> in the kitchen <u>lost heat to the colder glass door</u> [0.5m] and <u>condensed into water droplets</u>. [1m]

	c) When the kitchen was at 26°C, the <u>water vapour</u> lost less heat and <u>condensed slower</u> to form <u>less water droplets</u>. [1m] d) On a rack. The water on the dish has <u>greater exposed surface area</u> to the surrounding air, so <u>water evaporated at a faster rate</u>. [1m]
40)	a) During a heavy downpour, there is more water which <u>pushes foam float upwards</u>, causing <u>the aluminium foil to touch the metal rods</u>. [1m] The <u>closed circuit allows electric current to flow through</u> [1m] the alarm, ringing it. b) Electrical conductor [1m] c) To <u>ensure the circuit is dry</u> so that any <u>person inside will not get electric shock</u> [1m] as saltwater conducts electricity.