

Answer



**2024 Primary 5 Science
CHIJ St Nicholas Girls' School
End - of - Year Exam**

Booklet B

29)	a) No. Animal Y does not have feather which birds have. [1m] b) Insect [1m]
30)	a) Water and food [1m] b) Part H <u>clings onto the wooden pole to climb higher</u> [1m] for leaf to make food. c) Plant B. Due to the <u>absence of leaves, the plant cannot make food</u> [1m] which causes the plant to die.
31)	a) Respiratory system allows gaseous exchange to take place in the lungs whereby <u>oxygen from the surroundings is taken in and carbon dioxide from the body is removed.</u> [1m] b) If the <u>person exercises more frequently, the breathing rate increased at a slower rate</u> during exercise. [1m] c) <u>Increase the sample size by enrolling more people</u> taking part in this experiment. [1m]
32)	a) Blood, blood vessel [1m] b) <u>Air from surroundings enters the nose, down the windpipe and into the lungs.</u> [0.5m] When <u>oxygen is in the lungs, the oxygen enters the blood</u> [0.5m] which is transported to the heart. <u>The heart pumps blood high in oxygen to the arms.</u> [1m]
33)	a) As the height at which <u>seed T is dropped increased, the distance travelled increased,</u> [0.5m] hence causing the seed to <u>be dispersed further from parent plant.</u> [0.5m]

	b) To ensure the <u>mass of the seed is the same</u> [0.5m], so that <u>height is the only one changed variable for a fair test.</u> [0.5m] c) Ensure that the height at which seed T is dropped is constant. [1m] Change the length of the wingspan of seed T. [1m] d) So that the seedlings do not experience overcrowding and will not compete for water to grow more healthily. [1m]
34)	OUT OF SYLLABUS a) The chlorophyll in the chloroplast can absorb more light to make more food. [1m] b) No, the <u>ability to move is not the unique characteristic that belongs to animal only.</u> [1m] Even a robot can move on its own. c) The nucleus controls all activities in the cell. [1m]
35)	a) Set-ups A and B. Both seeds have <u>water, air(oxygen) and warmth</u> to germinate. [1m] <u>Light is not required for germination.</u> [1m] b) Part A provides food for the seedling to grow. [1m]
36)	a) Matter (solid) occupies space. [1m] b) 1 mark  c) The <u>plastic bottle with pebbles will occupy space in the water tank.</u> [1m] As there is <u>less space for water to occupy in the tank,</u> [1m] the amount of water is reduced.
37)	a) 27°C b) To find out <u>how the number of layers of cloth affects the temperature of hot water</u> over 30 minutes. [1m] c) Set-up E is the <u>control set-up to compare and confirm that the decrease of temperature of hot water is only affected by the number of layers of cloth</u> [1m] and not other variables.

	d) <u>Glass is a poorer conductor of heat</u> [1m] compared to metal. <u>Hot water lost heat slower to cooler surroundings</u> [1m] at a slower rate.
38)	a) When switch was closed, <u>electric current flowed through the closed circuit</u>, [1m] causing the iron rod to <u>become electromagnet which attracted metal bar P</u>. [1m] b) i) electrical conductor [0.5m] ii) non-magnetic material [0.5m]
39)	a) <u>Light travels in straight lines</u> and blocked by object. [1m] b) Towards street lamp. The <u>length of shadow decreased as less light is blocked</u> when Ravi is directly under the lamp. [1m] c) Yes, for period B, the <u>rate of change in the length of shadow is greater</u>. [1m]
40)	a) R. At the <u>furthest distance, magnet R can attract the greatest number of iron pins</u>. [1m] Comparing R with P, even <u>though P can also attract 4 nails, magnet P is nearer to the tray of pin, indicating P has weaker magnetic strength</u>. [1m] b) No. It was observed that Q attracts the least number of pins. <u>Comparing Q with S, there are 2 changed variables, the distance between magnets and pins, and different types of magnets</u>, [1m] therefore, it is not conclusive.
41)	a) As the <u>exposed surface area of towel increased, the rate of evaporation of water increased</u>. [1m] b) The mass of the towel has <u>reached 50g</u> [1m] which is constant over time. c) amount of wind [1m] d) In figure 2, <u>the exposed surface area of water to surroundings is greater</u>, [1m] so <u>water</u> gained heat faster from surroundings and <u>evaporated faster</u>. [1m] Also, gravity pulls the mass of water droplets downwards.