

Answer

2024 Primary 5 Science Maha Bodhi School End - of - Year Exam



Booklet B

29)	a) The <u>heart pumped blood faster, transporting more oxygen and digested food to the required muscles</u> [1m] so as <u>to release more energy while jogging.</u> [1m] b) Small intestine <u>breaks down food into simple / simpler substances</u> / digested food. [1m] <u>Digested food is absorbed into the blood</u> [1m] through the small-intestinal walls. c) Digested food in the small intestine was absorbed into the blood at a slower rate. [1m]
30)	a) Comparing set-ups W, X and Z, when <u>plant in W has the most amount of leaves, the amount of water left is the least.</u> [0.5m] This indicates <u>the plant in W has greatest amount of water loss through the most amount of tiny-openings / stomata,</u> [1m] hence <u>most amount of water is absorbed by the roots.</u> [0.5m] b) The layer of oil prevents water in the jar from evaporating. [1m] c) Comparing set-ups W and Y, Set-up Y is the <u>control set-up to prove that roots absorb water,</u> as <u>no water is absorbed by the plant</u> in set-up Y. [1m]
31)	a) Cell X : egg [0.5m] Cell Y : sperm [0.5m] b) Fertilization. [1m] When many sperms are released in the female, <u>a sperm</u> will meet and <u>fuse with an egg</u> [1m] known as fertilization.

32)	a) i) The fibrous husk <u>traps air which allow fruit G to float on water</u>, [1m] so that it can be carried further away from the parent plant. ii) waterproof [1m] b) P. Area P is <u>downstream</u> of the adult plant of fruit G. The area where young plants G are found <u>follows the direction of the river flow</u>. [1m]
33)	a) Condensation [1m] b) <u>Air lost heat to the ice cubes to become cold air</u> [0.5m] above. <u>Warm water vapour</u> further away then <u>lost heat to the cold air</u> [0.5m] and <u>condensed into water droplets</u>. [1m] c) The temperature of the water vapour above the spout of kettle is of higher temperature. [1m]
34)	a) Temperature of surrounding air / volume of water at the start / exposed surface area of water in the bowl [1m] b) i) <u>Water</u> in the wet cloth gained heat and <u>evaporated</u>, causing <u>air in the room to lose heat</u>. [1m] ii) <u>Wind increased the rate of evaporation</u> of water, causing <u>air to lose heat faster</u>. [1m]
35)	a) Both J and K are electrical conductors. [1m] b) When button is pressed, <u>contact J touches K, forming a closed circuit</u>. [1m] This allows <u>electric current to flow through the closed circuit</u> [1m] which causes the bulbs to light up and sound box to ring. c) The other bulb remains unlit and the sound box cannot ring. As the bulbs and the sound box are arranged in parallel, when L is blown, there is <u>an open circuit where no electric current can flow through</u>. [1m]
36)	a) A matter is anything that <u>has mass</u> and <u>occupies space</u>. [1m] b) i) ice cubes : X [0.5m] ii) oxygen : Z [0.5m]

	c) There are air spaces inside the sponge. <u>Air is a gas and has no definite shape and no definite volume which can be compressed</u> [1m] into the plastic container. The wooden block <u>is a solid and has a definite shape</u> , [1m] hence it cannot be squeezed in.
37)	a) Metal. <u>Light</u> from the light source <u>is blocked by the metal blade</u> [1m] for the light sensor to record 0 units of light. b) No, <u>only 4 blades have blocked the light from being recorded</u> [1m] while the fan has 5 blades. c) The amount of time that is recorded 0 units will be longer. [1m]
38)	a) His hand lost heat to the cold metal sheet. [1m] b) Metal is a good conductor of heat. <u>Heat from the warmer surroundings is transferred faster to the ice cube</u> [1m] through the metal sheet. c) i) Thicker sheets will conduct heat from the warm surroundings at a slower rate due to its larger mass. [1m] ii) G. When placed on material G, <u>time taken</u> for ice cube to melt is the <u>longest</u>, [0.5m] indicating that G is <u>poorest conductor of heat</u>. [0.5m] Using container made of G will cause <u>the hot food lose heat to the cooler surroundings at the slowest rate</u>. [1m]
39)	a) Iron / steel [1m] b) At the start, <u>the like-poles of magnet W and magnet Y are facing each other, so Y is being repelled towards the right side</u>. [1m] When Y swings towards magnet X, the <u>like poles of X and Y are facing each other and hence magnet Y is being repelled away towards the left side</u>. [1m]
40)	a) Strength [1m] b) Ensure that both strips P and Q, have the same thickness. [1m] c) i) The 100g-weight is too heavy and tore strip P too much. [1m] d) ii) She should use smaller weights, gradually increasing the weight till the strip start to tear. [1m]