

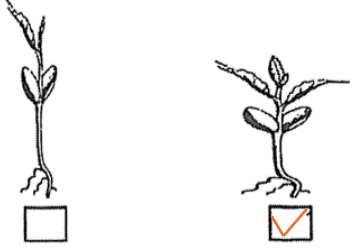
Answer



2024 Primary 5 Science
Nan Hua Pri. School
End - of - Year Exam

Booklet B

29)	a) The stem supports and holds the plant upright. [1m] b) Part X is the <u>water-carrying tubes, where blue-coloured water is transported</u> [1m] upwards from the beaker.
30)	a) System X : digestive system [0.5m] System Y : circulatory system [0.5m] b) Nose, windpipe, lungs [1m] c) Surrounding <u>air, containing oxygen, enters the nose, down the windpipe and into the lungs.</u> [0.5m] The lungs breathe in oxygen and <u>oxygen enters the blood. Blood in vessel A is high in oxygen which is then transported to the heart.</u> [1m] For blood vessel <u>B, the body has already used up oxygen</u> for its life processes, hence <u>the amount of oxygen is less.</u> [0.5m]
31)	a) Increased [1m] b) When jogging, the <u>heart pumped blood faster, transporting more oxygen and digested food to the required muscles</u> [1m] to <u>release more energy</u> [1m] for the strenuous exercise. c) The duration of the activity [1m]
32)	OUT OF SYLLABUS a) Nucleus contains genetic information which is passed down from parent cell to daughter cell. [1m] b) Cell B. It contains cell wall which plant cell has. [1m] c) Cytoplasm or cell membrane [1m] d) To ensure that old and damaged cells are replaced. [1m]

33)	a) Pots B, D and E [1m] b) 1 mark  c) When there is sufficient space, <u>the seedling will not grow too tall and thin as it does not need to compete for sunlight to make food.</u> [1m] The <u>stem is thicker, stronger and healthier with enough</u> <i>*nutrients, water, sunlight and space.</i> [1m] <i>* only one factor is required for PSLE</i>
34)	a) Fertilization [1m] b) i) cell X : ovary [1m] ii) cell Y : testis [1m] c) As <u>many of cells Y will die or unable to reach cell X</u> [0.5m] in the journey, many cells Y <u>increases the chance of one cell Y meeting and fusing with cell X.</u> [0.5m]
35)	a) Magnetic material [1m] b) The <u>bar magnet must move away from the electromagnet</u> [1m] as like poles repel. c) To find out if the number of coils of wire around the iron rod affects the magnetic strength of the electromagnet. [1m]
36)	a) <u>Water</u> in the wet soil gained heat and <u>evaporated into water vapour</u> [0.5m] which then <u>lost heat to the cooler inner surface</u> [0.5m] of the bottle and <u>condensed into water vapour.</u> [1m] b) <u>Water droplets</u> gained heat and <u>evaporated</u> [1m] into water vapour. c) Presence of wind / temperature of the surrounding air [1m]

37)	a) The air in the plastic cup occupies space [1m], hence water is not able to fully flow into the cup. b) Air in the cup escaped through the holes. [1m] Water flowed in and occupied all the space in the cup [1m] that was previously occupied by air, hence wetting the cotton wool.															
38)	a) 100°C [1m] b) 2 marks <table border="1"> <thead> <tr> <th>Statement</th><th>True</th><th>False</th></tr> </thead> <tbody> <tr> <td>At the start of the experiment, the water in containers D and E had the same amount of heat.</td><td></td><td>✓</td></tr> <tr> <td>At the start of the experiment, the water in containers D and E had the same temperature.</td><td>✓</td><td></td></tr> <tr> <td>The air surrounding the containers would gain heat from the hot water in containers D and E.</td><td>✓</td><td></td></tr> <tr> <td>After a few hours, the water in D and E would reach room temperature.</td><td>✓</td><td></td></tr> </tbody> </table> c) On a hot day, the 2 sections of road would gain heat [0.5m] and expand. [1m] The gap provides space for expansion [0.5m] and hence not crack nor buckle.	Statement	True	False	At the start of the experiment, the water in containers D and E had the same amount of heat.		✓	At the start of the experiment, the water in containers D and E had the same temperature.	✓		The air surrounding the containers would gain heat from the hot water in containers D and E.	✓		After a few hours, the water in D and E would reach room temperature.	✓	
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39)	a) 1 mark for correct arrangement of switches 1 mark for parallel arrangement of bulbs Room 1 Room 2 b) Yes. When the bulb is not needed in a specific room, Mr Tan can use the switch to turn off, hence saving electricity. c) When one bulb in a room is fused / blown, the other bulb will still be lit. [1m]															

- 40) a) Light from the torch travels in straight lines and is blocked by the object, forming shadows. [1m]

b) 1 mark

Materials		
glass	metal	tracing paper
C	B	A

- c) i) Object C allows most light to pass through, so it did not block any light. [1m]
- ii) As object A is placed further from the light source, the size of the shadow becomes smaller. Since the shadow cast by object B is much larger, [1m] hence only this shadow is seen.