

**Mendaki PSLE Science  
2019  
Answer Key**

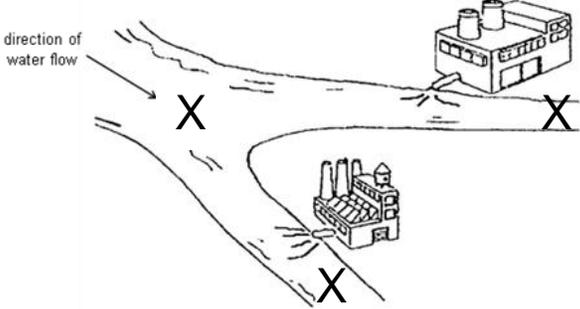
**Multiple-Choice Questions (28 questions x 2 marks = 56 marks)**

<b>Qn no.</b>	<b>Ans</b>	<b>Qn no.</b>	<b>Ans</b>	<b>Qn no</b>	<b>Ans</b>	<b>Qn no</b>	<b>Ans</b>	<b>Qn no</b>	<b>Ans</b>
1)	4	7)	3	13)	2	19)	2	25)	4
2)	3	8)	4	14)	1	20)	1	26)	1
3)	3	9)	4	15)	4	21)	4	27)	2
4)	2	10)	2	16)	2	22)	2	28)	2
5)	2	11)	1	17)	2	23)	3		
6)	3	12)	1	18)	4	24)	2		

**SCIENCE BOOKLET B (44 marks)**

Question	Acceptable Answers	Marks	Remarks
29	<p>(a) It is made of a clear and strong plastic. (1m). It must be transparent (1/2m) so that the light produced in the wheel can pass through for Salleh to see. (1/2m)</p> <p>(b) There is lesser kinetic energy(1/2m) when the skate moved at a slower speed which would be converted to lesser electrical energy.(1/2m)</p>	<p>2m</p> <p>1m</p>	
30	<p>(a) Banana plant reproduce from suckers / shoots growing from the base of parent plant / to get nutrients from the parent plant.</p> <p>(b) Fruit</p> <p>(c) Pineapple / Bamboo / Sugar cane</p>	<p>1m</p> <p>1m</p> <p>1m</p>	
31	<p>(a) Both have 3-stage life cycles.</p> <p>(b) The young of a cockroach looks like its adult but not the young of the frog.</p>	<p>1m</p> <p>1m</p>	
32	<p>(a) The water vapour in the surrounding air (1/2m) came in contact with the cooler outer surface(1/2m) of the window. It lost heat (1/2) and condensed into water droplets on the outer surface of the glass. (1/2m)</p> <p>(b) The outside temperature is cooler than the inside temperature of the car (1/2m). The warmer water vapour will then condense on the cooler inner surface of the window(1/2m), forming water droplets.</p>	<p>2m</p> <p>1m</p>	

33	<p>(a) As the length of the wing-like structure increases, the distance travelled by the shorea fruit also increases.</p> <p>(b) Strength of wind/ Mass of the fruit</p>	1m	
34	<p>(a) Move the light source closer to the beaker.</p> <p>(b) As the temperature of water increases from 15°C to 25°C, the rate of photosynthesis increases. However, as the temperature of water increases from 25°C to 35°C, the rate of photosynthesis decreases (1m). This is because it has become too warm for the plant to photosynthesize effectively. (1m)</p>	1m 2m	
35	<p>(a) When bulb A fuses, Bulbs C and D lights up./ When bulb B or C fuses, bulb A lights up.</p> <p>(b)</p> <div> <p>The diagram shows a series circuit. On the left is a battery. Moving clockwise from the battery, there is a switch, then Lamp A, then Lamp B, then Lamp C, and finally back to the battery. Lamps A and B are connected in parallel to each other, and this parallel branch is connected in series with Lamp C.</p> </div>	1m 2m	Award 0 if any of the bulb is missing/ switch is missing.
36	<p>(a) The force applied overcame the frictional force(1/2m) and the gravitational force(1/2m) acting between the box and the slope.</p> <p>(b) Coat the slope with lubricant/oil / Add wheels to the bottom of the box</p>	1m 1m	(b) Accept other reasonable answers (Key concept: Reducing frictional force acting between the box and the slope)

37	<p>(a) If A and B are attracted to each other, it merely shows that one is a magnet while the other is made of magnetic material. It doesn't prove that they are both magnets.</p> <p>(b) The end X will repel and P (1m). Only a magnet can repel another magnet. (1m)</p> <p>(i) Dropping/Hitting/Hammering</p> <p>(ii) Stroking it with a stronger magnet.</p>	1m	
38	<p>(a) Chicken / Mynah / Snake</p> <p>(b) The population of eagles decreased.</p>	2m	(a) Accept any two animals
39	<p>(a)</p>  <p>(b) Volume/Amount of river water sample taken / Amount of Substance P added into each beaker</p> <p>(c) Less sunlight will travel through the polluted water (1/2m) and will affect the submerged plants' ability to make enough food to survive (1/2m).</p>	2m	Must include all the three locations to get 2 marks

40	<p>(a)</p> <table border="1"> <thead> <tr> <th>Structural Adaptation</th> <th>Benefit for the plant</th> </tr> </thead> <tbody> <tr> <td>waxy leaves</td> <td>reduce/prevent water loss</td> </tr> <tr> <td>pink leaves around white flowers</td> <td>Attract pollinators for pollination</td> </tr> <tr> <td>juicy and thick leaves</td> <td>Store water and food</td> </tr> <tr> <td>needle-like leaves</td> <td>Reduce water loss</td> </tr> </tbody> </table> <p>(b) To prevent predators from climbing the plant.</p>	Structural Adaptation	Benefit for the plant	waxy leaves	reduce/prevent water loss	pink leaves around white flowers	Attract pollinators for pollination	juicy and thick leaves	Store water and food	needle-like leaves	Reduce water loss	4m	
Structural Adaptation	Benefit for the plant												
waxy leaves	reduce/prevent water loss												
pink leaves around white flowers	Attract pollinators for pollination												
juicy and thick leaves	Store water and food												
needle-like leaves	Reduce water loss												
41	<p>(a) From the food he eats</p> <p>(b) elastic potential energy → kinetic energy → heat energy + sound energy (1/2m for each)</p> <p>(c) Stretch the rubber band further (1m). This will cause the rubber band to possess greater elastic potential energy (1/2m) which then be converted to greater kinetic energy in the plastic ball (1/2m), and the plastic ball will travel farther.</p>	1m 2m 2m											