

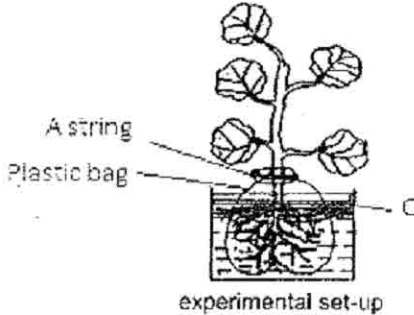
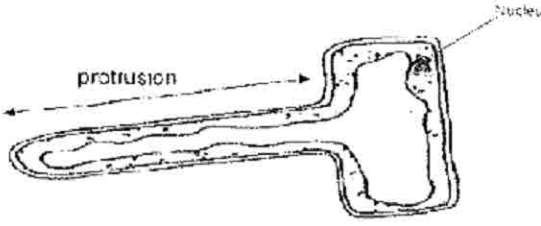
SCHOOL : ROSYTH PRIMARY SCHOOL  
LEVEL : PRIMARY 6  
SUBJECT : SCIENCE  
TERM : 2021 SA1

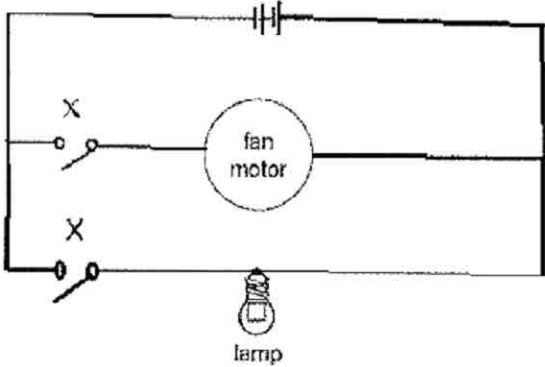
---

**SECTION A**

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	3	4	4	4	1	1	4	1	3
Q 11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
4	3	4	3	2	4	2	4	4	3
Q 21	Q22	Q23	Q24	Q25	Q26	Q27	Q28		
4	3	3	1	3	4	2	4		


29a	Heart
29b	As the number of air sacs in the lungs decreases, the breathing rate increases.
29c	A smoker <u>has fewer air sacs</u> , so there is lesser surface area to absorb oxygen <u>into the bloodstream</u> from his air sacs, making him breathe faster to <u>take in same amount of oxygen as a non-smoker</u> .
30a	Leaf A will die. Water-carrying tubes are broken and <u>cannot transport water from the roots to the leaf</u> .
31c	The protrusion has <u>a large surface area in contact with the soil to absorb water faster</u> .
31d	It <u>has chloroplasts to trap light and photosynthesise to make food</u> .
33a	C. It has markings similar to leaf K, so it can <u>blend into the surrounding and not be seen</u> easily by its predator.
34b	It has long legs to keep its body further from the hot sand to reduce heat gain. It has padded feet to reduce heat gain from the hot sand.
36a	<u>Water vapour in the surrounding air loses heat to the cooler surface of the leaf and condenses to form water droplet</u> .
36b	Water at the surface <u>will gain heat from the water below the surface to evaporate</u> , so the remaining hot water in the cup cools down.
37b	When the ball hits the bell, <u>kinetic energy is converted to sound energy</u> so there <u>is less kinetic energy for the ball to move further</u> .
38b	Singapore is sunny so the <u>solar panel will convert light energy from the Sun to electrical energy</u> , and the electric water pump can work to <u>draw water from the ground to water the plants for it to continue growing</u> .
40a	Force is needed to <u>overcome friction between the materials and the cloth</u> .
40b	Material M. <u>M needs the greatest force</u> to make it start moving along the ear loop, so it will have the <u>greatest friction to overcome before the mask will come loose</u> .

	 <p style="text-align: center;">experimental set-up</p> <p>b)</p>
Q31)	<p>a) Cytoplasm</p>  <p>b)</p> <p>c) Protrusion increase exposed surface area to the soil and absorb water faster.</p> <p>d) Cell C has chloroplast which contains chlorophyll to absorb light to make food.</p>
Q32)	<p>a) Test 2 (0) Test 4 (0)</p> <p>b) Oxygen</p> <p>c) There will still be some carbon dioxide inside thus photosynthesis can take place.</p> <p>d) In order for photosynthesis to take place, there must be light and when more carbon dioxide is given, the plant increases its rate of photosynthesis.</p> <p>e) Add more water plants.</p>
Q33)	<p>a) Caterpillar c as leaf k has a lot of spots just like caterpillar c. They have the same body patterns so it can blend into the leaf k, and predators cannot spot it easily.</p> <p>b) i) increase ii) decrease</p>

	<p>iii) decrease</p> <p>c) Leaf L → caterpillar D → frogs → birds</p>
Q34)	<p>a) Long legs Padded feet</p> <p>b) Feature 1: Long legs How it helps: The heat will take very long to travel to his back. Feature 2: Padded feet How it helps: The camels feet will not be so hot that it is burnt.</p>
Q35)	 <p>a) b)</p>
Q36)	<p>a) Water vapour from surroundings lose heat to the colder leaf and condenses to form dew drops.</p> <p>b) Water at the surface gain heat from the water below the surface to evaporate.</p> <p>c) When the hot water cools down to room temperature.</p>
Q37)	<p>a) The aim of the experiment is to find out if the length of spring will affect the distance travelled by the ball.</p> <p>b) When the ball hits the bell there is a reduction in kinetic energy so the ball does not go past 25cm.</p>
Q38)	<p>a) i) Light energy → Electrical energy ii) Kinetic energy → Potential energy → Kinetic energy</p> <p>b) The solar panel takes in light energy to be converted into electrical energy for the water pump to water the plants.</p>
Q39)	<p>↑ air resistance</p>

	↓ gravity
Q40)	<p>a) As friction and gravity will not allow the materials to be easily moved.</p> <p>b) Material M as it would make the mask be most fitting to all head sizes.</p>