

Topic: Plant Systems

Sub-topic 1: THE 3 PLANT PARTS AND ITS FUNCTIONS

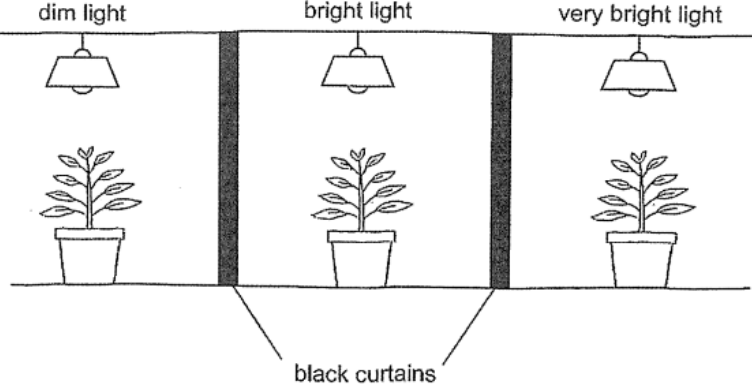
Question keywords	Answers
1. Insect M, egg-laying location on plant	Ovary
2. explain, identify (set-up 1 results)	Set-up 1 results belong to the plant without roots, as less water is absorbed.

Subtopic 1.1 General - Experiment, THE 3 PLANT PARTS AND ITS FUNCTIONS

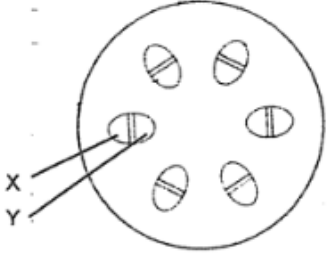
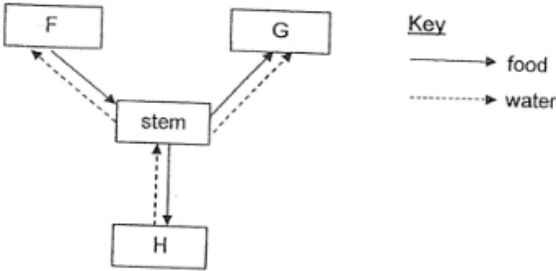
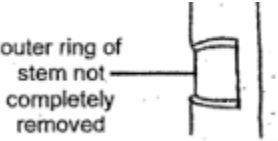
Question	Answer
To find out, number of leaves affect, water absorption of roots	Presence of leaves leads to greater water absorption.

Aim of experiment, set-ups A,B, D used	To find out if the number of leaves affects the amount of water absorbed by the roots.
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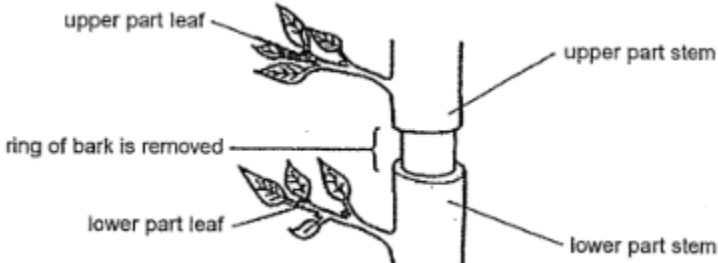
Subtopic 1.2: General - Experiment, THE 2 CLASSIFICATION OF PLANTS

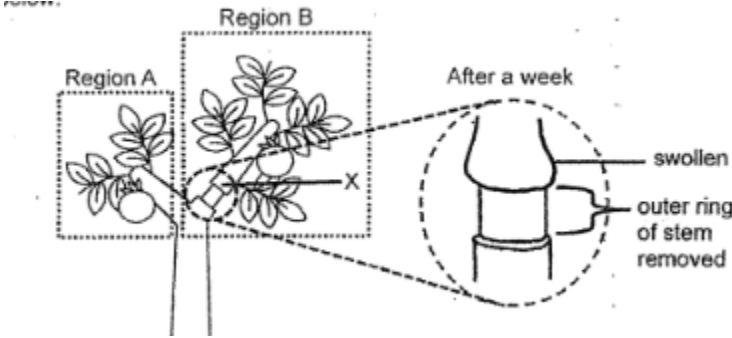
Question	Answer														
 <p>The results are as shown.</p> <table border="1"> <thead> <tr> <th rowspan="2">Amount of light</th> <th colspan="2">Height of the plant (cm)</th> </tr> <tr> <th>Start of the experiment</th> <th>End of the experiment</th> </tr> </thead> <tbody> <tr> <td>dim</td> <td>10</td> <td>11</td> </tr> <tr> <td>bright</td> <td>10</td> <td>13</td> </tr> <tr> <td>very bright</td> <td>10</td> <td>15</td> </tr> </tbody> </table>	Amount of light	Height of the plant (cm)		Start of the experiment	End of the experiment	dim	10	11	bright	10	13	very bright	10	15	
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Variable to keep constant	The type of plant used should be kept constant.														

Subtopic 2: Plant Transport System


Question keywords	Answers
	
<p>diagram (parts X and Y)</p>	<p>X: Food-carrying tube (Phloem), Y: Water-carrying tube (Xylem).</p>
	
<p>parts F, H, plant transport system</p>	<p>F: Xylem, H: Phloem</p>
	
<p>Advantage (remove outer ring, C-shaped ring, not completely)</p>	<p>Completely removing the ring would prevent water absorption, reducing the tree's ability to grow.</p>

Subtopic 3: Food-carrying Tubes in Plants

Question keywords	Answers
	

bark removal effect on stem parts	Upper stem swells, lower stem remains unchanged. The leaves at the top stay green, and the lower leaves yellow.
additional effect on plant, bark removal	After some time, the plant will wilt and eventually die due to lack of nutrient transport.
	
Reason (swollen part X after a week)	Food made in the leaves could not be transported below X as the food-carrying tubes were removed.
Reason (bigger fruits in region B, after ring removal)	More food was transported to region B, leading to bigger fruits.

Subtopic 4: Water-carrying Tubes in Plants

Question keywords	Answers
red-stained part of stem	Water-carrying tubes
Why (red stained part of stem is damaged)	Photosynthesis decreases due to reduced water supply.
Draw arrow (water transport in plants)	Water moves from the roots to the stem, then to the leaves and fruits.
Function of part X	Part X transports water from the roots to the rest of the plant.
	
Explain (lack of purple color in plant)	The two colors move up separate sides of the plant.