Planning Light Hours for a Plant Chamber

Scoring guide · one credit per question · review written work against each rubric

Planning Light Hours for a Plant Chamber

Question 1

Choice (2)

The graph shows zero net uptake at setting 1. A zero difference occurs when the production and removal rates match.

Question 2

The rates at both settings are 2 mmol/h. The displayed results do not show an increase from 3 to 4.

Question 3

During the light period the plant removes 8 × 2 = 16 mmol on balance. In darkness its net uptake is 16 × (−1) = −16 mmol. The daily total is 0 mmol.

Question 4

Setting 2 gives 8 × 1 = 8 mmol net uptake while lit. The dark period still adds 16 mmol to the air. The total uptake is −8 mmol, so the air gains carbon dioxide and the requirement is missed.