Tracking Sugar and Starch in a Leaf Model

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

Tracking Sugar and Starch in a Leaf Model

Question 1

Choice (2)

The starch pool grows by six carbon units during the light interval.

Question 2

New sugar could be made in photosynthesis and then stored as starch. The rise in starch can account for new carbon even while the soluble sugar pool stays unchanged.

Question 3

The pools contain 6 + 10 = 16 units before darkness and 8 + 6 = 14 after. Two carbon units are released.

Question 4

Starch can supply sugar, raising its amount even while respiration releases carbon. The combined carbon pools fall from 16 to 14 units.