Tracking Carbon Between Two Leaf Regions

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

Tracking Carbon Between Two Leaf Regions

Question 1

Choice (3)

The label is supplied beside P only. Its later presence in Q sugars shows that labeled carbon reached Q.

Question 2

In light, photosynthesis can use carbon dioxide to form sugars. The carbon atoms from the labeled carbon dioxide can become part of those sugars.

Question 3

Q gains labeled carbon when the internal pathway is open but does not gain it when the pathway is blocked. P makes labeled sugar in both runs, so the change in Q supports movement through the pathway.

Question 4

Labeled carbon can reach Q by transport from P. The result shows that the carbon is present in Q, but does not identify where all the sugar was made.