Separating Water Mass From Leaf Growth

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

Separating Water Mass From Leaf Growth

Question 1

Choice (2)

Only the increase from 4.0 to 4.5 g directly shows that dry matter increased.

Question 2

Starting water mass is 20.0 − 4.0 = 16.0 g. Final water mass is 19.0 − 4.5 = 14.5 g. It loses 1.5 g of water.

Question 3

Both end at 19.0 g wet, but the light trial gains 0.5 g dry matter and the dark trial loses 0.2 g. Equal wet mass can include different amounts of water.

Question 4

Photosynthesis uses carbon dioxide and water to make sugars. Retaining some newly made material can increase dry mass while enough water is lost to lower total wet mass.