Finding a Dye Path Through a Test Pouch

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

Finding a Dye Path Through a Test Pouch

Question 1

Choice (1)

A is uncoated and B has coating on the seams only. Their difference isolates seam coating under the model.

Question 2

The seams appear to account for most movement. Coating them lowers the outside concentration from 4.0 to 0.2 mg/L. Coating the flat film instead lowers it only to 3.8 mg/L.

Question 3

Reused water may contain dye before the new trial. Measure its dye concentration before adding the pouch and compare the change, or run the test with fresh clear water and verify the starting reading.

Question 4

Compare pouches with different lengths of exposed seam. Measure the dye entering the surrounding water, for example using concentration with equal outside volumes. Hold a relevant condition constant, such as starting dye concentration, seam material or test duration. Accept an equivalent test that isolates seam length.