Checking Water Transfer Across a Model Membrane

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

Checking Water Transfer Across a Model Membrane

Question 1

Choice (1)

P begins with eight sugar particles and 4 × 2 = 8 salt particles. Q has 6 × 2 = 12 salt particles on the right.

Question 2

Q starts with eight dissolved particles on the left and 12 on the right at equal volumes. Water moves on balance from left to right in the model.

Question 3

Six is the number of salt units before they separate. Those units give 12 dissolved particles. The model compares dissolved particle concentrations, so the right side initially has the greater value.

Question 4

Twice the volume needs twice the particle count, or 16 dissolved particles. Two particles come from each salt unit, so the larger side needs eight salt units.