Tracking Neutralization as a Solid Dissolves

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

Tracking Neutralization as a Solid Dissolves

Question 1

Choice (1)

The first 0.004 mol of OH^- uses up 0.004 mol H^+, leaving 0.002 mol.

Question 2

The new 0.003 mol OH^- uses the 0.002 mol H^+ left over. An excess of 0.001 mol OH^- remains.

Question 3

The initial 0.004 mol of dissolved OH^- leaves 0.002 mol H^+. The first solid portion then releases 0.003 mol OH^-, which is enough to use up that remaining H^+. The mixture neutralizes the rinse once the additional hydroxide becomes available.

Question 4

The unfiltered mixture supplies 0.010 mol OH^- and leaves 0.004 mol OH^-. The filtered sample supplies only 0.004 mol OH^- and leaves 0.002 mol H^+.