Reading What Remains After a Precipitate

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

Reading What Remains After a Precipitate

Question 1

Choice (2)

The 0.040 mol of OH^- can react with only 0.020 mol of Mg^{2+}, leaving some Mg^{2+}.

Question 2

P forms 0.020 mol solid, leaves 0.010 mol Mg^{2+}, and leaves no OH^-. Q forms 0.020 mol solid, leaves no Mg^{2+}, and leaves 0.020 mol OH^-.

Question 3

Both trials form 0.020 mol $Mg(OH)_2$, using 0.020 mol Mg^{2+} and 0.040 mol OH^-. Trial P starts with more Mg^{2+} and leaves 0.010 mol Mg^{2+}. Trial Q starts with more OH^- than it needs and leaves 0.020 mol OH^-.

Question 4

The remaining 0.010 mol Mg^{2+} reacts with the remaining 0.020 mol OH^-, exactly the 1:2 ratio. They form another 0.010 mol solid, leaving neither measured reactant in excess.