Checking Neutralization With Two Sensors

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

Checking Neutralization With Two Sensors

Question 1

Choice (1)

The pH is 7.0 at 25 °C, and the conductivity reading is 5, which is above zero.

Question 2

Na^+ and Cl^- remain dissolved and mobile. The reaction consumes H^+ and OH^-. Sodium and chloride are spectator ions in the model.

Question 3

Dilution reduces the concentration of dissolved ions that carry charge. The original solution is close to neutral and dilution does not create an excess of acid or base, so its pH can remain close to neutral.

Question 4

Measure a pure-water blank with the same sensor and setup. Compare that reading with the diluted sample to see whether its signal is above the instrument’s blank reading.