Checking a Rain Sensor With Blank Samples

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

Checking a Rain Sensor With Blank Samples

Question 1

Choice (1)

J reads 7.0 for the blank and 6.0 for the reference. L matches only the blank and K matches neither.

Question 2

The blank has a lower pH after contact with K. The cup could introduce acidic material into the liquid. A changed liquid would give a changed reading even with a working sensor.

Question 3

L reads the blank as 7.0 but changes the reference from 6.0 to 6.4. It passes the blank test while changing the weakly acidic reference reading.

Question 4

Compare matched portions of the same reference solution in otherwise identical L cups with and without the cleaning step. Keep contact time, reference concentration, and sensor the same, and compare with the direct reading. Accept a valid equivalent controlled comparison.