Checking Where Bubbles Come From in Water

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

Checking Where Bubbles Come From in Water

Question 1

Choice (2)

At the same temperature the water with more dissolved air produces more early bubbles.

Question 2

At 60 °C the sample with more dissolved air gives many more wall bubbles, so some early bubbles can be air coming out of solution. Both samples show sustained bubbles throughout the water at 100 °C, and both stay at 100 °C as heating continues. That later evidence fits boiling.

Question 3

Liquid water droplets would indicate water vapor was present because it can condense. The gases in air remain gaseous under the collector’s conditions.

Question 4

Water molecules enter the gas phase as intact molecules. Boiling changes their spacing without breaking the O–H bonds within them.