Comparing Water on Two Microscope Covers

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

Comparing Water on Two Microscope Covers

Question 1

Water in a spread film contacts more of the cover. Stronger attractions between the water and the coated surface favor that contact compared with remaining in separate drops.

Question 2

Choice (1)

The water masses match at 20 mg, but the coated cover has a higher readable percentage of the image.

Question 3

The new cover starts cloudy, so the image reading can change for a reason unrelated to how water spreads. Directly compare the shapes, coverage, or contact angles of droplets under the same conditions.

Question 4

For example, use the same cover angle so water does not run off one cover more readily, or wait the same time before measuring so each sample has equal time to spread. Accept another relevant control with a correct explanation.