Checking Current Through a Coated Strip

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

Checking Current Through a Coated Strip

Question 1

Choice (3)

Q and R both expose the left contact. Only R also exposes the right contact.

Question 2

Both contacts touch the coating in P. A lack of current could result from poor contact through the coating even if the metal inside conducts.

Question 3

Q exposes one contact but gives no current. R exposes both and does give current, supporting the need for a conducting path at both contacts under these conditions.

Question 4

Test a separate layer of the coating without the metal under the same voltage and at the same distance between contacts. Measuring current directly through that layer isolates the coating’s behavior.