Drawing a Bond Model After an Internal Turn

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

Drawing a Bond Model After an Internal Turn

Question 1

Choice (2)

The rear group rotates without changing which atoms are attached. Each Cl remains bonded to its original carbon.

Question 2

Both have two carbons, four hydrogens, and two chlorines. The rear C–Cl arrow points opposite the front arrow in P and 60° away from it in Q. The formula does not record that relative orientation.

Question 3

P gives cancellation because its equal-strength arrows are opposite. The 60° separation in Q leaves a nonzero combined arrow.

Question 4

Draw the front arrow upward and the rear arrow angled up and to the left. Label the arrows and show a 60° separation. Accept a labeled sketch with the same relative directions.