Reading a Carbon Model in a Mirror

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

Reading a Carbon Model in a Mirror

Question 1

Starting at F, both records read F, Cl, Br clockwise. Q starts the list at Cl because the model has turned, but the circular order is unchanged.

Question 2

Choice (3)

With H toward the viewer, R reverses the order of Cl and Br around F. Rotating around the viewing axis preserves that order.

Question 3

Show F at the top, Br next clockwise, and Cl last clockwise, with H at the center or marked as pointing toward the viewer. The drawing matches record R. Accept a labeled projection with the same stated positions.

Question 4

P and R both have one C atom bonded once to each of H, F, Cl, and Br. The atoms and bond types match. With H pointing toward the viewer in both cases, Cl and Br appear in opposite clockwise order around F, showing different spatial arrangements.