Matching Two Hydrogen-Bond Contact Sites

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

Matching Two Hydrogen-Bond Contact Sites

Question 1

Choice (1)

P differs from the connector by 0.02 nm. Q differs by 0.30 nm. Only P is within 0.05 nm.

Question 2

Both have the right number of sites, but the spacing on Q is too large to line up with both H atoms at the same time.

Question 3

Show two solid N–H bonds and one dotted contact from each H to a different O. Accept equivalent orientations with both contacts in place and the four connections represented correctly.

Question 4

The matching outline does not restore the lost donor. The modified connector has only one H available for the stated kind of contact, so at most one contact can form.