Checking Two Solids With the Same Atom Ratio

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

Checking Two Solids With the Same Atom Ratio

Question 1

Choice (2)

The separate XY groups directly describe the organization of Q. The shared atom ratio does not distinguish the models.

Question 2

Electrons can move through the connected lattice in P and carry charge. The shared electrons in Q remain within individual molecules.

Question 3

The new lattice has a 3:1 ratio. Ten XY molecules contain 10 X and 10 Y, so their ratio remains 1:1. Each additional or removed molecule changes the two atom counts equally.

Question 4

The first ratio is 1:1 in both, but P has a continuous metallic lattice with mobile electrons and Q has separate molecules. The count alone gives no bond arrangement.