Drawing Fragments From One Shared Bond

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

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Question 1

Choice (2)

In Q hydrogen keeps no electron. Its one proton then gives a charge of +1.

Question 2

In P each atom keeps its original contribution, leaving H and Cl neutral. In Q H loses its electron contribution and is +1. Cl gains that electron and is −1. The combined charge is zero in each model.

Question 3

The charged-particle detector distinguishes them. P produces two neutral fragments, while Q produces two charged fragments. The total counter gives two for either case.

Question 4

Show H with a + charge and no dots. Show Cl with a − charge and eight valence-electron dots. Accept equivalent placements of the eight dots and labeled ion brackets.