

Competition Corner: Constraint Audit

g12_u02_w05

Original fictional evidence challenges. No instrument operation, sample analysis, or real-substance identification is implied.

Challenge 21. Two fictional candidates, C_3H_6O and C_4H_{10} , both fit nominal mass 58. Compare their carbon percentages and explain how a supplied fictional carbon percentage of 62.1% changes the candidate set. Then list three limits that remain.

Challenge 22. Design a four-step audit protocol for a paper mass-evidence card. Your protocol must include arithmetic, rounding, ambiguity, and claim-boundary checks; it must not tell a reader how to operate an instrument or analyze a real sample.