**Chemistry 2.4 AS 91164** Demonstrate understanding of bonding, structure, properties and energy changes



Writing Excellence answers to **Comparing Actual and Calculated enthalpy data** questions

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| **Comparing Actual and Calculated enthalpy data QUESTION** | |
| **Question:**  The accepted enthalpy change for the combustion    reaction of butane gas, C4H10(*g*), is Δr *H* = –5754 kJ mol–1.  Explain why calculated enthalpy is different to the accepted value.  In your answer, you should include at least TWO reasons. | |
| **ANSWER** | |
| 1. state values for both calculated data (worked out from a previous question on experimental data) and accepted data  *Units, sign and 3sgf* |  |
| 2. link results from experimental data to errors in experimental design |  |
| 3. explain error number 1. |  |
| 4. explain error number 2. |  |
| 5. explain error number 3. |  |
| 6. explain error number 4. (may need only 2 or 3 in answer) |  |
| 7. make summary statement linking that not energy released is transferred to heating the water |  |

NOTE: The white column is how your answer would appear on your test paper so make sure you **write out complete sentences**. The grey area is just to help you structure your answer and would not appear in the question.