**Chemistry 2.6 AS 91166** Demonstrate understanding of chemical reactivity



Writing Excellence answers to **Reaction rate Factors – Surface Area** questions

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| **Reaction Rate Factors – Surface Area QUESTION** |
| **Question:**  Compare and contrast the reactions of 0.5 g of **magnesium ribbon**, Mg(s), with 50.0 mL of 0.100 mol L–1 hydrochloric acid, HCl(aq), and 0.5 g of **magnesium powder**, Mg(s), with 50.0 mL of 0.100 mol L–1 hydrochloric acid, HCl(aq).Refer to collision theory and rates of reaction in your answer.  |
| **ANSWER** |
| 1. state the **collision theory** |  |
| 2. Describe the reactants in your reaction and state **which factors are the same** |  |
| 3. Describe the reactants in your reaction and state **which factor is different** (the factor affecting reaction rate) |  |
| 4. **link** the factor to the collision theory |  |
| 5. link the reaction to more successful collisions occurring per unit of time |  |
| 6. link to more products (name products) being formed per unit of time AND link to a faster reaction rate |  |
| 7. summarize the reaction with the **slower reaction rate** |  |
| 8. Explain that both reactions will produce the **same amount of product** eventually as they started with the same amount of reactants |  |

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.