**Chemical reactions**

Criteria D assessment task

Record 8 situations [4 useful and 4 harmful chemical reactions] that show evidence of a chemical change. Identify the reactants and the products, and determine whether there is proof of a chemical reaction. Classify each of the chemical reactions according to the common reaction types discussed in the unit “Chemical reactions”.

Also discuss each situation and relate it to any of the following factors to show why they are relevant-

*Factors: Economic, Environmental and Political*

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| **Criterion D: Reflecting on the impacts of science** |

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| **Level** | **MYP descriptor - Year 3** | **Demonstrated When** |
| **0** | The student does not reach a standard described by any of the descriptors below. | The student does not reach a standard described by any of the descriptors below. |
| **1-2** | The student is able to:i. state the ways in which science is used to address a specific problem or issue ii. state the implications of the use of science to solve a specific problem or issue, interacting with a factor iii. apply scientific language to communicate understanding but does so with limited success iv. document sources, with limited success | 1. You identify different chemical reactions and **outline** the issue related to them
2. You **outline** the implications of different chemical reactions and how understanding them can help make suitable choices
3. You **apply** key basic scientific terms some of the time
4. You have attempted to **document** sources using MLA format
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| **3-4** | The student is able to: i. outline the ways in which science is used to address a specific problem or issue ii. outline the implications of using science to solve a specific problem or issue, interacting with a factor iii. sometimes apply scientific language to communicate understanding iv. sometimes document sources correctly | 1. You state different chemical reactions and **summarize** the issue related to them
2. You **describe** the implications of different chemical reactions and how understanding them can help make suitable choices
3. You **apply** relevant key scientific terms correctly on most occasions
4. You have **documented** most sources correctly, but not all are in MLA format
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| **5-6** | The student is able to: i. summarize the ways in which science is applied and used to address a specific problem or issue ii. describe the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii. usually apply scientific language to communicate understanding clearly and precisely iv. usually document sources correctly | 1. You **describe** different chemical reactions andthe issue related to them
2. You **discuss** the implications of different chemical reactions and how understanding them can help make suitable choices
3. You **apply** key scientific terms (words) in clear sentences on most occasions
4. You have **documented** all sources in MLA format with few formatting errors
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| **7-8** | The student is able to: i. describe the ways in which science is applied and used to address a specific problem or issue ii. discuss and analyze the implications of using science and its application to solve a specific problem or issue, interacting with a factor iii. consistently apply scientific language to communicate understanding clearly and precisely iv. document sources completely | 1. You **describe** different chemical reactions andthe issue related to them
2. You **discuss** and **evaluate** the implications of different chemical reactions and how understanding them can help make suitable choices
3. You **consistently apply** key terms in clear sentences consistently.
4. You have documentedall sources **completely** in MLA format.
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