**Assessment rubrics: Sustainability of a product or process**

Teachers may develop their own assessment marking schemes, rubrics or other tools to assess students’ report of the chemical concepts associated with a real-life scenario.

The following is a sample rubric that can be used directly or adapted to suit the assessment task. Rubrics for different assessment task presentation formats have been included from which teachers may select according to the format of their assessment task.

Rubrics for this task must include references to sustainability.

Assessment rubrics, if used, should be given to students prior to the task.

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| **Criterion** |  | **1 mark** | **2 marks** | **3 marks** |
| Background research  | Logbook notes | Records research information in logbook | Records relevant research information in logbook | Annotates research information in terms of relevance to the investigation |
| Chemistry understanding | Chemicals and/or processes | Identifies the chemicals and/or processes involved in their investigation | Discusses the chemicals and/or processes involved in their investigation | Analyses advantages and limitations of the chemicals and/or processes involved in their investigation |
| Application of sustainability principles | Green chemistry principles | Defines relevant green chemistry principles | Explains how green chemistry principles relate to the product or process | Discusses implications of green chemistry principles for the product or process |
| Sustainable development goals | Identifies sustainable development goals relevant to the product or process | Describes how sustainable development goals relate to their product or process | Suggests long-term impacts on sustainable development goals of their product or process |
| Transition from a linear to a circular economy | Distinguishes between a linear economy and a circular economy | Indicates how aspects of their product or process relates to a linear or circular economy | Proposes ways that a transition to a circular economy can be further promoted in terms of their product or process |
| Importance of sustainability | Identifies the sustainability issues existing prior to the development of their selected product or process | Discusses the impacts for human health and/or the environment of the sustainability issues existing prior to the development of their selected product or process | Predicts how long-term sustainability would have been affected without the development of their selected product or process |
| States how sustainability principles relate to their product or process | Explains why sustainability principles are important in relation to their product or process | Discusses how sustainability is relevant to their product or process for future years |
| Communication | Selection of chemical information | Communicates chemical information in language that is appropriate for the audience | Sequences their communication logically | Selects relevant data and information to support the communication |
| Infographic | Provides basic information | Is uncluttered with clear messaging | Has visual impact that conveys importance of the development of the selected product or process |
| Oral presentation  | Contains some relevant information | Contains key points related to chemistry and sustainability | Emphasises link between product or process and sustainability  |
| Multimodal presentation | Contains some relevant information | Visual information is supported by oral presentation | Relevant data and information is used to support conclusions |