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| outhern River College | **Year 11 Earth and Environmental Science**  **Task 3: Rocks in everyday life** |

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| **Name:**  **Due Date:** | **Weighting 10% of final mark** | **Score: /** |

Mining is one of the most important industries in Western Australia, with our ores extracted to be used in a number of different industries. Iron Ore is our most valuable extracted product, but we also mine Gold, Nickel, Alumina, Copper, Zinc, Diamond and Lead

For this task you are required to investigate the ways in which humans use different minerals in our everyday life and the ways in which we use the products of mining.

You will be required to choose **one** mining product or ore, and investigate:

* Where it is mined
* How much is resourced each year
* The value of the commodity
* The mining process- typically extraction and transportation
* The refinement process- how we turn the ore into useful material
* Uses of the ore
* Safety considerations of the ore that may be mined
* How we use the ore in our everyday lives and what impact that has on the remainder of the world.

You should choose a format such as:

- Fact sheet

- Brochure

- Poster

Marks will be allocated for presentation and information (a rubric is provided)

You should aim to have at least **five (5)** references and marks will be allocated for placing them in the correct format.

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| **Not acceptable (0 marks)** | **Limited (1 mark)** | **Satisfactory (2 marks)** | **Good (3 marks)** | **Excellent (4 marks)** |
| *Location*  Does not provide the location of the mine | Location provided with missing details | States where ore is mined in Australia | States where ore is mined in Australia with all details included including a map |  |
| *Resources*  Does not make mention of how much ore is mined each year | Student mentions the amount mined but has errors | Mentions the amount mined in Australia per year | Mentions the amount mined in Australia per year and compares this to other parts of the world |  |
| *Value of commodity*  Missing | Mentions price but incorrect details | Mentions price in overall $ | Mentions price per tonne exported each year | Mentions price per tonne exported each year and compares this to other countries. |
| *Mining process*  Makes no mention of the mining process | Fails to mention details in the extraction of the resource | Mentions the extraction of rock from the Earth | Mentions the extraction of rock from the Earth and how this is separated from the waste material | Mentions how rock is extracted from the Earth and how this is separated from the waste material and how this is transported for refinement |
| *Refinement*  Makes no mention of refinement | Mentions limited details of how the ore is made into valuable product | Mentions what mining ore is turned into and mentions the process | Mentions what mining ore is turned into and the process with details on how it is turned into a useable resource | Mentions what mining ore is turned into, the process of how that is turned into useable resources, mentioning some of the chemistry |
| *Uses of the Ore*  Not included | Mentions one way in which the resource can be used | Mentions multiple ways the resource can be used with no details. | Mentions multiple ways in which the resource can be used with details. | Mentions multiple ways in which the resource can be used with details, including where the resource is used or created |
| *Safety considerations*  Not included | Attempts to mention safety issues when mining but does so incorrectly | Mentions safety issues with the extraction | Mentions safety issues with the extraction or handling and measures to reduce the impact |  |
| *Presentation*  Major issues | Missing headings and large white space | Headings included and images included | Good presentation with format set out to present logical argument | Excellent presentation with few errors, set out to present logical argument and images included add to the argument |
| *References*  Not included | 1 or 2 references | 5 references in incorrect format | 5 references in correct format |  |