

“Excellent Elements” GUIDED RESEARCH

SCI 8: *Reflecting on the Impacts of Science*

4. How does your element function in your human innovation? How do its **properties relate to its use** in that human innovation? Example: Copper wires are electrically conductive.
5. What are the implications of using your element? Pick another element that could be used in place of your element for a specific task. **Compare the advantages and disadvantages of using each to complete the task.**
Example: While Gold is more conductive than Copper, Copper is used in wiring because it is significantly cheaper (Economic).

Format:

- Your chosen element (Example: Copper):
- Element used for comparison (Example: Gold):
- Specific task used for comparison (Example: Electrical Current):

Your element:	Describe the specific task:
Comparison element:	

6. What are **advantages** of using this element? *Relate to at least one of the following factors: Social, Economic, Environmental*
7. What are **disadvantages/limitations** of using this element your “object/thing? *Relate to at least one of the following factors: Social, Economic, Environmental*

BIBLIOGRAPHY				
#	Web site title	Web page Title	URL	Date Accessed
1				
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ASSESSMENT

Criterion D: Reflecting on the Impacts of a element				
(0)	Beginning (1-2)	Developing (3-4)	Accomplished (5-6)	Exemplary (7-8)
<p><i>I have not achieved a standard described to the right.</i></p>	<p><i>I am able to:</i> state the ways in which an <i>element</i> is used to address a specific problem or issue</p> <p>state the implications of the use of an <i>element</i> to solve a specific problem or issue, interacting with a factor</p> <p>apply scientific language to communicate understanding but does so with limited success</p> <p>document sources, with limited success.</p>	<p><i>I am able to:</i> outline the ways in which an <i>element</i> is used to address a specific problem or issue</p> <p>outline the implications of using an <i>element</i> to solve a specific problem or issue, interacting with a factor</p> <p>sometimes apply scientific language to communicate understanding</p> <p>sometimes document sources correctly.</p>	<p><i>I am able to:</i> summarize the ways in which an element is applied and used to address a specific problem or issue</p> <p>describe the implications of using an <i>element</i> and its application to solve a specific problem or issue, interacting with a factor</p> <p>usually apply scientific language to communicate understanding clearly and precisely</p> <p>usually document sources correctly.</p>	<p><i>I am able to:</i> describe the ways in which an <i>element</i> is applied and used to address a specific problem or issue</p> <p>discuss and analyse the implications of using an <i>element</i> and its application to solve a specific problem or issue, interacting with a factor</p> <p>consistently apply scientific language to communicate understanding clearly and precisely</p> <p>document sources completely.</p>

Command Terms for Science

Analyse - Break down in order to bring out the essential elements or structure. To identify parts and relationships, and to interpret information to reach conclusions.

Apply - Use knowledge and understanding in response to a given situation or real circumstances

Describe - Give a detailed account or picture of a situation, event, pattern or process

Discuss - Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence

Outline - Give a brief account

State - Give a specific name, value or other brief answer without explanation or calculation

Summarize - Abstract a general theme or major point(s)