Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ***Life without Rare Earth Metals***

**Directions:**  *Before reading*, in the first column, write “A” or “D,” indicating your agreement or disagreement with each statement. As you read, compare your opinions with information from the article. In the space under each statement, cite information from the article that supports or refutes your original ideas.

|  |  |  |
| --- | --- | --- |
| **Me** | **Text** | **Statement** |
|  |  | 1. Rare-earth metals have very similar physical and chemical properties. |
|  |  | 1. Most rare-earth elements were mined in the same town in Sweden. |
|  |  | 1. All rare-earth elements are in the lanthanide row on the periodic table of elements. |
|  |  | 1. Rare-earth metals provide more strength when alloyed with other metals. |
|  |  | 1. Rare-earth elements were used in color television tubes in the 1970s. |
|  |  | 1. Rare-earth elements are used in sports equipment. |
|  |  | 1. Nanoparticles of scandium surrounded by lithium are incorporated into aluminum to create more powerful but lighter weight hockey sticks. |
|  |  | 1. Most rare-earth elements are more common than gold. |
|  |  | 1. Rare-earth elements are easy to separate from their minerals. |
|  |  | 1. The United States is the largest producer or rare-earth elements. |

Emoji center: Write about what surprised you, what confused you, and other emotions in the chart below.

|  |  |  |
| --- | --- | --- |
|  | **Prompt** | **Your Answer** |
| C:\Users\kdrury\Desktop\download.jpg | I was surprised to learn… |  |
| I could not believe... |  |
| C:\Users\kdrury\Desktop\2.jpg | The author assumed I knew… |  |
| I am still confused about… |  |
| \\WFFS2\Teachers\kdrury\downlo9ad.jpg | At first I thought… but now I know… |  |
| The most interesting part was… |  |

S-O-S Summary: Read the article first. Then read this statement and describe what it means with evidence from the reading.

Statement*: I could barely survive without rare earth metals.* What does this mean to you? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Opinion: Do you agree or disagree? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Support: Back up your opinion with evidence including facts, examples, and reasons from this article:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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