**A Fresh look at the Periodic Table**

***A Science 9 Chemistry Project***

You have been solicited by the Science community to create a new Periodic Table of the Elements. Can you represent it in a different form than its current one? This project is based on the process of Solution Fluency and Collaboration Fluency presented in class and with your COL teacher.

1. **In your group, DEFINE and DISCOVER:**

* Restate the problem you are trying to solve in your own words.
* Develop some questions to research before you start to brainstorm.

1. **In your group, DREAM:**

* What information does the periodic table tell you?
* How could you arrange it differently based on its chemical and physical properties?
* What different shapes could be used?
* How can you use colour?

1. **With your partner, DESIGN**

* What is your plan?
* Make it happen. Create your new Periodic Table.
  + Demonstrate an accurate and full understanding of the properties and patterns of elements.

1. **Individually, DELIVER:**

* Write an explanation of your Periodic Table.
  + Demonstrate a detailed, clear and accurate explanation that demonstrates a depth of knowledge of the properties of the elements.

1. **Individually, DEBRIEF:**

* How could you have improved your plan? Add this debrief under the explanation of your new Periodic Table.

***What your COL teacher is looking for –***

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| --- | --- | --- | --- | --- | --- |
|  | Missing - 0 | Not Meeting – 1-2 | Minimal - 3 | Meeting – 4 | Exceeding - 5 |
| **Define**  **(What is the challenge you’ve been given?)** | Missing. | The problem is not defined. | A single sentence about the problem shared. | A complete statement about the problem is shared. | States the problem completely with all its nuances. |
| **Dream**  **(What innovative ideas do have about how this problem could be solved)** | Missing | No possibilities shared. | Typical possibilities are shared. | Shares some interesting dreams about the solution. | Shares creative, even wacky, dreams about the solution that go beyond the norm. |
| **Deliver**  **(How will you package and publish your information?)** | Missing. | Review is not published. | Uses typical format to share; the review is short. | Uses a logical format to share the information; the review is complete. | Uses the most appropriate format to share the information; risks taken; the review is clear and thorough. |
| **Debrief**  **(How did the process go)** | Missing. | No reflection on the plan or the process of completing the assignment. | Simple reflection on the process of the project. No insight into examining the plan or the final outcome of the assignment. | Examines the product but limited or no improvements given. Simply a reflection on what did or did not work well. | Honestly and critically examines the product and process and can demonstrate where improvements could have been made. |

S. Robinson

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|  | **0** | **1** | **2** | **3** | **4** | **5** |
| **Fresh Periodic Table** | No fresh periodic table | A very limited creation of the periodic table | Limited creation of a fresh periodic table that does not show an understanding of the properties and patterns of elements | Creation of a fresh periodic table show some understanding of the properties of elements but is sometimes inaccurate | Creation of a fresh periodic table shows a mostly full and accurate understanding of the properties of the patterns of elements | Creation of a fresh periodic table shows an accurate and full understanding of the properties and patterns of elements |
| **Explanation of the fresh Periodic Table** | No explanation | A very brief explanation that lacks a depth of understanding | A brief explanation that is inaccurate and/or lacking knowledge of the properties of elements | Some explanation of the properties of elements, although not always accurate or clear. | A clear and accurate explanation that demonstrates knowledge of the properties of the elements | A detailed, clear and accurate explanation that demonstrates a depth of knowledge of the properties of the elements |

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Names:

***Ms. Brandsma will be marking you according to this rubric –*** /10

***Please post to edublog with the following information:***

**Title:** A Fresh Look at the Periodic Table

**Subject:** Science 9

**Tag:** BrandsmaFreshPeriodicTable2019