Chemical Bonding Project

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Role:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Last week, we learned about ionic, covalent, and metallic bonds. This week, we are going to learn about the principles of design, and apply those to creating a sculpture. The sculpture will represent the chemical bonds in a molecule. You will work with a group to research which bonds are present in a specific molecule. Then, you will use the research to brainstorm and create a sculpture.

Your grade will be based on how well you meet the criteria outlined in the rubric on the back of this page.

Your group’s molecule is…..\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chemical Bonding Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Description of Skills for This Project:**  **We…** | **Self-Evaluation** | | | **Evidence from your work:**  **Use examples from your artwork to explain why you gave yourself “met the guidelines” or “best work”** | **Teacher Evaluation** |
| I didn’t do this | I met the guidelines | This is my best work! |
| …Created a mini sculpture representing one principle of design. |  |  |  |  |  |
| …Created a sketch for our final sculpture. |  |  |  |  |  |
| …Used our group’s research to design and create a sculpture of our molecule. |  |  |  |  |  |
| …Applied at least three principles of design to our final sculpture. |  |  |  |  |  |
| …Represented the chemical bonds present in our molecule in our sculpture. |  |  |  |  |  |
| …Answered the three questions and explained the thoughts behind our project. |  |  |  |  |  |
| …Supported our team project by fulfilling our individual roles. |  |  |  |  |  |
| …Participated respectfully in the gallery walk. |  |  |  |  |  |

Research Guide/Launch Point:

What chemical bonds are present in your molecule?

How is your molecule used/how does your molecule react, or what types of reactions does your molecule have?

Brainstorm your ideas on the whiteboard first, and then sketch your final idea here:

Note: your final project might not look like your sketch. That is ok!



Final Write-Up Questions:

1. Do you think artists intentionally apply the principles of design in their projects? If yes, why? If no, why not?
2. How did you use at least three of the principles of design to represent your molecule?
3. Explain how your sculpture represents the chemical bonds within your molecule.