

# Integration of Chemistry and Art - The Ion Model Project

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A collaboration between 3<sup>rd</sup> Period North Eugene HS chemistry students, Tia Holliday, chemistry teacher, & Kate Ali, sculptress and Lane Community College faculty

To Students:

The feedback you give us today will inform the way that we do this project and future integrated art projects. We need and value your honest, thoughtful responses. Please discuss each prompt/question between you, decide on a group response and record that response on the chart pack paper. If there are different opinions, feel free to record those thoughts. If you have a personal response or thought that you want to share, make a note. There will be a chance for individuals to share when we debrief as a class.

Each group will need:

your models  
markers  
chart pack paper  
model "connector links"

Each group will choose:

1 recorder - record group responses on chart pack paper  
1 or 2 presenters - report group responses to the class during the debrief

## Prompts for Discussion

- Let's talk about logistics of the models and using them to build compounds.
    - How do we decide where the holes should be drilled?
    - Are there any problems that we need to identified and solved before we make the holes?
    - I'm worried about this: imagine that you want to build **iron III oxide**,  
$$2 \text{Fe}^{3+} + 3 \text{O}^{2-} \rightarrow \text{Fe}_2\text{O}_3$$

How could you arrange the holes so that you could build a model of that compound?  
Draw a picture of how you think you could accomplish this.
    - What other combinations of cations and anions might be problematic?
    - Predict problems that may arise when drilling the holes? Using the links?
    - Brainstorm: Are there other methods we could use to connect the ion models to make compounds?
  - Reflect on the entire process.
    - What problems did you encounter? How did you solve them?
    - What was challenging or frustrating? What was satisfying and made you feel good about your work?
    - Were you engaged? Were you enjoying what you were doing?
    - Did it seem like the people around you were engaged in the work of the project?
    - How would you change the project? What would make this project better, more meaningful, more interesting to you?
  - Think about chemistry.
    - Explain how this project connects to chemistry. Does the project support anything that we have studied? Give specific examples.
    - What future topics might we study that would relate to the process or the project?
  - Think about Habits of Mind.
    - Look at the 16 Habits of Mind. What habits did you use in this project?
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