

# Communicating Science

**Guiding question:** how can we convey what we know about reactions to a younger audience?

One of the goals of our Chemistry course is that you should feel confident communicating your understanding of this subject to others. To that end in this project, you will work in a group to study a reaction type and teach the 6<sup>th</sup> grade about it. You will be assessed by each other and by me. You will in turn assess your peers. You will reflect on your work.

**What: Teaching 6<sup>th</sup> graders about Reactions**

**When:** 14 Nov; This will happen during class periods – E, F and G

**Timeline:**

1. Sept 17/18 – Introduce the project
2. Sept 27/Oct 1– groups decided and have work time
3. Oct 10/14 – Project work time
4. Oct 14/15 – lesson plan due
5. Nov 1/4 – Project work time
6. Nov 5/6 – script due
7. Nov 7/8 – peer presentation practice day
8. Nov 11/12 – graded peer presentation day
9. Nov 14– Game day

These deadlines will also be on the Canvas page.

**Total Points: 85**

**Presentation reactions:**

- REDOX: Metal plus acid, producing and testing for hydrogen
- Acid/Base: Acid plus carbonate, producing and testing for carbon dioxide
- Synthesis and Combustion: Magnesium burned in oxygen; burning of fossil fuels
- Decomposition: Electrolysis of  $\text{CuCl}_2$  or burning of sugar
- Acid/ Base: neutralization with indicators
- Double Displacement: Precipitation Reaction

## Assessment pieces:

### 1. HW - Lesson Plan (**20 points**)

The purpose of the lesson plan is to show that you have thought through what you are going to do and why.

Please follow the form "Teaching Project Lesson Plan" found on Canvas and in OneNote for all details.

### 2. HW – **10 points**: Script of the presentation

When putting together a presentation, it's important to have a sense of who will say what and when. The script is aimed at helping you figure that part out. This should be in a word document or google document form and turned in on Canvas.

The points here are for completion. This is your opportunity to get your facts checked before any presentation happens.

### 3. **Peer Assessment:**

a. You will evaluate 3 other groups on their presentation using the following rubric worth

Criteria	Exceed Expectation (A)	Achieved Expectation (B/C)	Did not achieve expectation (D/F)
<b>Voice Projection</b>	Speaks louder than fans or any other background noise.	Spoke loud enough to hear.	Did not speak loud enough and did not change tone/volume throughout presentation
<b>Audience Appropriateness</b>	Presentation was designed at the level so that the 6 <sup>th</sup> graders could understand <u>all</u> of the presentation.	Presentation was designed at the level so that the 6 <sup>th</sup> graders could understand most of the presentation.	Presentation was not designed at the level of a 6 <sup>th</sup> grader.
<b>Body Language</b>	Presenters faced their audience, looked calm and confident, did not turn away from group or walk away from the group.	Presenters were able to face their group and present a confident manner for the presentation.	Presenters were not able to face their group, turned their backs often or even walked away from the group.
<b>Audience Connection</b>	All presenters consistently engaged the audience through questions and encouraged discussion about the reaction.	Presenter(s) engaged the audience about the presentation. Some questions were asked about the reaction.	Presenters did not engage the audience at all during the presentation.

<b>Content</b>	Presenters understood their reaction and included other examples of this kind of reaction in their presentation.	Presenters understood most of their reaction, and were able to convey this to the audience.	Presenters did not understand their reaction.
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- i. Your peer assessments will all be averaged to give your group one overall grade. It's worth 20 points.
  - b. Formal presentation assessment by your teacher.
    - i. Using the same rubric above, we will also assess you on the day. While you will give your presentation a number of times, we will only assess one of them.
    - ii. This assessment will be worth **30 points**.
4. HW: 5 points - Reflection on your work
- a. You will be asked to complete a reflection on your work, including what you learned and how you would improve your preparation and execution of the presentation.