Created by Emma Downs, Fitchburg State University (edowns1@fitchburgstate.edu), posted on VIPEr ([www.ionicviper.org](http://www.ionicviper.org)) on June 28, 2022.  Copyright Emma Downs 2022.  This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. To view a copy of this license visit <http://creativecommons.org/about/license/>.

**Semester Project - Elements**

Communication is a key part of science. The most exciting scientific discovery in the world doesn’t matter if no one ever hears about it. Thus, a successful scientist must have scientific knowledge but also be able to communicate that knowledge effectively, both verbally and in writing. The final project focuses on communication about science, starting at the basis of chemistry, the elements. Our jumping off point will be BBC’s podcast series on chemistry in everyday life *Elements*: <http://www.bbc.co.uk/programmes/p01rcrn6/episodes/player> . Peruse the listings, listen to a few podcasts, and choose the element that you will spend the semester getting to know. (It should not be C, H, O, N, or P, and it should be a metal.) This overall project is worth 30% (300 points) of your final grade.

**Part 1: Blog Posts (150 points)**

The writing part of this project will be a blog. We will be using the blog function on Blackboard under tools. You should use your best practices for blog writing as discussed in class. Images are encouraged, just make sure to include citations.

Posts should be between 700 and 1000 words (the first can be a little shorter), and are due by 5 PM on the due date. The posts should have good grammar and spelling and be properly referenced. (Wikipedia is a good starting point but not an appropriate reference.) Posts should be focused on chemistry.

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| **Activity** | **Due Date** |
| Your favorite science blogs post | 9/21 |
| Choose element | 9/23 |
| Why this element? Post | 10/7 |
| Economics/Real Life Uses Post | 10/21 |
| Properties/Reactivity/Group Post | 11/9 |
| Choose article for lit review | 11/18 |
| Applications – lit review Post | 11/30 |

Why this element? – Why did you choose this element? Why do you find it interesting? A brief introduction to your blog.

Economics/Real life uses – Where does this element show up in real life? What is it used for? Why is it important?

Properties/Compounds/Reactivity within group – What does this element do chemically? What kind of compounds does it form? What types of reactions? How does it fit within its group on the periodic table and compare to other elements of that group? Many inorganic textbooks contain a section like this, I have several in my office if you would like to look at them.

Applications – choose a current paper from a scientific journal that is focused on the element. Summarize the paper, particularly into/conclusion. (Start looking early so you can request papers from ILL if needed.) Remember this summary should be for a non-scientist.

Because part of this assignment is for you to teach each other about the elements, it is important that you read each other’s posts. You must comment least one of your peers’ posts for each assignment.

**Part 2: Presentation (150 points)**

You will present about your element during the final exam period. The presentation should be about ten minutes long and will encompass the material in your blog posts, with a particular focus on the last two. Your presentation will be graded on both content and style. Most of the presentation should be about inorganic chemistry topics. Your slides should be neat and professional looking and your presentation should be well practiced. Figures should be used where appropriate, but no clip art. (See the presentation rubric for more detail.) You may not use videos in your presentation.