

Chemical Compound Paper or Presentation

Fall 2021

Students will prepare a presentation on a chemical compound of their choosing. Students may choose to prepare a 750-1000 word paper OR a 3-5 minute PowerPoint presentation which can be recorded or given live.

Paper and Presentation must include:

1. Chemical compound – formula, IUPAC name, common names. For elements include its electron configuration.
2. Structure – For molecular compounds include the Lewis Structures – geometry, bond angles, nonpolar or dipolar. For an ionic compound include its crystal structure (picture is sufficient) and include its Lewis Structure. If you choose an element that is a metal, you can look up its crystal structure and include a picture of it.
3. Physical properties – Molecular Weight, Density, Melting Point, Boiling Point, Flammability, Solubility (Ch. 14), Toxicity and anything else of interest. Highlight any interesting or unique properties. Given in table format. Only highlight interesting features in your paper or presentation
4. Chemical Reaction – at least one, properly written and formatted. Could describe how it is made, how it is used etc. Must be relevant to what is discussed/presented about the compound.
5. For molecular compounds discuss any Intermolecular Forces present between molecules, for ionic compounds include the bond strength and bond length, for elements discuss any Intermolecular forces present.
6. Important uses – industry, medicinal etc.
7. Production - how it is produced, how much is produced, where it is produced or where is it is found naturally.
8. Why you chose the chemical compound or why it's your "favorite" chemical
9. Graphics – include at least two pictures/diagrams that provides useful information. You can also include pictures that do not provide useful information to make your paper or presentation look nice.

Deadlines:

1. 11/12/21 - Choose your favorite chemical compound to give a presentation or write a paper. Sign up for it with Jay, first come first serve.
2. 12/2/21 - Papers or presentations due. Papers and Video/PowerPoint presentations should be uploaded into the proper drop-box on D2L.

Miscellaneous Requirements

Paper	Presentation (PowerPoint)
<ol style="list-style-type: none"> 1. 750-1000 words 2. 12 point Times New Roman font 3. PDF, docx or rtf format 4. Single spaced 5. Margins 1" 6. At least 2 meaningful graphics –majority of graphics should be informative, though the occasional pretty picture is acceptable 7. Should include cover-page with <ol style="list-style-type: none"> a. Title b. Name c. Date 8. Spelling counts 3+ References from academic or government sources, MLA or APA format. If you need help: https://owl.purdue.edu/owl/purdue_owl.html	<ol style="list-style-type: none"> 1. Prepare a 4-5 minute talk and PowerPoint 2. Presentation should be uploaded to D2L in a .WMV or .MP4 format 3. No paragraphs or walls of text 4. Clear/Concise points – elaborate in your talk 5. At least 2 meaningful graphics –majority of graphics should be informative, though the occasional pretty picture is acceptable 6. Font Sizes – goal is to make it readable from the back of the class-room <ol style="list-style-type: none"> a. Header – 28-32 pt b. Main Text 18-20 pt 7. 3+ References from academic or government sources, MLA or APA format. If you need help: https://owl.purdue.edu/owl/purdue_owl.html 8. Spelling counts

Chemical Compound Paper or Presentation - Grading Rubric - Fall 2021

Deadline – 20 points	Max	Student	Comments
Choose Topic Deadline	5		
Presentation Deadline	15		
Formatting – 20 points			
Length	10		
Formatting - Fonts, Margins, Spelling etc	5		
References given	5		
Content – 60 points			
Chemical Formula and Structure	5		
IUPAC/Common Names	5		
Lewis Structure or Crystal Structure	10		
Properties (Table Format)	5		
Chemical Reaction/Equation	10		
IMF's or Bond length/strength	5		
Important Uses + Production	5		
Why you choose the compound	5		
Graphics – Insightful (2)	10		
Total	100	0	

#	Student	Topic	Paper or Presentation
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