Chemistry Now! A division of elementsulfur.com
700 College Dr, Building H, Room 317-T
Henderson, NV 89002
Email: info@chemistrynow.org
Website: www.chemistrynow.org

Attn: Chem 122 Creative Team,

As part of Chemistry Now's ongoing mission to make chemistry accessible and relevant, I'm thrilled to announce our latest initiative. We have partnered with elementsulfur.com, a premier online resource for CSN students, to showcase a series of engaging infographics that will educate the public about chemical phenomena discussed in a first-year major chemistry course.

These topics form the foundation of our understanding of chemistry and are critical to appreciating the role this science plays in our daily lives. By displaying your work on elementsulfur.com, your infographics will reach a global audience of students, educators, and curious minds seeking to deepen their understanding of chemistry.

Your mission, as a team of talented science communicators, is to take these fundamental concepts and bring them to life. Whether it is explaining the periodic trends that dictate the properties of elements or unpacking the energy changes that fuel the reactions around us, your work will bridge the gap between complex scientific ideas and relatable, everyday experiences.

Each infographic should:

- Clearly and concisely explain a key chemical phenomenon from the course material.
- Illustrate the concept with visuals that are both informative and eye-catching.
- Connect the phenomenon to real-world applications or problems.
- Be designed to resonate with a general audience, making the information both accessible and engaging.

These infographics will not just be classroom tools; they will be part of a dynamic online platform that inspires a new generation of chemists, answers questions for the curious, and dispels myths about the world around us. By sharing your work on elementsulfur.com, you will contribute to a growing library of chemistry resources that are shaping the way science is taught and understood.

I know this team's talent and dedication, and I cannot wait to see what you create. Your work here will remind the world that chemistry is not just a subject to study; it is a lens through which we can better understand and improve our lives.

Let us work together to make science clearer, more accessible, and infinitely more exciting!

Best regards,

Dr. D
Chief Editor, Chemistry Now

Chemistry Now Concept Infographic Project:

Mastering Concepts Through Infographics

If you received the letter from the editor (Dr. D) then you have been assigned this as a project in your general chemistry class. This project will encompass a significant portion of your grade at 15 %. The goal will be to create an engaging infographic that explains a key chemical phenomenon from your former General Chemistry I course and demonstrate its relevance by incorporating three distinct real-world examples into your infographic. Some of the better infographics will be hosted on Dr. D's website elementsulfur.com to help other students.

An infographic is a visual way of presenting information that combines text, images, and graphics to explain a topic clearly and quickly. Think of it like a poster or digital design that uses charts, diagrams, and pictures to help people understand something without having to read a lot of text. For example, instead of writing a long explanation about how soap works, an infographic might show a picture of a soap molecule, explain it in one or two sentences, and include a diagram to show how it removes grease. Infographics are often colorful and creative to make learning fun and interesting!

Instructions:

Step 1: Topic Selection and Reservation

a. Head to our corporate website, **chemistrynow.org**, Employees 122 – (project) to **reserve your topic** from the provided list.
    - First come first served.
        - Caution: The easier topics will come with higher expectations.
b. Login using the password provided on canvas. (You are roleplaying as an employee after all).
c. Each student or group must have a unique topic. First come first serve. Please check the update list of topics available each week on **chemistrynow.org**. Early reservations are recommended to secure your preferred topic. Topic reservations will close on the 1st of April 2025.

Step 2: Research Your Topic

a. Begin by reviewing your **textbook** to fully understand the chemical concept. The textbook is your primary resource for explaining the concept.
b. To add depth, explore **two peer-reviewed scientific articles** related to your topic or its applications. Properly cite these in **ACS format** in your summary.
c. Identify **three real-world examples** that illustrate how this concept applies to everyday life, technology, or industry.

Step 3: Find Inspiration

a. Visit **compoundchem.com** to view infographics by Andy Brunning.
b. Look at examples like:
    - "How Soap Works"
    - "The Chemistry of Sunscreen"
    - "Ocean Acidification: The Other Carbon Dioxide Problem"
c. **Use these as inspiration, not as source material.** The copy editor (**Dr. D**) will review your work to ensure originality and verify that it does not replicate content posted on the website and go by CSN's academic integrity policy. i.e. your infographic must be your own original work.

Step 4: Design Your Infographic
Your infographic must:

a. Clearly explain the assigned chemical concept using your **textbook** as the primary reference.
b. Include **three real-world examples** tied to your topic to help relate it to people not familiar with chemistry.
c. Be visually engaging with graphics, charts, or images. Creativity is a bonus. Nothing offensive, follow the student handbook for academic integrity.
d. Fit your design within an **8.5 x 11-inch** layout (portrait or landscape).

Use design tools like **Canva, PowerPoint, or Google Slides** for a polished and professional appearance. Advanced students or those with a knack for design can explore more sophisticated tools like **Adobe Illustrator** for a polished, professional finish. All of these software's are available free at CSN computer centers.

Step 5: Submission Requirements

a. Submit your completed infographic as a **PDF or high-quality image file (JPEG/PNG)** on **canvas LMS** by the deadline of MAY 1st 2025 because you have this information on the first day of class and it is 3 months away there are no excuses for missing. Plan accordingly.
b. Include a **one-page summary** that includes your name the title of your infographic so that I can identify it (do not put your name on the infographic unless you want it shown to the world). Explain your concept, and how it connects to the three real-world examples, and cites any sources used (textbook, journal articles, etc.) in **ACS format.**

Steo 6: In-class Presentation

a. All students will present their infographic in person to the class.
b. Your presentation should be no longer than **3 - 5 minutes** and should:
    - Briefly introduce your topic.
    - Explain the chemical phenomenon/concept and its connection to the three real-world examples.
    - Use your infographic as a visual aid during the presentation.
c. The presentation will be done the class session before your class final (May 12th)
d. This is to aid your grade in helping me understand your POV on your infographic.

Key Deadlines

a. Topic Reservation Due: March 31st, 2025
    - Reserve your topic on chemistrynow.org to secure your choice.
        - Rough Draft (Optional): You may submit a draft of your infographic info for feedback. Please allow at least two weeks for review.
        - Early submissions are encouraged to receive guidance and improve your final product.
b. Final Infographic and Summary Due: April 30th
    - Submit your completed infographic file and summary on chemistrynow.org.
    - All files will be reviewed, pre-graded, and uploaded to the presentation computer ahead of class presentations.
c. Presentation Dates: May 12th
    - In-person presentations will occur during the week of finals week. Be prepared to present for up to 3 - 5 minutes.

How will the copy editor (Dr. D) grade this?

Your infographic project will be graded across **four key areas**, each designed to evaluate a different aspect of your work. These areas are:

1. **Content Accuracy (60 points):** Assessing the depth of research, scientific accuracy, and proper citations.
2. **Real-World Examples (45 points):** Evaluating the relevance, variety, and explanation of your three examples.
3. **Visual Design (30 points):** Reviewing the organization, layout, and use of graphics in your infographic.
4. **Clarity and Accessibility (15 points):** Ensuring the information is engaging, clear, and well-written for a general audience.

Each area is broken into specific components, outlined in the comprehensive grading rubric below. Your final grade will reflect your ability to meet the criteria in these areas.

1. Content Accuracy (60 points)
- Depth of Research (20 points):
    - 18–20: Concept is thoroughly researched using the textbook and peer-reviewed sources.
    - 11–17: Concept is mostly accurate, but some details lack depth or precision.
    - >10: Limited or incorrect information; insufficient research.

- Scientific Accuracy (20 points):
    - 18–20: Chemistry concepts are explained accurately and clearly.
    - 11–17: Minor inaccuracies or unclear explanations.
    - >10: Major inaccuracies or lack of clarity.

- Proper Citations (10 points):
    - 18–20: Two peer-reviewed articles and textbook cited in proper ACS format.
    - 11–17: Missing or improperly formatted citations.
    - >10: No citations or unrelated sources.

2. Real-World Examples (45 points)
- Relevance to Concept (15 points):
    - 13–15: All three examples are directly and clearly tied to the topic.
    - 9–12: Most examples are relevant, but connections are unclear.
    - 0-8: Examples are irrelevant or poorly explained.

- Variety of Examples (15 points):
    - 13–15: Examples are diverse and cover multiple aspects of real-world applications.
    - 9–12: Examples are somewhat repetitive or lack variety.
    - 0-8: Examples are repetitive or unrelated.

- Explanation of Examples (15 points):
    - 13–15: Each example is thoroughly explained and connects to the concept.
    - 9–12: Some examples lack detailed explanation or clear connections.
    - 0-8: Examples are unexplained or incorrectly linked to the concept.

3. Visual Design (30 points)
- Layout and Organization (15 points):
    - 13–15: Infographic is well-organized, visually appealing, and easy to navigate.
    - 9–12: Some parts are cluttered or difficult to follow.
    - 0-8: Layout is disorganized or unappealing.

- Use of Graphics (15 points):
    - 13–15: Graphics, charts, and visuals enhance understanding and are relevant.
    - 9–12: Graphics are present but lack relevance or clarity.
    - 0-8: Graphics are missing or poorly executed.

4. Clarity and Accessibility (20 points)
- Audience Engagement (10 points):
    - 9–10: Information is presented in an engaging and accessible way for a general audience.
    - 6–8: Information is clear but lacks engagement or accessibility.
    - 0–5: Information is confusing, overly technical, or not engaging.

- Writing and Grammar (5 points):
    - 5: Writing is concise, error-free, and easy to understand.
    - 3-4: Minor errors or unclear phrasing.
    - 0–2: Significant errors or poorly written content.

Late Assignments:
- **Late submissions will not be accepted.**
- Students have had three months to complete this project, and the firm deadline ensures fairness and accountability. It is the student's responsibility to plan and manage their time effectively.

Missing Assignments:
- Assignments not submitted by the due date will receive a grade of **zero.**
- Exceptions will only be made under the MOST extreme, documented circumstances (e.g., serious illness or emergencies). Students must notify the instructor **before the due date** to discuss any possibility of accommodations.