

Chemistry AP Research Presentation Project

You and a partner will research and prepare a presentation on a topic in chemistry. Your presentation will be approximately 10 minutes in length and must have a visual component (i.e. Power point or Prezi). You may choose from the list of topics below or create your own topic (with instructor approval). Your presentation must fully address the chemistry of the topic, but may also include additional information. Your presentation must include *at least* two figures. A figure can include a diagram, table, picture, chart, or graph and should be relevant to the content.

In addition to the presentation, you and your partner will prepare five questions on your topic and provide an answer key. Both the questions and answer key must be submitted electronically. Questions should be varied in format and can include multiple choice, matching, true-false, and/or short answer responses. Questions will be chosen from each group and compiled into a test. The test will be on _____.

The grading criteria for the research project are given below.

Possible Topics: only ONE group per topic.

Sign up will be available online on the website beginning _____.

- acid rain
- ozone depletion
- climate change
- air pollution
- water pollution
- artificial sweeteners
- aluminum production
- steel
- the Haber process
- industrial chemistry
- light bulbs
- mining
- alloys
- adhesives
- water purification
- magnetism
- chemotherapy
- PET scan
- bioluminescence
- glass
- gemstones
- Teflon
- Styrofoam
- photography
- food chemistry
- explosives
- petrochemicals
- hydrogen fuel cells
- batteries
- plastic
- cleaning products
- polymers
- fireworks
- liquid crystal displays
- X-rays
- particle physics
- the chemistry of smartphones
- astrochemistry
- forensic analysis
- the chemistry of special effects
- cosmetics chemistry
- sunscreen
- fragrances and flavors
- biogeochemical cycles (carbon/nitrogen/phosphorus/sulphur cycles)
- biological molecules (lipids, proteins, carbohydrates, nucleic acids)
- SI units
- the quest for absolute zero
- super conductors
- nanotechnology
- radioactive dating
- nuclear weapons
- nuclear energy
- nuclear stability: Why are some atoms radioactive?
- The large hadron collider
- synthesis of new elements
- lasers
- an additional topic of your choice (with instructor approval).

Grading Criteria:

— 10	Presentation	Each presentation should last approximately 10-12 minutes. The presentation should be well-prepared and professional and include visuals (i.e. power point or prezi). This page must be turned in at the time of your presentation (with your names on it).
— 20	Completeness, Accuracy, and Depth of Explanation of Chemical Concepts	The presentation must fully explore and accurately discuss the chosen topic. Relevant chemical concepts should be explained in detail and show a clear understanding of the material presented. Include a works cited page (MLA) as the final slide of the presentation.
— 10	Questions	Five questions must be prepared with an accompanying answer key. The questions should be varied in format and based on important information in the presentation. The answer key should be accurate and complete. The questions and answer key must be submitted electronically during your class period (to slipetz@smmusd.org) no later than _____. Please submit with the questions on page 1 and the answer key on page 2.
— 5	Figures	A figure is diagram, table, picture, chart, or graph that displays content in a visual manner. Figures should be appropriate and include a descriptive caption . The presentation must include at least two figures. At least one of the figures must be <i>self-created</i> .
— 5	Neatness, Effort, and Creativity	All material should be presented in an organized manner. Spelling, grammar, and punctuation should be correct. Impress me!

Total —
50