Chemistry 108: The Chemistry of Everyday Phenomena

Paper Ideas Part Three

Due: Tuesday, March 31st, 11:00am

Please choose one of the three topics below for your third paper.

Note: Do not merely answer these questions given in the description in the given order, but write a coherent paper that addresses these issues. The paper must be typed, should not be longer than 5 pages (double spaced, reasonable margins), and must include at least 2 references (valid web references are fine). The work must be your own.

Note regarding references:
- Using web references as your sources are okay, but make sure they are valid. For example, listing Wikipedia or Google as your reference is NOT valid. You can start there but you must move to a link that contains an article written by a valid author.
- You must cite your references throughout your paper (by author) and include a bibliography at the end. I am not picky about the format (use MLA or whatever you’re used to) but the bibliography must include the author’s name, article/book name, website address (if applicable), publisher (if applicable), and copyright date/accessed date.

**Paper Idea I:**
Thinking about the conductivity test you saw in lecture and performed in lab, write a paper about batteries. What, in general, constitutes a battery (what are the major components and what functions do they serve)? How is chemical energy turned into electrical energy? Discuss automobile batteries (lead storage batteries), dry cell batteries, and rechargeable batteries in particular. Include any relevant history.

**Paper Idea II:**
Write a paper on the use of science in solving crimes. You may write at length about one specific topic or more briefly about a maximum of three topics. Example techniques: ballistics, fingerprinting, DNA, bloodstain analysis (detection and typing), firearm residue analysis, or one or more of your choosing.

**Paper Idea III:**
Write a paper about the drug methamphetamine. When was this drug first synthesized? During what decade was there a rise in recreational use of the drug? Why do some people believe that this drug is an epidemic problem in the United States? Besides the effects of the drug on your body and the fact that it is illegal, what are some dangers of making the drug? Why can we no longer buy over-the-counter drugs in Illinois that contain pseudoephedrine unless we obtain it from a pharmacist? Do you agree with this law? Why or why not?