

## Physical Science

### Poison Research Report - Level 1 Assignment

Due Beginning of Class, Friday, February 28 – 20% penalty for each day or part of day late.

*To submit your report, share it as a Google Document with me, giving me EDIT PERMISSION, and sending an email to notify me. The time of that email will be considered the time of your submission, and I will ignore any changes to the document after that time.*

Assume that you discovered that the perpetrator's poison of choice was a barium compound in aqueous solution. Your task is to research this compound's use as a poison. Your report should include:

1. its symptoms – what the victim feels and how they appear
2. what organs or other bodily functions it affects
3. antidotes and treatment
4. how the poison works within the body, specifically including what chemical mechanisms it uses; for example, what other chemicals or elements does it affect in the body?

Only include information that is relevant to the use of soluble barium compounds as a poison. Environmental exposure to barium and the use of barium as a diagnostic in medical tests is not relevant.

Remember your audience – if you use fancy medical terms, you must explain them in terms that normal people on the jury would be able to understand. Cite the source (see below).

Your report must be typewritten, double-spaced. Clean, professional formatting, good English grammar and spelling, and clear writing will count for 10% of your evaluation.

You may research this report on the internet, with doctors, chemists, or other professionals, or any other resources except another student. You must prepare this report on your own, without writing assistance from any other person, and without discussing your report or sources with other students.

You must clearly quote or specifically cite all sources including internet sites, interviews with specific individuals, and all other materials whenever using facts, ideas, or concepts you discovered in your research. You must cite anything that is not “common knowledge”. For example, “barium is an element” is common knowledge; that ingestion of barium can lead to paralysis is not. Remember:

- Citations must include enough information that I can access the source to verify your information.
- If you use more than a few words taken directly from a source, you should put them in quotes.
- Cite your sources in the text where you quote, paraphrase, or otherwise use the information you found; simply providing a list of works cited at the end of your report is not sufficient. You may provide a numbered list at the end, and simply place the number in the text.

There is no minimum or maximum length for the report, but it would be difficult to do a good job covering this topic in less than several pages.