Mini Topic Project

**Topics:**

1. Acids and bases – what are they? Real life examples of their importance.
2. pH calculations – how to calculate pH? Real life examples of where we use pH.
3. Nuclear power – fission equations. Pro/cons
4. Concentration calculations – parts per million and parts per billion and connections to pollution
5. Electrochemistry – how do batteries work?
6. Chemistry professions – where is the chemistry in something like dentistry, veterinary science, etc
7. Chemistry of space – where did elements come from? How do we know what elements are out there?
8. Chemistry of food – examples of some chemical reactions that happen in cooking, and how chemistry is used in food science.

Tasks

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| Researcher and Manager* Person responsible for bringing a laptop each day
* Person responsible for navigating websites
* Must create a list of websites used – will turn this in.
* Must help the Material’s Creator and Presenter translate the information recorded into handouts and power point slides
* Also responsible for keeping the group on task during work time.
 | Materials Creator* Must create a Note Taking Template for fellow classmates to use. Must follow formatting guidelines shown in class.
* Must create a set of 5 questions for students to do. Three must cover the material taught to the class, one must be some kind of creative processing task, and one must be an “extension question” where you ask them to go look up something related to your topic to extend their learning. Must follow formatting guidelines shown in class.
* **Must bring 36 copies of each by:**
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| Recorder and Coordinator* Person responsible for recording relevant information
* May do so on another laptop or on paper – will turn this in.
* Must help the Material’s Creator and Presenter translate the information recorded into handouts and power point slides
* Also responsible for making sure all tasks get “scheduled” and “executed.”
 | Presenter* In charge of making PowerPoint slide – you get TWO slides TOTAL
* Must follow formatting guidelines given in class.
* Will present material to the class
* Is responsible for making sure the material presented makes sense
* **Must add file to the School Loop Drop Box assignment by:**
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**Sign Ups:**

Decide who will sign up for which task. By signing you acknowledge that you understand the requirements for your task and you will collaborate with your group in an effective and acceptable way – you understand that your grade is based on a combination of participation, collaboration, on task behavior, as well as the quality of the finished product you submit. By signing you also agree to bring any concerns about your group to Mrs. Farmer BEFORE the end of the project. You cannot complain about your group after the fact – issues need to be addressed when they happen.

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| **Tasks** | **Printed Name & Signature** | **Score** |
| Researcher and Manager |  | Participation | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Collaboration | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
|  | On Task Behavior | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Finished product | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Recorder and Coordinator |  | Participation | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Collaboration | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
|  | On Task Behavior | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Finished product | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Materials Creator |  | Participation | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Collaboration | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
|  | On Task Behavior | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Finished product | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Presenter |  | Participation | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Collaboration | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
|  | On Task Behavior | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |
| Finished product | 0  | 2.5  | 5  | 7.5  | 10  | 12.5  | 15  | 17.5  | 20 |