Chemistry 20: Research Topics

**Development of glassware /plastic-ware used in Chemistry**

Work with a partner to present a 5 – 10 minute talk.

Information you need must include (but is not limited to):

1. History of invention of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (date, scientist, nationality, etc)
2. Original use of this glassware in chemistry
3. Other uses in chemistry (give specific examples to support) (maybe this glassware has been replaced by something new?)
4. Compare: costs, sizes, accuracy, materials used in making, etc. – use a minimum of 3 supply companies
5. Describe what the item is made with
* Production of glass - include how glass
	+ - 1. Withstands sudden changes to: pressure, temperature, etc
* Production of plastics – include how plastic
	+ - 1. Withstands sudden changes to: pressure, temperature, etc
1. Something to engage the audience in your presentation
	* + Posters / pictures
		+ Handouts, quiz, video, activity
		+ Etc. Etc. - Don’t be limited by my suggestions
		+ DO not bore us!!
2. Extas???? – You come up with some information that is not asked for that relate to this topic
3. Bibliography of references used in your research. You must show evidence of research from both print materials as well as the Internet. A complete bibliography must be handed in to me.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Topic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Research 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Required Information** | Exceeds expectations: Clear explanation of topic | Meets expectations – basic explanation of topic | Below expectations: little or no explanation of topic |
| History of invention | 3 | 1-2 | 0 |
| Original use of glassware in chemistry | 3 | 1-2 | 0 |
| Modern uses of glassware supported with examples | 3 | 1-2 | 0 |
| Comparison of ‘value’ from three companies | 3 | 1-2 | 0 |
| Glass production (resist changes to pressure, temperature, stress) | 3 | 1-2 | 0 |
| Plastic production (resist changes to pressure, temperature, stress) | 3 | 1-2 | 0 |
| Something to engage the audience  | 4-3 | 2-1 | 0 |
| **Total** | **22** |  |  |
| Comments: |  |  |  |
| **Communication****- Speaking skills** | Exceeds expectations – audience is captivated | Meets expectations –most of audience are attentive | Below expectations- audience has tuned you out  |
| Eye contact with audience | 2 | 1 | 0 |
| Audible  | 2 | 1 | 0 |
| Appropriate vocabulary | **2** | 1 | 0 |
| Appropriate length and on topic | 2 | 1 | 0 |
| **Quality of questions asked by audience** | **3-2** | 1 | 0 |
| Quality of answers provided by you | 3-2 | 1 | 0 |
| **Total**  | 14 |  |  |
| Comments: |  |  |  |
| Bibliography  | 2 | 1 | 0 |

Total mark: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/ 38