**Polymer Shark Tank Rubric**

**Project Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Group Member Names:**

**PART 1 - PRODUCT DEVELOPMENT**

|  |  |  |  |
| --- | --- | --- | --- |
|  | 4 | 3 | 1 |
| Procedure 1st Draft | Present | Present but lacking | Not present |
| Peer Review | Constructive feedback | Completed, but insufficient feedback | Not completed |
| Procedure Revised | Completed | Completed but lacking | Not completed |
| Create Product | Product synthesized; procedural changes and observations noted; includes multiple picture of the process | Product synthesized but one criteria is lacking | One or more criteria is missing and/or product was not synthesized |
| Testing Product | Completed w/ results recorded | Completed but lacking | Not completed |
| Redesign/Retest | Changes are explained with sources. | Product is redesigned and retested but one other criteria is lacking. | Product was not redesigned nor retested |

**PART 2 – SCIENTIFIC ARTICLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 4 | 3 | 2 | 1 |
| Basic Info/Formatting | Article contains: title authors, date, 12pt, simple font, double spaced, and heading for each section | Article is missing 1 criteria | Article is missing 2-3 criteria | Article is missing more than 3 criteria |
| Introduction | Contains each of the 4 bullet points and demonstrates understating. | Missing 1 of the bullet points but demonstrates understanding | Missing 2 or more of the bullet points and demonstrates understanding | Missing 2 or more of the bullet points and demonstrates minimal understanding |
| Background | Contains each of the 4 bullet points and is specific to project. | Missing 1 of the bullet points and is specific to project. | Missing 2 or more of the bullet points and is less specific to project. | Missing 2 or more of the bullet points but is not specific to project. |
| Procedure | Includes all 3 criteria and shows complete understanding. | Missing 1 of the criteria but shows understanding. | Missing 2 or more of the criteria but shows understanding. | Missing 2 or more of the criteria but shows minimal understanding. |
| Results/Conclusion | Includes all 3 criteria and tables and graphs are labeled. | Missing 1 of the criteria but and graphs are labeled. | Missing 2 or more of the criteria but lacks some understanding. | Missing 2 or more of the criteria but shows minimal understanding. |
| Applications/Future Work | Includes all criteria and tables and shows complete understanding. | Includes all criteria and tables and shows some understanding. | Missing 1 criteria and tables and shows some understanding. | No criteria is present or criteria shows very minimal understanding. |
| Bibliography | Contains at least  5 sources  At least 3 come from .edu, .gov, or .org  All citations are accurate | Contains at least 5 sources  At least 3 sources come from .edu, .gov, or .org  Most citations are accurate. | Contains at least  4-5 sources  2-3 sources come from .edu, .gov, or .org  But, Citations are inaccurate or incomplete | Contains fewer than  5 sources  Only 1 source comes from .edu, .gov, or .org  Citations are very incomplete. |

**PART 3 – PITCH**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 4 | 3 | 2 | 1 |
| PowerPoint | Includes all criteria | Is missing 1-2 criteria | Is missing 3-4 criteria | Is missing 5 or more criteria |
| Visual/Artistic Aid | Included and adds value | Included but value is vague | X | Not included and/or add no value |
| Delivery | Includes all 3 criteria | Is missing 1 criteria | X | Does not present |
| Quality of Product | Clear examples of product, labeled, properly handled/presented | Has product, but poorly handled/presented | x | No product |
| Validity | Explained in detail important claims and decisions supported by research or data specifically sited | Explained some claims and decisions Referred to some of research or data, but not specific | Explained few claims and decisions Referred to one aspect of research or data, but not specific | Claims and decisions unclear.  No reference to research or data collected. |
| Creativity | Above expectations, unique, can tell it took time and effort, high quality | Meets expectations, somewhat unique, put in time and effort, good quality | Somewhat meets expectations, some thought put, generic ideas, missing quality | Did not meet expectations, sloppy, looks last minute or not much effort put in. |
| Cost Analysis & Environmental Impact | Included detailed info about cost, efficiency, and environmental impact specifically supported by research or data | Included some info about cost, efficiency, and environmental impact supported by research or data | Included one aspect about cost, efficiency, or environmental impact supported by research or data not specific | Did not include anything about cost, efficiency, or environmental impact.  OR  Included but without any support from research or data and not specific. |