ENGINEERING NOTEBOOK MATERIALS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question** | **Criteria** | | **Hypothesis or Prediction** | |
| **Brainstorm**  \*Leave 1-2 pages blank to record research notes, ideas, etc. | | | | |
| **Prediction Check** Based on new information, has your prediction changed? Circle YES or NO. Write your new prediction/hypothesis. Checkbox Checked with solid fill | | | | |
| **Plan & Design** | | | | |
| **Sketch** | | **Process** | | **Materials List** |
| **Prediction Check** Based on new information, has your prediction changed? Circle YES or NO. Write your new prediction/hypothesis. Checkbox Checked with solid fill | | | | |
| **Build & Create**  \*Leave 2-3 pages for written notes, observations, & build progress. Consider adding photos of each stage. | | | | |
| |  |  |  | | --- | --- | --- | | **Make a prediction …** | | | | **Before** | **Midway** | **After** | |  |  |  | | | | | |

KWHL Chart

*Insert Topic*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_





**How** will I find the info?

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| --- | --- |
| **Prediction Check** Based on new information, has your prediction changed? Circle YES or NO. Write your new prediction/hypothesis.Checkbox Checked with solid fill | |
| **Test**  \*Leave the next 1-2 pages blank to record data using relevant data collection tool (i.e. graph, table, chart, etc.). | |
| **Prediction Check** Based on new information, has your prediction changed? Circle YES or NO. Write your new prediction/hypothesis.Checkbox Checked with solid fill | |
| **Analyze**  \*Leave 1-2 pages blank to add a chosen analysis tool where you will use your raw data to visually show what happened during the testing phase. | |
| |  |  |  | | --- | --- | --- | | **Dependent Variable(s)** | **Independent**  **Variable(s)** | **Constant**  **Variable(s)** | |  |  |  | | |
| **Making sense of the Data**   1. Did you succeed? Why or why not? 2. Can you point to specific results that show strengths or weaknesses? | |
| **Prediction Check** Based on new information, has your prediction changed? Circle YES or NO. Write your new prediction/hypothesis.Checkbox Checked with solid fill | |
| **Reflect & Improve** | |
| **Answer the following:**   1. How effective was the prototype? 2. How reliable or efficient was it? 3. How would you improve the design? Draw your new model below. | |
| **Communicate** | |
| **Best Medium**   * Slide Presentation * Journal Article * Poster Presentation | **Why this medium?** |
| **Create a mock-up or outline.**  \*Leave 1-2 pages blank as needed. | |
| **Elevator Speech**  Synthesize all of your brainstorming from above and draft a 5-10 sentence brief speech. | |