Experimental Design Div C

School: __________________________

student: _________________________

student: _________________________

student: _________________________

Part 1

Design & Construct Experiment

Time: 20 minutes

Cover Sheet

FOR SUPERVISOR ONLY

Lab Equipment being utilized during experiment:

YES  NO

Supervisor Notes: (optional)

EQUIPMENT CHECKLIST

circle any MISSING item(s)

1x measuring device

1x timing device

1x calculator of any kind

3 x goggles
Division C

Team #: ______

(Page 2 Insert the Supervisor Prompt for Experiment & Background information - delete this before printing)

(Note: Single sided copies are recommended when printing this form - delete this before printing)

(Note: Recommended to NOT staple the pages together making it easier for teams work on different sections – delete this before printing)
Division C                                                                 Team #: _____

A. Statement of Problem

B. Hypothesis

C. Variables

<table>
<thead>
<tr>
<th>Independent Variable (IV)</th>
<th>Dependent Variable (DV)</th>
<th>Controlled Variables (CV)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1.</td>
</tr>
<tr>
<td></td>
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<td>2.</td>
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<tr>
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<td>Constants</td>
</tr>
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<td>1.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.</td>
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</table>

D. Experimental Control

Experimental Design DIV C                                                                 2021-2022
E. Materials

F. Procedure and Set-up diagrams
## G. Qualitative Observations

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Before</th>
<th>During</th>
<th>After</th>
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<tbody>
<tr>
<td>Results</td>
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</table>

## H. Quantitative Data - Raw & Condensed Data Tables
Part 2

Part 2: Experimental Write Up

Time: 30 minutes

Cover Sheet
Division C

1. Graph
J. & K. Statistics - Central Tendency & Variation with sample calculations
## L. Analysis of Data

### STATISTICS

<table>
<thead>
<tr>
<th>CLAIM</th>
<th>EVIDENCE</th>
<th>REASON</th>
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### OUTLIERS

<table>
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<th>REASON</th>
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### DATA TREND

<table>
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<tr>
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<th>EVIDENCE</th>
<th>REASON</th>
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## M. Possible Experimental Errors

<table>
<thead>
<tr>
<th>Specific Error Identified</th>
<th>Specific Effect on Results</th>
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<tbody>
<tr>
<td>Error 1</td>
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<tr>
<td>Error 2</td>
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</tbody>
</table>

## N. Conclusion

**Hypothesis Restated:**

**Hypothesis is Evaluated**

<table>
<thead>
<tr>
<th>Claim</th>
<th>Acceptance or Rejection of Hypothesis</th>
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<tbody>
<tr>
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</tbody>
</table>

**Evidence**

**Reason**

Experimental Design DIV C

2021-2022

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O. Recommendation for Future Experimentation

P. Abstract