

# Experimental Design

# Div. B

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 non-programmable non-graphing calculator

3 x goggles

(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)

**A. Statement of Problem**

**B. Hypothesis**

**C. Variables**

<b>Independent Variable (IV)</b>	<b>Dependent Variable (DV)</b>	<b>Controlled Variables (CV)</b>
		1.  2.  <b>Constant</b>
		1.

**D. Materials**

**E. Procedure and Set-up Diagrams**

**F. Qualitative Observations**

	<b>Before</b>	<b>During</b>	<b>After</b>
<b>Procedure</b>			
<b>Results</b>			

**G. Quantitative Data - Raw & Condensed Data Tables**

School: \_\_\_\_\_

student: \_\_\_\_\_

student: \_\_\_\_\_

student: \_\_\_\_\_

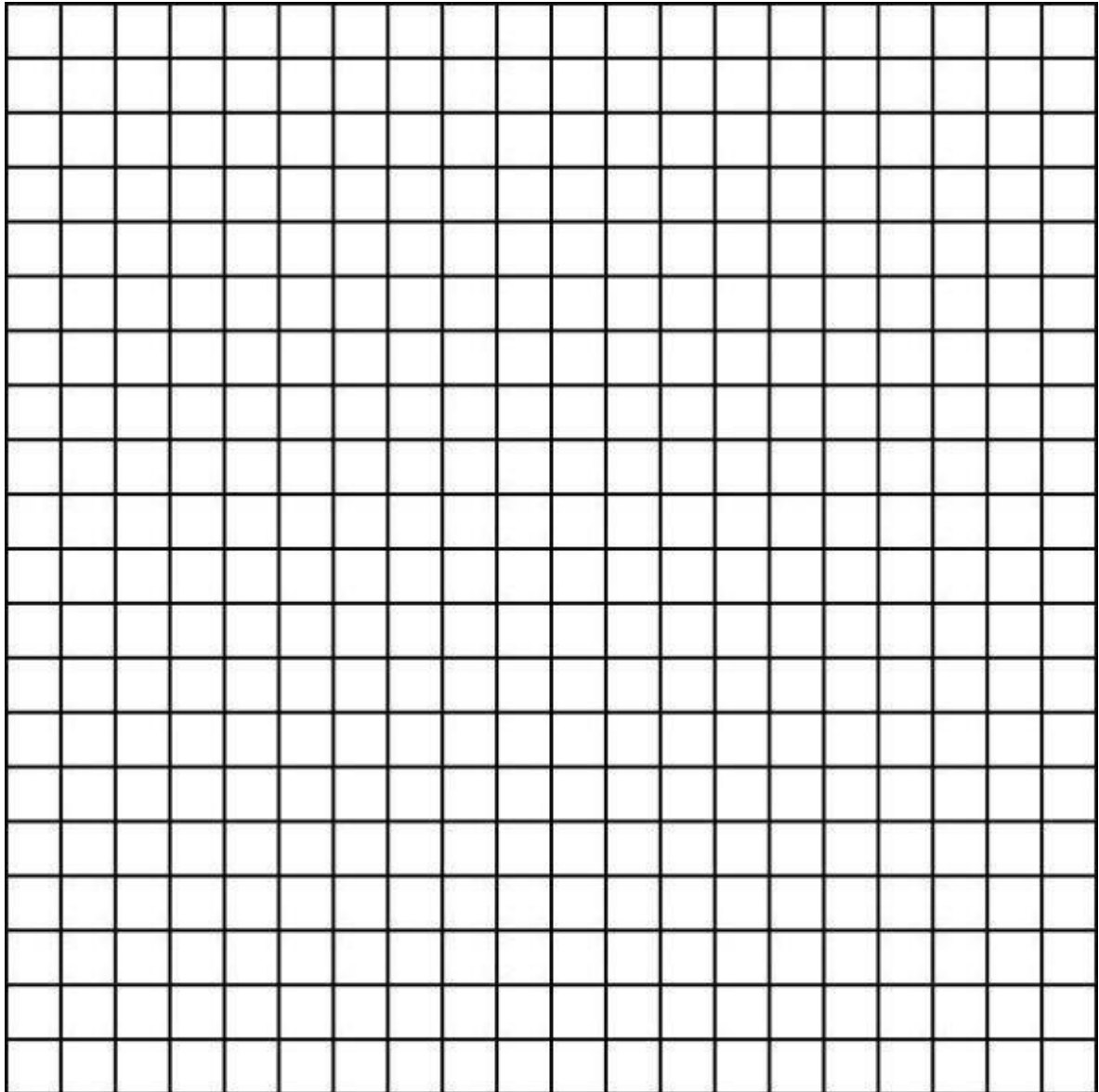
# Part 2

## Part 2: Experimental Write Up

Time: 30 minutes

*Cover Sheet*

H. Graph



**I. Statistics - Central Tendency & Variation with sample calculations**



**J. Analysis and Interpretation of Data**

<b>STATISTICS</b>	
<b>CLAIM</b>	
<b>EVIDENCE</b>	
<b>REASON</b>	

<b>OUTLIERS</b>	
<b>CLAIM</b>	
<b>EVIDENCE</b>	
<b>REASON</b>	

<b>DATA TREND</b>	
<b>CLAIM</b>	
<b>EVIDENCE</b>	
<b>REASON</b>	

**K. Possible Experimental Errors**

	Specific Error Identified	Specific Effect on Results
<b>Error 1</b>		
<b>Error 2</b>		

**L. Conclusion**

<b>Hypothesis Restated:</b>	
<b>Hypothesis is Evaluated</b>	
<b>Claim</b> <i>Acceptance or Rejection of Hypothesis</i>	
<b>Evidence</b>	
<b>Reason</b>	

**M. Recommendations for Future Experimentation**