

# 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

(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**

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

**D. Experimental Control**

**E. Materials**

**F. Procedure and Set-up diagrams**

**G. Qualitative Observations**

	Before	During	After
Procedure			
Results			

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

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

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

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

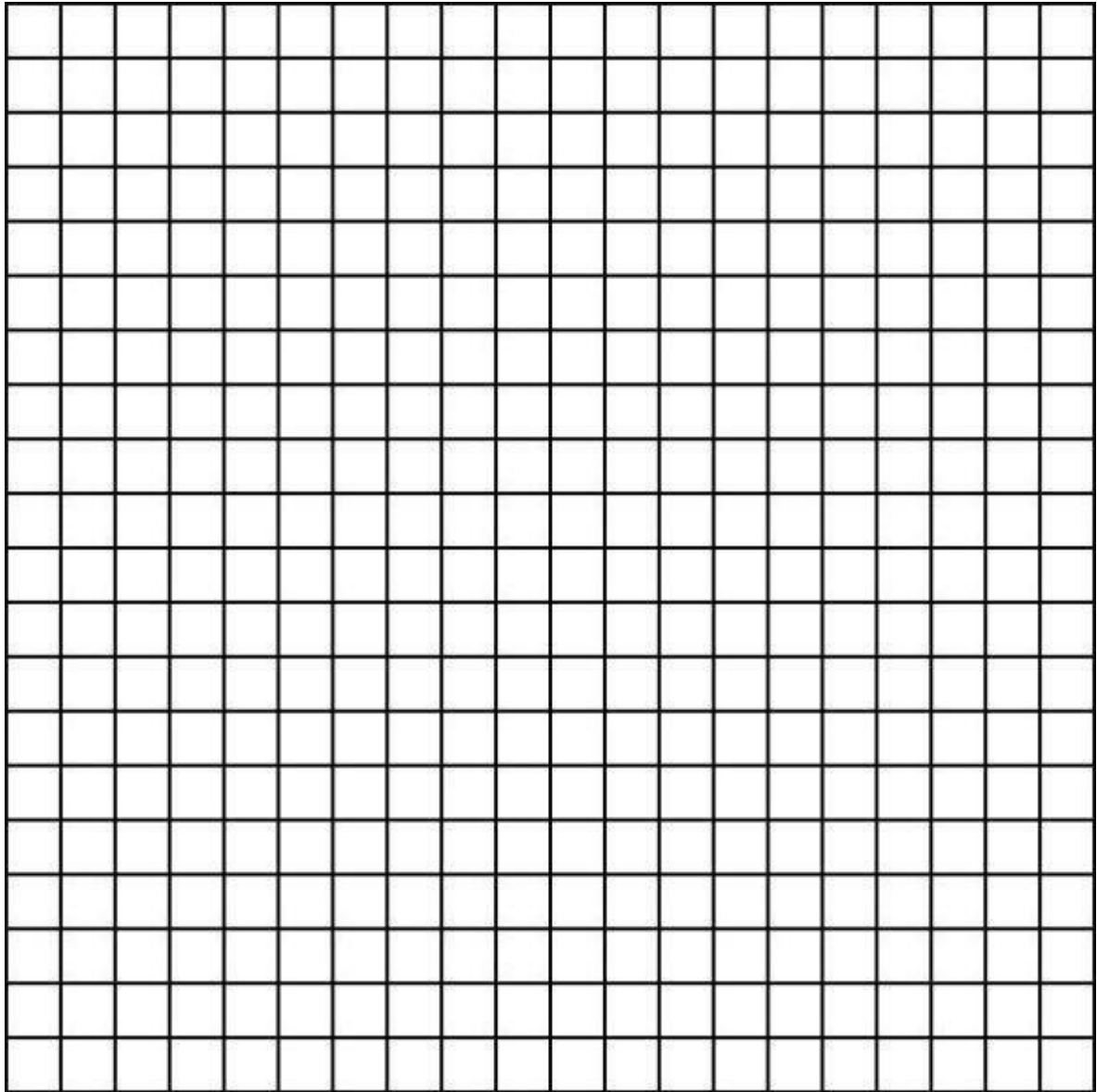
student: \_\_\_\_\_

# Part 2

## Part 2: Experimental Write Up Time: 30 minutes

*Cover Sheet*

I. Graph



**J. & K. Statistics - Central Tendency & Variation with sample calculations**



**L. Analysis 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>	

**M. Possible Experimental Errors**

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

**N. 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>	

**O. Recommendation for Future Experimentation**

**P. Abstract**