

My Inquiry Project Guide

Name: _____ Grade: _____

School: _____

Teacher: _____

MY ORIGINAL WONDERING:

BACKGROUND KNOWLEDGE ON TOPIC:

SCIENCE RESEARCH QUESTION:

INDEPENDENT VARIABLE:

(Identify the one that you will change in the experiment.)

DEPENDENT VARIABLE:

(Identify what you will be measuring – metric – and identify tool(s) used.)

SET-UP CONDITIONS/CONSTANTS/CONTROLS:

(List all materials and procedures that will remain constant to ensure fair testing.)

PREDICTIONS:

(List 3 possible outcome – increase, decrease, no effect. Circle the prediction that you think will MOST LIKELY occur.)

1.

2.

3.

MATERIALS:

(List all materials that will be used including size, quantity and descriptions such that others could duplicate your experiment.)

EXPERIMENT DIRECTIONS:

(List step-by-step procedures in the exact order it was done.)

DATA COLLECTION TABLE:

(Data is usually represented in a chart form. Do 10 trials and use metric measurements.)

Trial #	Experimental Group #1	Experimental Group #2
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Avg.		

GRAPH:

(A mathematical picture of the data, using averages to plot data in the experiment.
Remember to label the graph.)

Title: _____

Y

X

RESULT STATEMENTS:

(Mathematical statements based on your analysis of the data collection/graph. What does the data show? Provide at least three statements.)

EXPERIMENT EXPLANATION:

(Explain whether or not your data supports or fails to support your identified prediction. Explain why, including scientific facts and details!)

REAL WORLD USES:

(A description of ways, places or situations where the information from your experiment might be useful. Provide at least three examples.)

EXPERIMENT REFLECTIONS:

(Write a paragraph which includes thoughts, concerns, discoveries, or further questions to explore. What might you do differently next time?)