My Experiment Project Journal

Grades 3-5

| Name: | Grade: |
|----------|--------|
| School: | |
| Teacher: | |

MY ORIGINAL WONDERING:

BACKGROUND KNOWLEDGE ON TOPIC:

SCIENCE RESEARCH QUESTION:

PREDICTION:

Identify the outcome that <u>you</u> think will most likely occur. Provide reasons that led you to your prediction.

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.

CONTROL GROUP:

Identify the set of trials under "normal" conditions.

SET-UP CONDITIONS/CONSTANTS/CONTROLS:

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

MATERIALS:

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

EXPERIMENT PROCEDURES:

List step-by-step procedures in the exact order it was done so that it can be duplicated.

DATA COLLECTION TABLE:

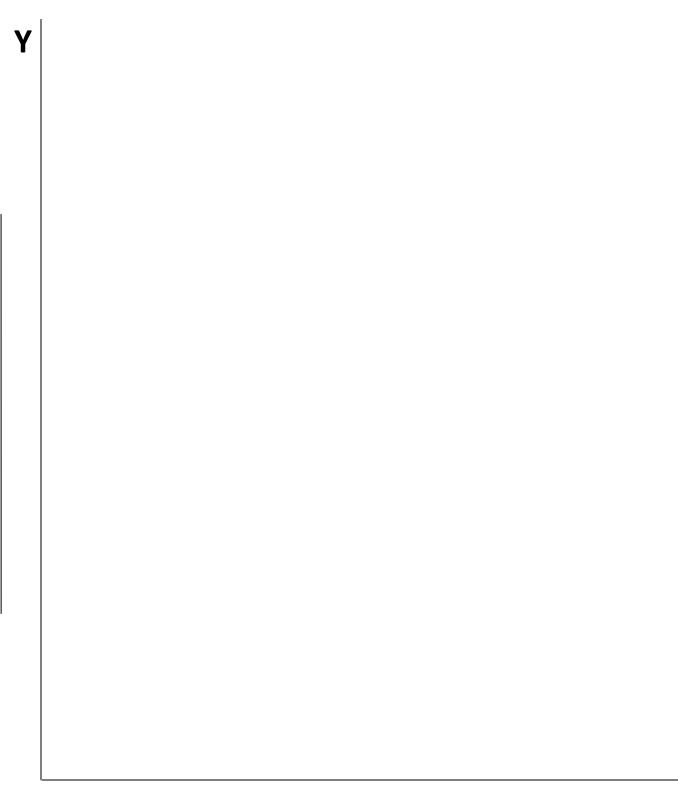
Data is organized in a chart form. Conduct 10 trials using metric measurements.

| Trial # | Control Group | Experimental Group #1 | Experimental Group #2 |
|------------|---------------|--------------------------|--------------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| Average | | | |

GRAPH:

Create a mathematical picture of the data. Plot the <u>averages</u> of each group of data (experimental groups and control group). Remember to label the graph.

Title: _____



RESULT STATEMENTS:

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

EXPERIMENT EXPLANATION:

Summarize your findings. Explain whether or not your prediction was correct using evidence from your findings.

REAL WORLD USES:

Describe ways, places, or situations where the information from your experiment might be useful. Provide at least three examples.

Dated Narrative: Record daily reflections on the experiment process. What are you working on? What observations are you making? What is going well? How are you overcoming barriers?

| Date | Reflections |
|------|-------------|
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