

# Independent Investigation

## Analyzing Results

Name \_\_\_\_\_

Date \_\_\_\_\_ Hour \_\_\_\_\_



### IMPORTANT NOTE:

This section will guide you through the process of analyzing your results. Analyzing your results is the part of your experiment where you describe as completely and simply as possible what happened when you did your experiment. ***Do not*** think about or refer to your hypothesis or try to explain why you got those results. That comes later in the section on drawing conclusions.

<b>Part 1: Review</b>	Investigation Title	
	Question you are investigating	
	Hypothesis	

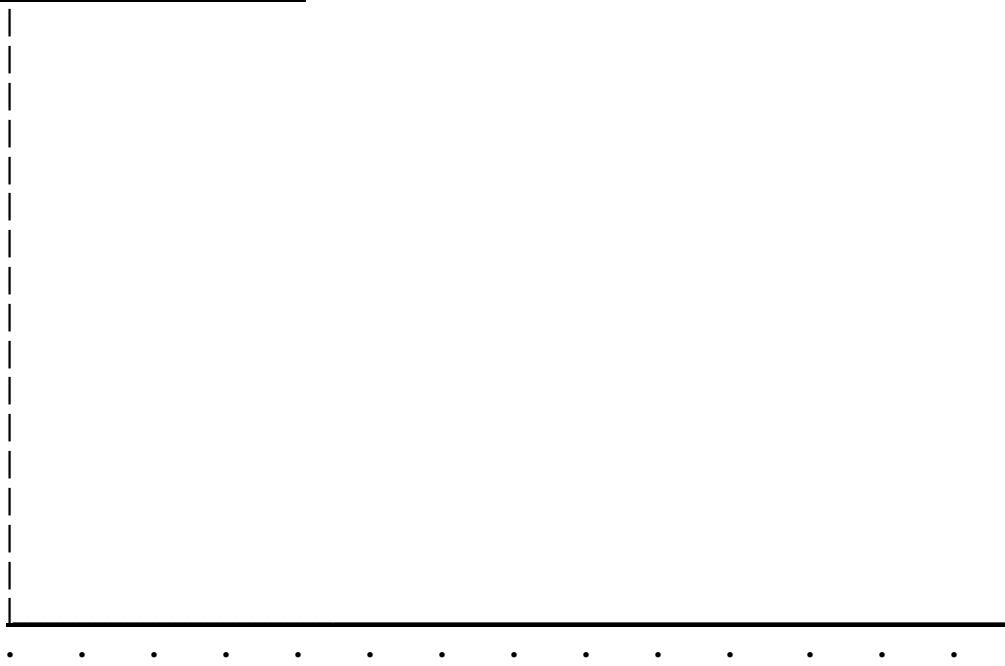
### Part 2: Organizing your data.

When you analyze your data you are looking very carefully at your data and trying to find a pattern. This takes time and patience and a little work. One way to find a pattern with your data is to make a graph. There are different types of graphs and the one you use will depend on your investigation. Some different types of graphs are line graphs, bar graphs and pie graphs. Make a graph that is appropriate to your data. Use the graph lay-out included here if it helps you or make your own.

# Graphing Results

Title of the graph: \_\_\_\_\_

*what I measured*  
*(specify units)*  
**(DEPENDENT VARIABLE)**



*what I changed*  
*(specify units)*  
**(INDEPENDENT VARIABLE)**

*Note:*  
*Both axes need to be labeled and appropriate units of measurement marked.*

### Part 3: Finding Patterns in Results

*When you look at your data you are asking yourself the question...*

When I changed (INDEPENDENT VARIABLE – the thing you changed)

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what happened to (DEPENDENT VARIABLE – the thing you measured)?

Study your graph and your data carefully to answer the question that you made when you completed the boxes above. Then rewrite the question as an answer below using the format:

**When I (changed or compared) the (your independent variable), then (describe what happened to your dependent variable)**

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### Part 4: Writing the Analysis of your investigation.

Now using the outline below write several paragraphs on the back that describe what your data show happened when you conducted your experiment.

- I. Describe the data that you collected.
  - A. What you measured and how you measured it.
  - B. Any observations that you made.
- II. Describe what your data shows by explaining what happened to the dependent variable when you changed the independent variable. Use specific details from your data to support your explanation.
- III. Describe any observations that you made while conducting your experiment.
  - A. Things that might have had an effect on the data that you recorded.
  - B. Things that went very well
  - C. Things that were difficult, created problems or went wrong.

