

Friday, October 5th, 2012

Unit: Scientific Inquiry Topic: M&M lab	Date: 10/5/2012 Class: Biology
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Michigan Biology Objectives:

B1.1B Evaluate the uncertainties or validity of scientific conclusions using an understanding of sources of measurement error, the challenges of controlling variables, accuracy of data analysis, logic of argument, logic of experimental design, and/or the dependence on underlying assumptions.

Illinois Objectives:

11.11.01 Understand and follow procedures relating to scientific investigations, including understanding the design and procedures used to test a hypothesis, organizing and analyzing data accurately and precisely, producing and interpreting data tables and graphs, performing appropriate calculations, applying basic statistical methods to the data, identifying appropriate conclusions, making predictions, and evaluating competing models.

11.11.04 Distinguish and define the following components of typical experiments: constants, variables, experimental group, control group (or control setup).

My Lesson Objectives:

- Make a line graph from a data table with the independent and dependent variables.
- Identify the control group and experimental group in a controlled experiment.

Activities:	Materials/Equipment:
<ul style="list-style-type: none">• Weekly Quiz - 10 minutes• Review Constants/Controls Part B Homework - 15 minutes• How to Write a Lab Report (25 minutes). Students take notes on the key elements to writing a formal lab report.	<ul style="list-style-type: none">• PowerPoint Presentation• Copies of instructions for lab report for the lifesaver lab.

Assessment: (Embedded, Formal)

Embedded: Constants and Controls Part B (homework)

Formal:

- Weekly quiz