

(This lab is designed for ELL language learners – or other students who might need some extra support)

Title:

Name:
Period:
Date:

Wild Guess:

Research Question:

Hypothesis:

Graph form:



In Words: I think the relationship will be in the form of a _____ pattern.

Variables

Independent Variable (IV):

Dependent Variable (DV):

Constants – include actual numbers if needed(C):

Method: Experimental Set-up (diagram of your experiment)

How you measure your DV and IV.

Can another person replicate your experiment exactly?

Description of experiment as you are carrying it out.

Values of Controlled variables

Data Table Title: (Include units, averages, and uncertainties)

Graph of data (include title, units, uncertainties, and best fit curve)

From Logger Pro:

Type of best fit line: _____
(linear, quadratic, inverse, inverse sq.)

Mathematical Formula:

_____ = _____

Formula with curves coefficient (a value)

_____ = _____

Conclusion:

Since the best fit line is _____, {linear, quadratic, inverse, inverse square}, I conclude therefore the relationship discovered is _____ {linear, quadratic, inverse, inverse square}, between _____(IV) and the _____(DV) This can be modeled mathematically as:

_____. { $y=ax$, $y=ax^2$, $y=a/x$, $y=a/x^2$ }. The coefficient value (A value) is _____ and represents _____.

So I predict with _____ {low, medium, high} confidence based on my data that with a prediction of _____ my value will be _____ because the data is _____ (near, close) to my range and the data points fall _____ (near, close) to my pattern.