

# Thermal Properties II Lab

Name \_\_\_\_\_

CATEGORY	EXEMPLARY	ACCOMPLISHED	DEVELOPING	EMERGENT
Quality of Presentation	Excellent effort that successfully communicates all the relevant features of the experiment in a thoroughly professional looking manner	Good effort that facilitates the reader's understanding of the data with no substantive errors in plots, calculations, grammar or communication.	Good effort with some errors in plot labeling or calculations; inconsistencies in presentation, grammar, or communication (handwritten)	Some effort, small and hard to read or hand written, ineffective communication of concepts
Why not linear expansion?	Qualitative and quantitative methods are presented along with the integral for the length of a spiral coil of particular functional dependence.	Both qualitative and quantitative approaches are presented based on rough measurements. Reasonable method for determining length of coil	Qualitative data analysis suggests that coil is not bimetal. Reasonable method for determining length of coil	Reasonable length of coil presented with little mathematical support.
Plot with solution space	..teaches me a thing or two about FreeMat models along the way. Thanks for the insight.	Adapted the FreeMat file successfully to produce a useful plot and solution space. Labels clear and appropriate.	Adapted the FreeMat file successfully to produce a useful plot and solution space.	Had difficulties modifying the FreeMat file to produce the needed plot
Interpretation of possibilities	...and include a brief web researched article on the development of bimetals in the search for more reliable clocks.	Finds materials in the right range and considers other mechanical or economic factors in analysis. Considers observed physical characteristics and data uncertainty	Finds materials in the table that match the data taken. Some effort to connect observed features of the bimetal. Some discussion of data uncertainties.	Picks two materials at random from the table.
Comments				