



Earth Science Rubric for Common Laboratory Assessments

Composition

Always use the following sequence:

<input type="checkbox"/>	I. Title: Present and posed as a question if appropriate? (eg.: How does the size of a crystal vary with the depth of its formation?)	<u> / 5pts</u>
<input type="checkbox"/>	II. Heading: Student Name and Date of Lab Activity	<u> / 5 pts</u>
<input type="checkbox"/>	III. Purpose:	<u> / 5 pts</u>
IV. Background Information:		
<input type="checkbox"/>	The student demonstrated research on the variables in the lab in a narrative format?	<u> /20pts</u>
<input type="checkbox"/>	Resources were cited within the text	<u> / 5 pts</u>
V. Hypothesis:		
<input type="checkbox"/>	The student used an “If...(Indep Variable),then...(Dep. Variable)” format as appropriate? (eg: If a rock cools deeper within the crust, then the crystal will be larger.)	<u> /10pts</u>
<input type="checkbox"/>	The hypothesis answered the question posed in the title?	<u> /10 pts</u>
<input type="checkbox"/>	VI. Materials: Are present and in a list format	<u> / 5 pts</u>
<input type="checkbox"/>	VII. Procedure: Is present and in a numbered list	<u> /10pts</u>
<input type="checkbox"/>	VIII. Results: points assigned in following sections of the rubric	Subtotal: <u> </u>
<input type="checkbox"/>	IX. Discussion: points assigned in following sections of the rubric	
<input type="checkbox"/>	X. Works Cited: points assigned in following sections of the rubric	

VIII. Results

Data Table Format

<input type="checkbox"/>	Table is titled and numbered	<u> / 5pts</u>
<input type="checkbox"/>	Labels are attached to each column	<u> / 5pts</u>
<input type="checkbox"/>	Units are attached to each column	<u> / 5pts</u>
<input type="checkbox"/>	Overall neatness of the data table	<u> / 5pts</u>

Calculations (immediately follows the Data Description paragraph)

<input type="checkbox"/>	The student demonstrated the use of appropriate equations?	<u> /15 pts</u>
<input type="checkbox"/>	An acceptable mathematical answer was obtained?	<u> /15 pts</u>
<input type="checkbox"/>	All numbers have the correct units attached?	<u> /15 pts</u>

Data Description

<input type="checkbox"/>	Appropriate data were fully and accurately recorded	<u> /10pts</u>
<input type="checkbox"/>	Observations were objectively described in paragraph form and/or were the data reported in words immediately following the data table?	<u> /20pts</u>

Graphing

<input type="checkbox"/>	Graph title and number is present and formatted properly i.e.(“Effect of the Independent Variable on the Dependent Variable”)	<u> / 5 pts</u>
<input type="checkbox"/>	Independent on the X axis, Dependent Variable on the Y axis	<u> / 5 pts</u>
<input type="checkbox"/>	Used the appropriate variables/data for the graph	<u> /20 pts *</u>
<input type="checkbox"/>	Axes are labeled and units correctly identified?	<u> / 5 pts</u>
<input type="checkbox"/>	Data is accurately plotted on the graph paper?	<u> / 5 pts</u>
<input type="checkbox"/>	The scale is ruled accurately for the data	<u> / 5 pts</u>
<input type="checkbox"/>	The appropriate type of graph was used	<u> / 5 pts</u>
<input type="checkbox"/>	Overall neatness of the graph	<u> / 5 pts</u>

Subtotal from previous page: _____/225

IX. Discussion Section

Discussion

- ____ Restated the hypothesis / 5 pts
____ Stated whether the hypothesis was supported or refuted / 5 pts
____ Used the correct data to properly support or refute hypothesis /40 pts *

Errors and Recommendations

- ____ Identified the errors and their sources /10 pts
____ How might the perceived errors have affected the results? /10 pts
____ How might these errors have been eliminated / 5 pts
____ What experimentation may be the next logical step or
how might this be applied to real life? / 5 pts

Concluding Paragraph

- ____ Correctly summarized the results of this lab activity in several sentences. /20 pts *

____ **X. Works Cited** Work cited in MLA format / 5 pts

____ **Proper Sequence** (Title, Heading, Purpose, Background, etc) /25 pts *

____ **Mechanics of Technical Writing**

- Used 3rd Person, Past Tense writing style / 10pts
(eg: **The student received** the following results from the experiment...)
Grammar, Spelling and Sentence Structure Conventions / 10pts

Total Points: /375

Days Late Penalty (-10%/day) **Percent Score:** %

Sapphire Score:

Student name: _____

* These are the sections of the lab report being focused upon during freshman year.

All lab reports are to be typed or legibly written in black or blue ink.

All lab reports must be completed satisfactorily and submitted. Failure to do so will result in a grade of Incomplete. Unresolved incompletes will result **in a failing grade for the semester.**