

Laboratory Techniques – Rubric Assesses Competency 1, 2E, & 4 in Tier 1E & 2E

		4 - Distinguished	3 - Accomplished	2 - Emerging	1 - Novice
PROCESS	PURPOSE (REQUIRED)	Purpose includes a statement or question, which clearly reflects an understanding of the objective(s) of the experiment/lab activity.	Purpose includes a statement or question, which reflects an understanding of the objective(s) of the experiment/lab activity.	Purpose includes a statement or question, which reflects an incomplete understanding of the objective(s) of the experiment/lab activity.	Purpose includes a statement or question, which reflects a misunderstanding of the objective(s) of the experiment/lab activity.
	PROCEDURE (Optional)	Includes clear organized set of directions that can easily be followed by someone who did not do the lab. Procedure written using academic, scientific language.	Includes a clear organized set of directions that can easily be followed by someone who did not do the lab.	Includes an unclear set of directions. Some steps may be: missing, incomplete, disorganized, difficult to follow.	Includes an unclear set of directions. Most steps may be: missing, incomplete, disorganized, difficult to follow.
	Representation (REQUIRED)	The data is appropriately represented in a well-organized graph, illustration and/or diagram.	The data is appropriately represented in an organized graph, illustration and/or diagram.	The data is represented in an organized graph, illustration and/or diagram.	The data is represented in an inappropriate or disorganized way.
	DATA & OBSERVATIONS (optional)	The data is accurately collected, well organized & contains all units.	The data s accurately collected, organized, & contains all units.	The data collected contains minor errors and/or is somewhat disorganized.	The data collected contains significant errors & is disorganized.
		Observations are concise, complete & descriptive.	Observations are complete.	Observations somewhat incomplete & lacking detail	Observations are incomplete & lacking detail
		Calculations, if required, are clearly shown, correct & complete; units are included.	Calculations, if required, are shown & complete but may contain minor errors; units are included.	Calculations show some work but are incorrect or missing units.	Most of the calculations are missing work.
CONCEPTS	CONCLUSION (optional? Or some require & some optional?)	The conclusion is complete & well thought out. It clearly addresses the question/ problem to be solved.	The conclusion is complete & thought out. It addresses the question/problem to be solved.	The conclusion is mostly complete. It addresses the question/problem to be solved.	The conclusion is incomplete OR does not address the question/problem to be solved.
		Conclusion demonstrates a clear understanding of the science concept being investigated as evidenced by: extensive use of new & previously learned scientific vocabulary.	The conclusion demonstrates an understanding of the science concept being investigated as evidenced by: appropriate use of new scientific vocabulary.	The conclusion demonstrates a basic understanding of the science concept as evidenced by: little use of scientific vocabulary.	The conclusion demonstrates a weak understanding of the science concept as evidenced by: no use of scientific vocabulary.
		AND EVIDENCED BY: clear connections between data, observations & concepts are consistently supported by specific evidence.	AND EVIDENCED BY: connections between data, observations & concepts supported by specific evidence.	AND EVIDENCED BY: basic connections between data, observations & new concepts not consistently supported by evidence.	AND EVIDENCED BY: connections between data, observations & new concepts are not supported by evidence
		AND EVIDENCED BY: Error sources are identified, appropriate & demonstrate a clear understanding of possible effects on outcome of the experiment.	AND EVIDENCED BY: Error sources are identified, appropriate & demonstrate a basic understanding of possible effects on the outcome of the experiment.	AND EVIDENCED BY: Sources of error are identified & are appropriate.	AND EVIDENCED BY: Sources of error are identified but are inappropriate.
		The report shows clear evidence of use of the writing process & is in final draft form.	The report shows evidence of use of the writing process & is in final draft form.	The report shows some evidence of use of the writing process & is in final draft form.	The report shows little evidence of use of the writing process.
		WRITTEN COMMUNICATION	WRITTEN COMMUNICATION (optional)	Focus is clearly stated & consistently referred to throughout the piece.	Focus is clearly stated & referred to throughout.
Consistently uses a variety of transitions effectively & is written in logical sequence.	Consistently uses transitions effectively & is written in a logical sequence.			Uses transitions & is written in a logical sequence.	Use of transitions is ineffective or work is not written in a logical sequence.
Consistently uses a strong, formal, academic voice.	Consistently uses a formal, academic voice.			Does not consistently use a formal, academic voice.	Does not use a formal, academic voice.
It contains few spelling and/or grammar errors.	It contains some spelling and/or grammar errors, which do not detract from the meaning of the work.			It contains some spelling and/or grammar errors, which detract from the clarity of ideas.	It contains many spelling &/or grammar errors, which significantly detract from the clarity of the written work.