New York Performance Standards Consortium   Student _____

Extended Science Project or Original Experiment   Title of Experiment _____

Circle one: Teacher or External Evaluator _____ **Date**_____

Circle one: Holistic evaluation _____ **Signature** _____

03/11

Performance Indicator	Outstanding	Good	Competent	Needs Revision
Contextualize	Background research has been thoroughly conducted using at least two original sources. Sources are all appropriately cited. The significance of the problem is clearly stated. The hypotheses/theses are grounded in the background research.	Background research has been thoroughly conducted. Sources are appropriately cited. The significance of the problem is stated. The hypotheses/theses are relevant to the background research.	Background research is included in the introduction. Sources are cited. The significance of the problem is stated. The hypotheses/theses are clearly stated.	Background research is not included in the introduction. Sources are not cited. The significance of the problem is not stated. The hypotheses/theses are not stated.
Critique Experimental Design	Identifies, describes and controls all relevant variables. Thoughtfully evaluates the procedure and/or set up Clearly describes bias in the design	Identifies, describes and controls most relevant variables. Evaluates the procedure and/or set up Clearly describes bias in the design	Identifies, describes and controls some relevant variables. Evaluates the procedure and/or set up Attempts to describe bias in the design	Does not identify, describe or control any variables. Does not evaluate the procedure and/or set up Does not attempt to describe bias in the design
Collect, Organize and Present Data	Collects data in a reliable and valid manner. Presents relevant data that is consistent with the problem. Generates appropriate tables, charts and graphs with data and makes appropriate calculations. Conducts thorough mathematical analysis of the data.	Collects data in a reliable and valid manner. Presents relevant data that is consistent with the problem. Generates appropriate tables, charts and graphs with data and/or makes appropriate calculations. Conducts mathematical analysis of the data.	Collects data in a reliable and valid manner. Presents data that is consistent with the problem. Generates tables, charts and graphs with data. Conducts analysis of the data.	Collects data in a non-reliable and/or invalid manner. Does not present data or presents data that is not relevant to the problem. Does not generate tables, charts and graphs. Does not analyze the data.
Analyze and Interpret Results	Draws thoughtful conclusions that are supported by the data. Relates conclusions to original question. Thoroughly describes sources of error and their effects on the data.	Draws conclusions that are supported by the data. Relates conclusions to original question. Describes several sources of error and their effects on the data.	Draws conclusions that are partially supported by the data. Attempts to relate conclusions to original question. Describes sources of error and attempts to describe their effects on the data.	Draws no conclusions or draws conclusions that are not supported by the data. Does not attempt to relate conclusions to original question. Does not describe sources of error or does not attempt to describe their effects on the data.

Performance Indicator	Outstanding	Good	Competent	Needs Revision
Revise Original Design	Proposes effective and relevant revisions for the experimental plan to lessen the effects of bias and sources of error. Poses thoughtful and relevant questions for future research.	Proposes relevant revisions for the experimental plan to lessen the effects of bias and sources of error. Poses relevant questions for future research.	Proposes revisions for the experimental plan to lessen the effects of bias and sources of error. Poses questions for future research.	Does not propose revisions for the experimental plan. Does not pose questions for future research.
Defense (for oral component only)	Thoroughly answers questions relevant to the experiment and related topics.	Adequately answers questions relevant to the experiment and related topics.	Adequately answers questions relevant to the experiment.	Does not adequately answer questions relevant to the experiment.