

Class Project Experiment Rubric (Grades K – 2)

Using the Rubric: Begin in the left hand column (Required Elements). Mark each category by circling the description that best matches that element in the project. The final proficiency level is the general trend location (Emerging, Developing or Accomplished) of all the circles on the chart.

Required Elements	Emerging	Developing	Accomplished
Research Question (A question that explains what is to be studied.)	States a research question; but inaccurate, incomplete, or lacks enough detail.	Accurately states research question; but lacks both cause and effect (x and y).	Accurately states research question: includes detail and cause and effect (x, y).
Predictions (Lists the three possible outcomes of the experiment; the one that is most likely to occur is identified.)	States one or more predictions; but inaccurate, or incomplete, or lacks enough detail to follow.	Accurately states three predictions, but lacks clear cause and effect (x and y); or no prediction that is likely to occur is identified	Accurately states three predictions that include cause and effect (x and y); and a prediction that is most likely to occur is identified.
Independent Variable (Describes the one thing that the students will change.)	States what will be changed but with inaccurate or incomplete details.	Accurately states what will be changed but lacks details (tools, quantities, units, method).	Accurately states what will be changed with enough detail to assure accuracy.
Dependent Variable (Describes what the class will measure.)	States what will be measured but inaccurate or incomplete details.	Accurately states what will be measured but lacks details (tools, units, how).	Accurately states what will be measured with enough detail to assure accuracy.
Set-Up Conditions (The things that will be kept constant.)	Lists some constants; some inaccurate or incomplete.	Lists all constants; lacks detail or description of how the conditions are set-up.	Lists all necessary constants with good detail and description of set-up.
Materials List (List all of the items that will be used in the experiment.)	Lists partial, confusing, or inaccurate materials; lacks quantities or measurements.	Lists most materials used; lacks some detail about type, quantity or size.	Lists complete and detailed set of materials; includes type, quantity and size.
Directions (List of steps in order of exactly what was done.)	Gives partial, confusing or non-sequential directions; or lacks enough detail to follow.	Gives most steps in the procedure; lacks proper sequence or enough detail to be followed.	Gives complete list of directions with detail such that the experiment could be duplicated by another.
Data Collection (Chart with the data that was measured in the experiment.)	Most data shown; some data missing, or not organized in chart form, or missing units or average.	Proper chart shown with complete data and average; some units or labels missing; or less than 10 trials done.	Proper chart shown with complete data and average; all units, labels, and detail present; 10 or more trials were done.
Graph (Mathematical picture of the data.)	Graph shown; some elements incomplete or inaccurate.	Proper graph shown; most elements complete and accurate.	Proper graph shown; all elements complete and accurate.
Results (Tells what happened in the experiment.)	Lists some results; some statements inaccurate or incomplete.	Lists most results; most statements accurate and complete.	Lists all results accurately and with detail.
Explanation (Summary of findings that evaluate the experimental procedure and/or possibilities for further study?)	Explanation statement present but inaccurate or incomplete.	Explanation statement present and accurate; but incomplete.	Explanation is accurate and with specific detail.
Real World Uses (Ways that the information might be used.)	States one or more uses; but incomplete, inaccurate, or lacks details.	States two possible uses with some detail; or more uses with incomplete detail.	States three or more possible uses with good detail.
Project Diary and Display (Presentation of the class process and project board.)	Some elements are missing, incomplete or inaccurate.	All elements present; most complete or accurate.	All elements present with good detail and few errors.