

Science Showcase Rubric 2017-2018

Grades 3-5 Individual projects

Using the Rubric: Begin in the left hand column (Required Elements). Mark each category by circling the description that best matches the project, and record that numeric score in the score box. Multiply each score with its weighting factor (wt column) to get a final score. Total the final scores to the bottom.

Required Elements	0	1 Point	2 Points	Score	Wt	Final Score
Research Question (A question that explains what was studied)	E L E M E N T N O T P R E S E N T O R N O T S C I E N C E	States a research question; but inaccurate, incomplete, or lacks enough detail.	Accurately states research question: includes cause and effect (x and y), and provides ample detail to investigate project.		x 3	
Predictions (Lists the three possible outcomes of the experiment and identifies the outcome that will most likely occur)		States one or more predictions; but inaccurate, or incomplete, or lacks enough detail to follow.	Accurately states three predictions that include cause and effect (x and y); Clearly identifies the most likely outcome.		x 3	
Independent Variable (Describes the one thing that the students changed)		States what will be changed but with inaccurate or incomplete details.	Accurately states what will be changed with enough detail to assure accuracy.		x 3	
Dependent Variable (Describes what the students measured)		States what will be measured but inaccurate or incomplete details.	Accurately states what will be measured with enough detail to assure accuracy.		x 3	
Control Group (Describes the set of data measured under normal conditions)		Identifies the set of data that will be measured under normal conditions but is inaccurate.	Accurately states the set of data that will be measured under normal conditions.		x 4	
Set-Up Conditions (List all of the things that were kept constant)		Lists some constants; some inaccurate or incomplete.	Lists all necessary constants with good detail and description of set-up.		x 3	
Materials List (List of all of the items that were used to complete the experiment)		Lists partial, confusing, or inaccurate materials; or lacks quantities or measurements.	Lists complete set of materials; sufficient detail to duplicate directions. (metric)		x 3	
Procedures (List of steps in order of exactly what was done)		Gives partial, confusing or non-sequential directions; or lacks enough detail to follow.	Gives complete list of procedures with detail such that the experiment could be duplicated by another. (metric & safety)		x 3	
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 averages.	Proper chart shown with complete data; 10 or more trials and averages; all units, labels, and detail present.		x 5	
Graph (Mathematical picture of the data)		Graph shown; some elements incomplete or inaccurate.	Proper graph shown; all elements complete and accurate.		x 5	
Results (Tells what happened with the data using mathematical language)	Lists some results; some statements inaccurate or incomplete.	Lists at least three mathematical results accurately and with detail.		x 3		
Explanation (Summary of findings that evaluate the experimental procedure and provides scientific reason that supports experiment findings)	Explanation statement present but inaccurate or incomplete.	Explanation is accurate and provides specific scientific detail related to experiment.		x 4		
Real World Uses relating to Research (Ways that the information might be used)	States one or more uses; but incomplete, inaccurate, or lacks details.	States three or more possible uses related to the research question; with good detail.		x 3		
Science Journal		Some elements are missing, incomplete or inaccurate.	All elements present, accurate, good detail and few errors; dated narrative present.		x 2	
Display Board		Some elements are missing, incomplete or inaccurate.	All elements present and accurate with good detail and few errors.		x 3	

Comments:

Total Score /100
