Rubric - EDP Evaluation Criteria

Student Name: _____ Teacher: _____

Project Title: _____

- USE these criteria to <u>SELF-EVALUATE</u> your science fair project one step at a time. •
- SUBMIT with your work as suggested in the timeline log for the teacher to "pre-evaluate" your progress.

2015-16 Criteria	0 points	1 point UNSATISFACTORY	3 points SATISFACTORY	5 points EXCELLENT	Points Earned
Problem Statement	No problem present	Format for defining the problem answers 1 of 3 questions: WHAT / WHO / WHY	Format for defining the problem answers 2 of 3 questions: WHAT / WHO / WHY	Format for defining the problem answers all three questions: WHAT / WHO / WHY	
Research	No research present	Vocabulary and or Q&A missing / bibliography worksheet correctly lists 1 of 3 sources	Vocabulary and Q&A incomplete / bibliography worksheet correctly lists 2 of 3 sources	Vocabulary and Q&A complete / bibliography worksheet correctly lists 3 or more sources	
Requirements (OPTIONAL - earn up to 5 extra points)	No requirements identified	Correctly identified 1-2 criteria and/or constraints	Correctly identified 3-4 criteria and/or constraints	Correctly identified 5 or more criteria and/or constraints	
Brainstorm	No brainstorm present	Student uses only prior knowledge no use of research knowledge to brainstorm idea(s) / idea(s) are minimally aligned or <i>impractical</i> for the intent of the problem / idea(s) are <i>inadequate</i> and sketches are <i>unclear</i> and missing labels	Student uses prior knowledge or research knowledge to brainstorm clear, focused ideas / ideas are <i>adequately</i> aligned to the intent of the problem / 2 or more ideas are listed and or sketched / ideas are adequately described and sketches are vague but sufficiently labeled	Student uses prior knowledge and research knowledge to brainstorm clear, focused ideas / ideas are <i>excellently</i> aligned to the intent of the problem / 2 or more ideas are listed and sketched / ideas are excellently described and sketches are detailed and thoroughly labeled	
Materials	No materials are identified	Materials not written in list form / materials are not identified correctly / 3 or more materials or amounts missing / missing safety concerns	Attempt to write materials in list form without using <i>"bullets"</i> / most materials are correctly identified / 1-2 materials or amounts missing / does not identify all safety concerns	Materials correctly written in list form using "bullets" / all materials carefully identified / amounts are included / clearly identifies safety concerns	
Procedure	No procedure present	Procedure is vague and difficult to repeat / unclear, insufficient details / does not write in "step-by-step" form / steps not numbered / lacks 3 or more steps / missing safety concerns	Procedure is clear enough to repeat with little difficulty / attempts to write in "step-by-step" form / most steps are numbered / lacks 1-2 steps / does not identify all safety concerns	Procedure is easy to repeat / correctly written in "step-by-step" form / all steps are numbered correctly / clearly identifies safety concerns	

Rubric - EDP Evaluation Criteria

Student Name: _____ Teacher: _____

Project Title: _____

- USE these criteria to <u>SELF-EVALUATE</u> your science fair project one step at a time. •
- SUBMIT with your work as suggested in the timeline log for the teacher to "pre-evaluate" your progress.

²⁰¹⁵⁻¹⁶ Criteria	0 points	1 point UNSATISFACTORY	3 points SATISFACTORY	5 point <i>s</i> EXCELLENT	Points Earned
Trial Data (observations / measurements)	No data collected or present	Insufficient data collected / experiment repeated only 1 time (only 1 trial)	Some quantitative and or qualitative data collected throughout 2 experimental repetitions (2 trials)	Exemplary quantitative and or qualitative data collected throughout 3 or more experimental repetitions (3+ trials)	
Data Presentation (tables, graphs, photos, diagrams)	No data presentation	 Insufficient data presentation documents / insufficiently labeled or titled / poor interpretation of data Tables: missing / errors in data presentation / averages missing Graphs: missing / incorrect type for data / errors in data presentation Photos: missing / not relevant as data / missing captions Diagrams: unclear, not relevant to data 	 Sufficient data presentation documents / sufficiently labeled or titled / attempts to interpret trial data Tables: some are unclear / trial averages are incomplete Graphs: some are not the best type to use for the data collected Photos: some are not relevant as data / vague captions Diagrams: some are unclear and or not relevant to data 	 Excellent data presentation documents / accurately labeled and titled / interprets trial data correctly Tables: are clearly organized / trial averages included Graphs: are the correct type for the data collected Photos: are relevant as data with detailed captions Diagrams: are clear and relevant to data 	
Improvements	No improvements	Student doesn't use data to redesign the working prototype into a more effective solution that aligns with the constraints, and intent of the problem / improvements are <i>inadequate</i> and sketches are <i>unclear</i> and missing labels	Student uses little data to redesign the working prototype into a more effective solution that aligns with the constraints, and intent of the problem / improvements are adequately described and sketches are vague but sufficiently labeled	Student uses data to redesign the working prototype into a more effective solution that aligns with the constraints, and intent of the problem / improvements are excellently described and sketches are detailed and thoroughly labeled	
** Application (OPTIONAL - earn up to 5 extra points)	No application	Does not explain what was learned / application (or use) of the idea(s) or solution is vaguely identified	Attempts to explain what was learned / identifies an obvious application (or use) of the idea(s) or solution	Clearly explains what was learned / identifies a significant and practical scientific or societal application (or use) of the idea(s) or solution	
Display (2 choices) • <u>tri-fold board</u> (48" × 36") - use display board layout & checklist • <u>Power Point</u> <u>Presentation</u> - use Power Point Template	Not a tri-fold board / 6+ grammar errors / illegible and unappealing / no color	Does not follow layout specifications / missing 3 or more labels to the engineering method / text is difficult to read; too small or poor choice of font style / disorganized / cluttered / documents have smudges, stains, are wrinkled or torn / protruding staples / 5+ grammar errors / poor color coordination; plain or excessive use of color	Attempts to follow layout specification / 1-2 labels to the engineering method are missing / clean and uncluttered / text can be read from 2 away / attempts to adhere all document corners / some tape or glue is visible / eye-catching / 3-5 grammar errors / good color coordination; 3-5 colors	Follows all layout specifications / all labels to the engineering method are present / well organized / very neat / legible text and data presentation; proper use of font styles and size / all document corners adhered to board / no visible tape or glue / quickly catches your eye / 1-2 grammar errors / excellent color coordination; 2-3 colors	
Prize Awarded	(55-45 pts)] st	(44- 33 pts) (32- 23 pts) 2nd 3rd	(22 points & below) Participation	FINAL SCORE	/45