

TSES Science - Engineering Fair 2016 Evaluation Sheet

Grades 4 - 5 ENGINEERING DESIGN PROJECT

Student(s): _____

Grade/Teacher: _____

Title: _____

Project #: _____

	ACCOMPLISHED ENGINEER 8-10	DEVELOPING ENGINEER 4-7	BEGINNING ENGINEER 1-3	CONSIDER:
PROBLEM STATEMENT, DEFINE A NEED	-Focused, original problem statement -Has conceptual understanding of topic -Will meet potential users' needs	-New question -Has above average grasp of topic	-Standard problem -Has grade-level grasp of topic	
PLAN	-Research cited -Has 3+ reliable sources -Connected to problem -Integrates research into design	-Research cited -2+ reliable sources -Key terminology used -Has a plan to find out more	-Research cited -1 source -Key scientific terms used	
CREATIVITY	-Student-driven -New idea -Novel approach to use of materials & decisions	-Variation on a standard design -New approach to use of materials	-Packaged or standard design	
DESIGN CRITERIA	-Criteria clearly defined -Goals are measurable -All materials listed -Timeline used and executed	-Criteria defined -Has goals -Materials listed -Timeline	-Key criteria defined -Materials listed	

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ENGINEERING PROCESS & PROTOTYPE	<ul style="list-style-type: none"> -Appropriate use of materials -Well-labeled schematics -Explains decisions -Sufficient testings (3 or more) -Considered alternatives 	<ul style="list-style-type: none"> -Appropriate use of materials -Has schematics -Explains decisions -Sufficient testings (at least 3) 	<ul style="list-style-type: none"> -Appropriate materials -Few testings -Data gathered -Understands design process 	
RECORD & LAB NOTEBOOK	<ul style="list-style-type: none"> -Detailed notes -Spans extended time -Has examples & illustrations -Student's own thinking 	<ul style="list-style-type: none"> -Detailed notes -Has examples, illustrations -Has a plan 	<ul style="list-style-type: none"> -Has notes -Has an idea 	
DISCUSSIONS & CONCLUSIONS	<ul style="list-style-type: none"> -Answers all aspects of problem -Evaluates design -Clear understanding of results, limitations -Discusses next steps, future work 	<ul style="list-style-type: none"> -Relates to problem -Evaluates design -Has conclusions -Has further questions 	<ul style="list-style-type: none"> -Relates to problem -Has conclusions 	
INTERVIEW <i>For groups, all students must participate equally!</i>	<ul style="list-style-type: none"> -Interprets & explains poster/display -Has a demonstration -Displays enthusiasm & curiosity 	<ul style="list-style-type: none"> -Uses poster to explain -Shows enthusiasm & curiosity 	<ul style="list-style-type: none"> -References poster -Shows enthusiasm 	
POSTER	<ul style="list-style-type: none"> -Visually well-done -Logically sequenced -Clear illustrations -Well-labeled 	<ul style="list-style-type: none"> -Visually appealing -Organized, has illustrations -Labeled, logical 	<ul style="list-style-type: none"> -Organized visually -Labeled -Registered! 	

Comments: