# **Electricity Design Project**

# 1. Select a Design Challenge

(Lighthouse, flashlight, locker light, alarm system, turbine generator, doll house, sporting game, game board, car, desk fan, toy robot, toy merry-go-round/wheel of fortune, etc...)

2.	Pur	pos	e/Fun	etion
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(What is your electronic device going to/supposed to do?)

4. Sketch Plan (top/side)			
	1		

# 5. Materials

(What things will you need in order to make your design?)

6. Testing a) Problems you've end	countered?	
b) What changes did ye	ou make?	
7. Sketch Final (top/side)		 

ne:	Date:	
Problem/Design Challenge:		
Criteria:		
Brainstorming (What are all the differen	nt ways):	
		X-2,000000000000000000000000000000000000
Planning:		
Steps to Follow:	Materials:	
	Safety Considerations:	

# Design Project Report (continued)

Testing:		
Criteria	Test Used	
Test Results: Attach D	Data Summary	
<b>&gt;</b>	<b>***</b>	
Evaluating and Im		
• Justification of ch	nanges to original design:	
Strengths and west	aknesses of final design:	
• Comment/reflecti	ion (Next time , A new problem):	
	•	
(		

# Design Project Report (continued)

Prototype Sketch 1 (Plan):		
Top View		
Cid. William		
Side View		
Prototype Sketch 2 (Final):		
Top View		
Side View		

Prototype: Date:			
Team Members:			
Criteria	Possible Points*	Self- Assessment	Teacher Assessment
Identifying the Practical Problem and Criteria for Success  • the problem is clearly stated  • class and/or group criteria are identified  • criteria address all or some of the following: function, aesthetics, environmental considerations, cost, reliability			
<ul> <li>Planning</li> <li>all steps are included and clearly described in a logical sequence</li> <li>all required materials/tools are identified</li> <li>safety considerations are addressed</li> <li>a labelled top- and side-view sketch of the prototype is included (Sketch 1)</li> </ul>			
Testing the Prototype  • tests are described and align with criteria (e.g., each criterion has been tested)  • test results are presented in an appropriate format (data sheet is attached)			
<ul> <li>Evaluating and Improving the Design</li> <li>a final sketch of the prototype is included (Sketch 2)</li> <li>changes to the original plan are justified</li> <li>strengths and weaknesses of the final prototype are presented</li> <li>suggestions for "next time" are included and/or "new problems" are identified</li> </ul>			
Total Points			
Comments:			

<sup>\*</sup>Note: The teacher and/or the class assigns possible points to reflect the particular emphasis/es of the project.