

Student: _____ Grade: _____ HR Teacher: _____ School: _____

Science Fair Judging Rubric

4th Gr. Design Challenge – Earthquake Resistant Building

Your work will be evaluated using the following rubric:

	3	2	1	0	Tally
Qualifications	You building has a least 4 floors and is at least 40 cm tall. The base on the building is between 225 cm and 324 cm. Your building holds at least 550 grams of weight.	You building has a least 3 floors and is at least 30 cm tall. The base on the building is between 200 cm and 324 cm. Your building holds at least 400 grams of weight.	You building has a least 2 floors and is at least 20 cm tall. The base on the building is between 150 cm and 324 cm. Your building holds at least 200 grams of weight.	Building did not meet any qualifications	
Simulation Earthquake Test	Your building is able to withstand simulated earthquakes (the shake table) for more than 10 seconds with 250 grams of mass on the top floor without collapsing.	Your building is able to withstand simulated earthquakes (the shake table) for up to 7 seconds with 250 grams of mass on the top floor without collapsing.	Your building is able to withstand simulated earthquakes (the shake table) for up to 4 seconds with 250 grams of mass on the top floor without collapsing.	It did not with stand the test from the simulation shake table	
Design	Design demonstrated creative, thoughtful and intentional planning.	Design mostly demonstrated creative and intentional planning	Design demonstrated some thoughtful and intentional planning	Design showed little to no thoughtful and intentional planning	
Design loop requirement	Completed a brainstorming sheet and used the design loop	Completed most of the brainstorming sheet and used the design loop	Completed some of the a brainstorming sheet and most of the used the design loop	Brainstorming sheet and the design loop was not used	
Research	<i>Cites three or more sources from one or more types of resources (e.g., text, encyclopedia, businesses, magazines, catalogs, internet, or interviews). The student clearly connects the research to their challenge.</i>	<i>Cites two or more sources from one or more types of resources The student generally connects the research to their challenge.</i>	<i>Cites only one source. Or has little or no connection to the challenge.</i>	<i>Does not cite sources.</i>	
Report	<i>The report included all of the required information and demonstrated a high level of knowledge gained.</i>	<i>The report included most of the required information and demonstrated a moderate level of knowledge gained.</i>	<i>The report included some of the required information and demonstrated a low level of knowledge gained</i>	<i>Report meets few requirements, or there was no report</i>	
Presentation	Students in group clearly and effectively presented their project to the class	Students in group effectively presented their project to the class with some need for clarification	Students in group presented project to the class with little understanding of their work	No presentation	
Total Points (out of possible 21)					

To calculate the score; multiply the Total Points by 4.77

Total Point × 4.77 = _____ %