



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Johnnie Kwok	Project Number S0214
Project Title Truss Bridges	
Abstract Objectives/Goals The project is find out the relationship between difference factor between different types of truss bridge, for example, the longevity of a covered truss bridge and to the truss itself, including the frequency of traffics, loading, maintenance, extent of protection, the different length of each truss, and the difference of the materials. By building model truss bridge with different length and different structure, after finish building the truss bridges, test them on the structure tester with the interface to the computer, finally compare the result. Methods/Materials making model out of balsa wood and test the model bridges by using the struture tester di-2000. Results the results in the span vs. maxium load has a decreasing rate when the span is increasing. And the H/S ratio vs. maxium load has an increasing ratio when the H/S ratio is increasing. Conclusions/Discussion H/S ratio increase because of the span increasing, that's made the Heigh become a less factor of the problem, so most likely the when the span increase, the maxium load will decrease.	
Summary Statement This project is about how the span will affect the truss bridges itself.	
Help Received Used lab equipment at Ribet Academy.	