



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) David A. Maguina	Project Number J0116
Project Title The Effect of Fin Shape on Flight	
Abstract Objectives/Goals The objective is to determine which of three different fin shapes enable a water-bottle rocket to achieve the greatest altitude. Methods/Materials One water-bottle rocket, 3 different fin shapes attached to the removable sleeves, one launch platform, one air compressor. Results The fin shape that curved below the rocket consistently achieved higher elevations. The smaller fin shape with right angles consistently achieved the lowest altitudes. Conclusions/Discussion My conclusion is that a curved fin shape improves aerodynamics enough to produce greater altitude.	
Summary Statement My project is about discovering the optimal fin design to enable a rocket to achieve the greatest altitude.	
Help Received Mom helped to type this report and display board.	