



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

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Project Title Parachutes	
Objectives/Goals The objective is to determine if the shape of a parachute's canopy will effect the time it takes to fall to the ground.	
Abstract	
Methods/Materials Six canopies, with the same surface area, shaped like a square with each side being 25 centimeters, a rectangle with sides of 30 and 20.83 centimeters, a triangle with a height and base of 35.355339 centimeters, a circle with a radius of 14.108315 centimeters, a octagon with sides of 11.4 centimeters, and an octagon with sides of 15.7 centimeters were cut out of rayon like material. Eight strings were sewn on to all of the canopies and connected at the ends. Each parachute was dropped fifteen times, from the same height, for a total of ninty trials.	
Results The circle canopy increased the falling time the most with an average of 5.28 seconds. The square's average of 3.77 seconds was the lowest time of the six parachutes.	
Conclusions/Discussion My conclusion is that the circle shaped canopy increses the time it takes to fall to the ground the most, compared to the square, rectangle, triangle, hexagon, and octagon shaped canopies. Because of the circle's shape, it also proved to be one of the safest parachutes by not spinning out of control or turning over.	
Summary Statement How will the shape of a parachute's canopy effect the time it takes to fall to the ground?	
Help Received	