# CALIFORNIA STATE SCIENCE FAIR
## 2004 PROJECT SUMMARY

**Name(s)**
Veronica S. Soto

**Project Number**
**J1219**

**Project Title**
## You Get the Point?

**Abstract**

**Objectives/Goals**
The purpose of my project was to examine the mathematics of computational origami.

**Methods/Materials**
I used different traditional origami patterns and shapes to relate the geometry of design to the pattern of the origami.

**Results**
I found that algorithms, Huzita#s axioms, and Kawasaki#s theorem could predict where points and creases would successively go in the origami pattern.

**Conclusions/Discussion**
I found that any figure, such as an animal or inanimate object could be made through computation, but that geometric shapes required additional manipulations of cutting and extra paper to obtain the desired pattern.

**Summary Statement**
I examined predictable mathematical relationships with a variety of traditional origami shapes and patterns.

**Help Received**