



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Eric D. Amezquita; David L. Hernandez	Project Number J0303
Project Title Domino Theory	
Abstract Objectives/Goals The experiment was conducted to find out if the distance between domino's will affect how fast a marble will go. If the increase space between the dominoes will create more speed for the marble because of the contact with the domino's and the kinetic energy that's transferred between the dominoes. Methods/Materials The experiment was formed by using domino's with different space in between them and used a set marble to measure the speed and distance of the impact from the dominoes. Results The experiment as seen, the dominoes 1 centimeter apart started to fall very quickly. While this was happening, the results were recorded by measuring the time and how far the marble went from its starting point. The next experiment with the dominoes 2 centimeters from each other, fell slower. The last experiment, the dominoes 3 centimeters apart fell about 2 seconds more than our first experiment. After the tests there were 3 different variables, the results were: 1 cm apart will have an average of 23.086cm per second, 2 cm apart dominoes have an average of 20.96cm per second, and 3 cm apart dominoes move at a rate of 19.87cm per second. Conclusions/Discussion The results proved the theory wrong. The hypothesis stated spaced out dominoes will transfer more kinetic energy to make the marble travel at a faster speed, but since the dominoes that were 1 centimeters apart created more kinetic energy because the dominoes had less time to fall, than the other spaced out dominoes. Now the fact is that the dominoes that are spaced out more will take more time for them to fall and won't have enough kinetic energy to transfer.	
Summary Statement We perused our hypothesis by spacing out the dominoes and explored the affect the speed of the marble had when contacted.	
Help Received This project was done between my partner and I only.	