



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Jennie R. Kaplan Woodson	Project Number J1115
Project Title What Would Wood Do?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals In my experiment I tested five different pieces of wood to see which wood would absorb the least amount of water. I tested Pine, Myrtlewood, Willow, Redwood, and Maple. I did this experiment because we have an outside door that absorbs a lot of water in the winter and I wanted to see what the best wood was to make a new door out of.</p> <p>Methods/Materials In my experiment I used three 3 inch x 3 inch x 1 inch pieces of Pine, Maple, Willow, Redwood, and Myrtlewood, a balance scale, 7 cups of water, rocks to weigh down the wood and 3 pans to hold the wood. I labeled the pieces of wood 1, 2, or 3 to indicate which of the 3 experiments I was doing. Then I weighed all of the pieces of wood to get the beginning weights. I took all the samples and put one piece of each type in each pan. I poured 7 cups of water in each pan; made sure the wood was submerged by putting a rock on top of them and let them sit for 12 hours. After the 12 hours I took the pieces out and weighed them again. I put the samples back in their pans and let them sit for 12 more hours. After 12 more hours I took out the samples and weighed them. I put them back for 24 more hours so they were in the water for a total of 48 hours . Then I weighed them for the last time and got my results.</p> <p>Results I did the experiment three times exactly the same way. In each experiment my results looked about the same. The Pine, Willow, and Redwood were the lighter woods and they absorbed larger amounts of water. The Maple and Myrtlewood were the heavier woods and absorbed less water at a slower rate.</p> <p>Conclusions/Discussion The three Myrtlewood samples followed my hypothesis that the heavier woods would absorb the least amount of water, so I believe that Myrtlewood would be the best wood to use outdoors. The Willow, Redwood, and Maple all soaked up about the same amount of water, but more than the Myrtlewood. The Pine would be the worst to use outdoors because it soaked up a large amount of water in a short amount of time. In the end I noticed that woods with similar beginning weights soaked up different amounts of water. Weight may not be the only factor involved in absorption. I believe that the water went into the air pockets in the wood. Each wood has a different structure, so the air pocket spaces are unique to each type of wood.</p>	
Summary Statement My project was about how much water Pine, Myrtlewood, Willow, Redwood and Maple samples would absorb in different time periods.	
Help Received My dad and Eric Almquist of Almquist Lumber Company provided the wood; my teacher Andy Slavin provided the scale; my mom helped me with making the graphs of my data in Microsoft excel.	