



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Kalati J. Tuilesu</b>	<b>Project Number</b> <b>J0626</b>
<b>Project Title</b> <b>Which Evaporates Fastest?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective is to determine which liquid: water, vinegar, rubbing alcohol, or olive oil evaporates the fastest and why. <b>Methods/Materials</b> Equal amounts of water, vinegar, rubbing alcohol, and olive oil were poured into 4 separate vials of identical shape, material, and size. I used a camera to take records of the speed of evaporation of each liquid over time ending the experiment on the 15th day. The liquids were left at room temperature. I used various materials to make models of atoms and molecules. <b>Results</b> The rubbing alcohol evaporated the fastest followed by water and finally vinegar. Olive oil didn't seem to evaporate at all. <b>Conclusions/Discussion</b> My conclusion is that molecule size and polarity of molecules affects the liquid's ability to evaporate. Since rubbing alcohol has both a small molecule as well as less polarity, the molecules are not holding on to each other so it evaporates the fastest.	
<b>Summary Statement</b> My project is about the evaporation of four liquids which depends on molecular structure and size.	
<b>Help Received</b> Grandmother helped with research and making of molecular models. Mother helped with board layout. Uncle gave telephone interview and confirmed polarity question.	