



CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s) Anna Tada	Project Number J2029
Project Title Lasting Flowers	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals In Japan, it is said that if you put a 10yen coin in a flower vase, the flower will last longer. So I wanted to test if that is true. Additionally I also wanted to test on American coins for similar results. I wanted to include the flower food in this experiment as well to see how well those chemicals functions. Then, I started my project to see which coins will last the flowers longer. My objective for this experiment was to find a better way to preserve cut flowers.</p> <p>Methods/Materials Put one brushed and sterilized 10yens, \$1coins, quarters, dimes, nickels, and pennies inside 40 plastic containers individually. Pour 100ml of water to each 40 plastic containers. Put one table spoon of flower food to each five plastic containers out of 40. Then cut 40 very similar looking carnations into 15cm. Place the carnations into the 40 plastic containers. Now, use a glue gun to place the digital camera where you can take pictures of my experiment every night.</p> <p>Results The flower food lasted for 23days in average and 10yen lasted for 22.6days in average. The third place was water(lasted for 20.6days in average) and penny(lasted for 20.2days in average). The others were in this order: quarter, nickel, \$1coin, and dime.</p> <p>Conclusions/Discussion From my background research and the results, it seems like the composition of the coins are affecting these results. Flower food, 10yen, and penny had composition of copper and zinc. I looked in the article and it said that copper has ability to kill germs and bacteria. For zinc it said that zinc is an element that is like a fertilizer, which is what stimulates plant growth. \$1coin, quarter, dime, and nickel had the composition of nickel in common. I looked in an article and it said that nickel is very harmful element and it is very toxic to plants. Now I understand why and how it came up with these results. Also when I look at the composition of flower food I found out that it is very similar to fertilizers. So the flower food is giving out the nutrient to plants. For 10yen and penny, they both have composition of copper and zinc. Like mentioned before, the copper has ability to kill germs and bacteria and zinc is an element that is like a fertilizer which is what plants need. By knowing that, copper kills germs and bacteria inside water, so the flower can live longer. Now I know the difference in between flower food and 10yen and penny.</p>	
Summary Statement An observation about how long the flower will last when I put a coin.	
Help Received My mother helped me buy materials and make graphs; My father helped my how to write my report and set up my project; and Mr. Cady helped me by answering questions that I had.	