



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Casey M. Campos	Project Number 28167
Project Title Can Absorbent Materials Help Preserve Produce?	
Abstract Objectives/Goals The objective of my project was to determine if absorbent materials could help preserve produce. Methods/Materials Zeolite granules, Zeolite rocks, and pine pellets (1/4 cup each) were individually combined with produce in a plastic bag. Produce was selected based on similar size and firmness, and included 12 of each: carrots, cucumbers, peaches, and tomatoes. For example, one peach was placed in a bag and 1/4 cup of pine pellets was added. The bag was then sealed and placed in the refrigerator for observations. Each absorbent material had three trials for each type of produce plus a control group. Sixteen observations were made noting changes in appearance and firmness. Results Carrots, cucumbers, and peaches that were placed in bags with Zeolite rocks were preserved better than the other absorbent materials and the control group. Tomatoes placed in bags with Zeolite rocks showed the same amount of preservation as the control group, both of which were preserved better than the other absorbent products. Conclusions/Discussion Zeolite rocks have a three-dimensional honeycombed structure and possess a negative charge. This allows the rocks to attract the ethylene gas that fresh produce naturally contains in order to ripen and eventually rot. The rocks remove some of the ethylene gas by trapping it in the honeycomb structure, allowing the produce to stay preserved longer. My conclusion suggests that Zeolite rocks should be used when storing produce to help it remain fresh.	
Summary Statement My experiment proves that absorbent products can be used to preserve produce longer.	
Help Received Teacher helped edit report; Mother helped prepare display board.	