



CWSF 2019 - Fredericton, New Brunswick



Zoe Yee

Water My Seeds Doing in Water Beads?

Challenge: Resources
Category: Junior
Region: Edmonton
City: Edmonton, AB
School: Parkview School

Abstract: I explored how seeds could germinate inside spheres of water-absorbing

polymer gel (water beads, Orbeez). Most of the seeds did not grow into seedlings if they were just pushed inside the spheres. Tunnels were needed in the spheres to allow air to reach seeds and give space for leaves to grow. Growing seeds inside such spheres could help in growing food during

space exploration.

Biography

My name is Zoe Yee and I am a Grade 8 student in the Mandarin bilingual program at Parkview Junior High. I was born in Edmonton, Alberta, and half of my heritage is from China and half is from Newfoundland. I have taken piano, singing, and Chinese dance lessons since I was little, and I am in RCM Level 9 piano now. I love singing and playing music, and I perform often in Chinese and in English. I participate in many festivals, competitions, and cultural events around Edmonton, especially around Chinese New Year! At school, I help out other students and teachers as part of the Panther Student Support Team, and I organized and lead the Glee Club. My project "Water My Seeds Doing In Water Beads?" was inspired by my interest in the science of super-absorbent polymer spheres and wondering if they could be used to help grow plants in space craft or habitats in space. If seeds could grow inside these "water beads", then that could be very useful in environments that have minimal water or are weightless. I used fast-germinating flower seeds, and I'm interested in exploring how well vegetable seeds will germinate in water beads.

Awards	Value
Excellence Award - Junior - Bronze Medal	
Sponsor: Youth Science Canada	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$1 000





