

Summary Report for Cascades Science Squad Science Days – Sep 22, 2012

<u>Jul 14</u> <u>Jul 28</u> <u>Aug 11</u> <u>Aug 25</u> <u>Sep 8</u> Sep 22

Cascades Science Center Foundation is a non-profit organization with a mission to inspire enthusiasm for science, technology, engineering and mathematics through hands-on science education. Thanks to the parents for getting involved with the foundation by making their child part of the Science Squad, volunteers (activity leads and activity assistants) for donating their time to engage kids in science and Children's Home Society of Washington for providing a venue at North Seattle Family Center. Our last session with these kids was on Saturday, Sep 22, 2012. We did few science experiments, handed out certificate of completion and enjoyed a very good potluck brought in by the kids' parents. We want to take this opportunity to thank all the volunteers who made this program possible. Thanks to our Seattle Works HandsOn Leadership project leaders - William Brenes, Yasmin Gastelo and Tsega Desta for project, volunteer and student registration management in this program. Thank you for your time and effort. When we have over 20 kids in a session, the classes go smoothly largely because of the help of the activity assistants - Arturo Lire, Bryan Benites, Guadalupe Aguayo, Ashish Harchwani, Malcolm Lalkaka, Erol Balevi – who have helped in multiple sessions throughout this program. The photos from the event can be found on our Facebook page here. We had over 30 volunteers from Boeing, who provided this great gift of education to the kids of North Seattle Family Center. The Activity Lead Guide has the names of the volunteers as well as the link to all the lesson plans we covered in this program. THANK YOU!

The next few pages contain the feedback from some of the parents addressed to the volunteers. They are originally in spanish and then translated to English.

Physical Science

Biochemistry

Lead: Josh Toman, Jessica Parsons, Guadalupe Aquayo

This lesson included three activities. The kids started with <u>Yeast Balloons</u>, in which they learnt how the reaction between yeast, water and sugar can inflate a balloon. They explored that yeast are tiny living organism. Then, in <u>Potato Power</u>, the objective was to learn about enzymes and the effect heat can have on its chemical reactions. The reaction of enzyme with oxygen can be slowed or prevented by inactivating the enzyme with heat. Finally, in <u>Create own Perfume</u> the kids experimented with mixing a scented balm by mixing beeswax, almond oil and essential oils (choice of Lavender and Eucalyptus). According to <u>Wikipedia</u>, Biochemistry, sometimes called biological chemistry, is the study of chemical processes in living organisms, including, but not limited to, living matter. The laws of biochemistry govern all living organisms and living processes. By controlling information flow through biochemical signalling and the flow of chemical energy through metabolism, biochemical processes give rise to the complexity of life.

Engineering



Circuits Extended

Lead: Gina Malaver, Josh Toman, Jessica Parsons

Saltwater Circuit: In this activity, kids continued their lesson on electric circuits by using saltwater as part of the circuit. They created electrolytes by wrapping large popsicle sticks with an aluminum foil and then closing the circuit by immersing these sticks in a saltwater solution. Saltwater circuit is used as a desalination plant tool to test for the removal of salt from ocean water. Electrical engineers design and build small- and large-scale electrical systems. In the circuit design sub-discipline of electrical engineering, engineers use their knowledge of the conductivity of materials to design circuit boards that are used in cell phones, TVs, toaster ovens, computers, and uncountable other devices. Understanding the dangers and opportunities of mixing electricity and water helps engineers design for safety as well as creative measurement tools.

Graduation







Congratulations to the students at North Seattle Family Center for participating in this fun, hands-on, educational Science, Technology, Engineering and Mathematics (STEM) program during the summer of 2012. We wish these next generation of leaders a bright future.



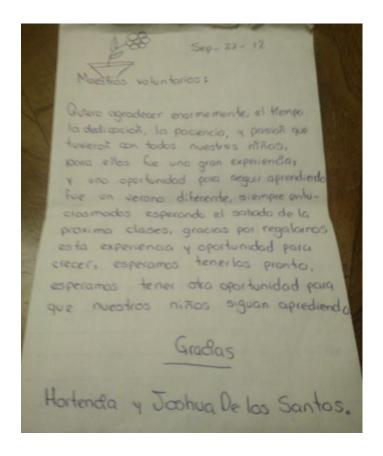




Dear Volunteer Teachers,

I want to thank your enormous time, dedication, patience, and passion that you had all of our children, for them it was a great experience, and an opportunity to continue learning. They were waiting for the upcoming classes. Thank you for giving us this experience and opportunity to grow. We hope to have another opportunity to make our children continue learning.

Thank you,



Maestros Voluntarios:

Quiero agradecer enormement, el tiempo la dedicacion, la paciencia, y pasion que tuvieron con todos nuestros ninos, para ellos fue una gran experiencia, y una oportunidad para seguir aprendiendo fue un Verona diferent, siempre entucrasmados esperando el sabada de la prxima clases. Gracias por regalarnos esta experiencia y oportunidad para crecer, esperamos tenerlos pronto. Esperamos tener otra oportunidad para que nuestros ninos siguan aprediendo.

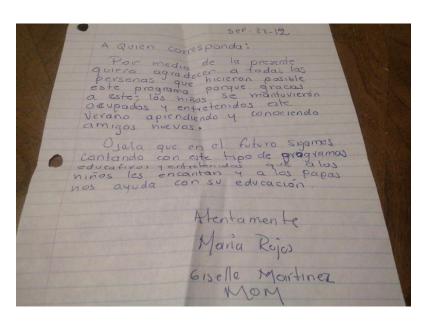
Gracias

Hortencia y Joshua De los Santos

To who it may concern:

I hereby would like to thank today the people who made possible this program because thanks to this; children were kept busy and entertained this summer and meeting new friends. We hope that in the future we continue with this type of educational and entertaining programs that children are entertained and non-parents help their education.

Kind Regards,



A Quien Corresponda;

Por medio de la presente quiero agradecer a today las personas que hicicron possible este programa porgue gracias a este; los ninos se mantuvieron ocupados y entretenidos este verano aprendindo y conociendo amigos nuevos.

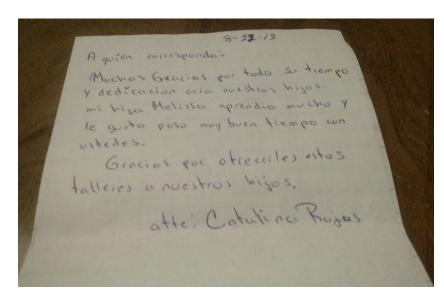
Osala que en el future sigamos contando con este tip de programas educativos y entretenidos que a los ninos les encontan y a los papas non ayuda con su educacion.

Atentamente Maria Rojas Giselle Martinez Mom

To whom it may concern:

Thank you very much for your time and dedication towards our children. My daughter Melissa learned much and liked spend a very good time with you. Thank you for giving our children these workshops.

Kind Regards,



A Quien Corresponda;

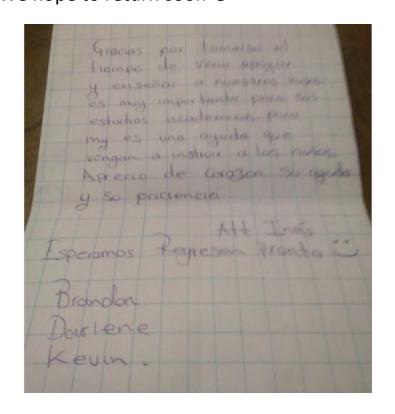
Muchas Gracias por todo su teimpo y dedicacion ocia nuestros hijos mi hija Melissa aprendio mucho y le gusto paso muy buen tiempo con ustedes.

Gracias por ofrecerles estos talleres a nuestros hijos.

Atte: Catalina Rojas

Thank you for taking the time to come to support and teach our daughters. It is very important for their academic studies. For me it is very helpful you to come to instruct our children. I appreciate greatly your support and your patience.

Kind Regards, We hope to return soon ☺



Gracias por tomarse el tiempo de venir apoyar y ensenar a nuestros hijas. Es muy importante para sus estudios academicos. Para my es una ayogda que vengan a instruir a los ninos. Aprecio de carazon su ayuda y su paciencia.

Att Ines Esperamos Regresen Pronto ☺

Brandon Darlene Kevin