

Community Activities-  
Kristine Smetana 1/23/2020

NCW was held on Sunday October 20th. We had an amazing event that focused on a walk around the periodic table where children of all ages could look and touch real elements and experiment with them. The event was a huge success given the typical Sunday is not a busy day at the Science Museum but this was a jam-packed event including a teacher program where teachers who attended ranged from grades pre-K through high school. There were 8 teachers who were given activities for their classes based on the periodic table. Each teacher received a set of periodic tables, their own element kit, slime, super balls, separation mixtures, prism glasses, dolomite rock growing sets, magnets and many other really cool things. (Teachers were from Richmond (elementary and High school), Henrico, Alberta (High School), Gloucester (middle school), Dinwiddie (middle school), Chesterfield (elementary) and Petersburg (elementary). Teachers helped out when the stations were very busy. They were also walked around the event to see all the activities and how they could use the ideas for their classrooms to make them more interactive on a low budget.

Activities included making spooky slime and learning how boron was an essential element for that; looking at some of the noble gases like Neon and Argon using really cool prism glasses (kids could take them home) and learning about and drawing line spectra; becoming an alchemist and turning copper into silver and gold; learning how calcium is essential to bones while exploring owl pellets, human x-rays and searching for sharks teeth matching elements on a periodic table and learn about some of their physical properties including density determinations; learning how we can produce oxygen and learn about the properties of gases; learning about iron, magnetism and magnetic fields; learning about conductivity and electrolytes; exploring how elements and rocks are related to household items; exploring the element carbon and making a buckyball; making jewelry; learning about circuits; and many other fun activities.

In addition to NCW, I have been volunteering as a guest scientist at schools and helping with science clubs and providing some materials to these clubs that focused on our theme of Marvelous Metals this past fall. These included a set of activities focused on the element calcium. This fall we focused on the element calcium both as a metal and as an essential to teeth and bones, looking at antacids and shells being the antacids of the ocean; cleavage and crystal structures of calcite, growing dolomite crystals and learning about caves and rock formation and alginate worms and how they are being used in cancer research.

#### Future plans

I have been working on getting more students involved in science in the rural areas of Virginia and we are expanding on more activities for the community in southside Virginia, including March 12<sup>th</sup> doing a lot of science activities with two visiting elementary schools. CCEW will be working with the EarthFest at the Science museum where we will be a participant. And, this summer I will be trying to run a teacher program in Southside to help provide teachers with materials, labs, etc for their classrooms run as a workshop and help them with STEM activities.

