

Tonia Murray
Teacher Grade 5 Science/Science Geeks Sponsor
Emerald Coast Middle School
Murrayt@walton.k12.fl.us
850-622-5026

Dear Mr. Cox and Mr. Ruff,

I wanted to follow up on my grant. This year I had over 20 kids participate in the Science Geeks Club in our school, Emerald Coast Middle. We met twice a month after school to explore a variety of topics. I was fortunate to have a retired scientist help me who loves electricity, chemistry, and energy so that was our focus. Along the way we dabbled in chemistry using potassium permanganate and dry ice. (Both a big hit!)



We started with making motors using magnetic wire, magnets and batteries, moved on to building chemical batteries, then extended into capacitors using foil (only

one worked!). After that, we began looking at some old school crystal radio building (your grant helped supply materials for this) it was challenging but fun to see us try to locate the best position for our antennas. We concluded our year looking at alternative energy by creating and testing solar cookers from pizza boxes. The smores and hotdogs were a yummy conclusion to this particular project.

I have attached some photos of our fun for you. and I extend a sincere thank you for your support of STEM in my classroom and beyond.

