

Community Energy Allies

ENERGY EAGLES

2023 - 2024

BREMEN ELEMENTARY
SCHOOL

BREMEN, KENTUCKY

Advisors: Mandy Toomey & Emily Gardner



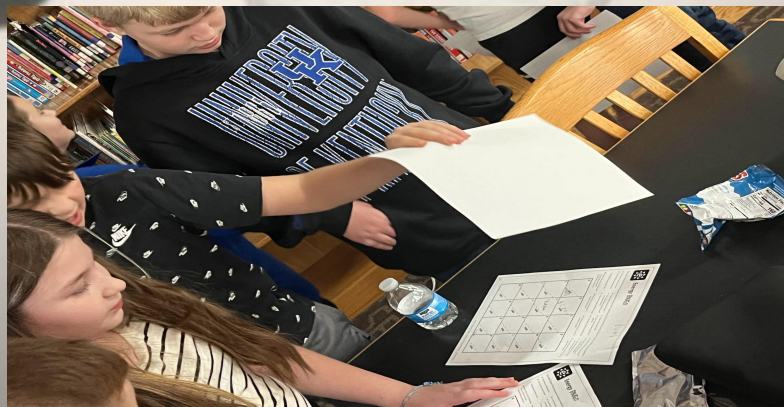
The 2023 - 2024 members of the BES Energy Eagles Student Energy Team have had a wonderful, energized school year! For our project this year, our team wanted to become allies with the homeless and displaced citizens of our community by equipping them with energy related items. Go on a journey of learning about energy and the power of helping others!

At our first meeting as Energy Eagles this year, we played a game on Blooket to help us review what we had learned as either previous Energy Eagles or in our classes. We reviewed energy forms, sources, efficiency, and conservation.

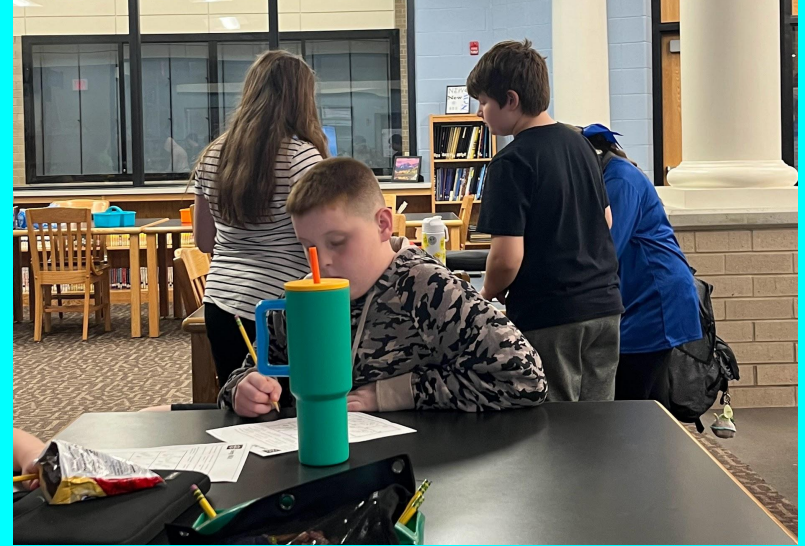


Let's get this Energy Party Started!

Another one of the first things we did as the new 2023-2024 Energy Eagles was Energy BINGO! It was so fun! It was a great way to get to know the new members of our team and learn/review energy!



After discussing homelessness in our FCA Meeting, I shared with the rest of my teammates that I wish we could do something to help them.



Goal 1: A Project is Born!



**Help for the Homeless
Muhlenberg Co.** >

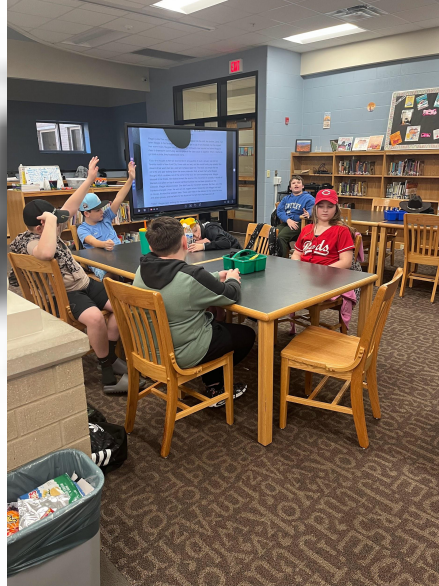
Public group · 1.2K members

There is a group in our county called Help for the Homeless - Muhlenberg County. We reached out to them and they shared that our county has approximately 33 homeless or displaced people and some of them are children! 33 may not sound like a lot in a big city, but it is 33 too many in our small county in Kentucky!

What does it mean to be "homeless or displaced?"

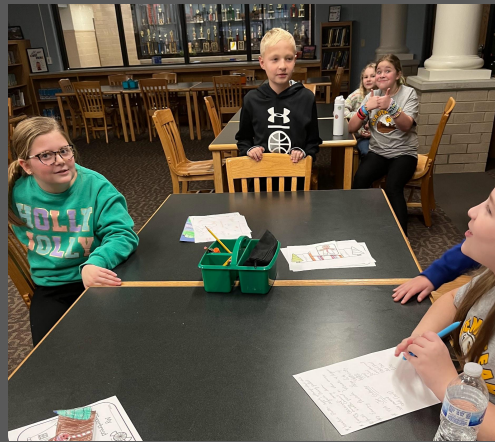
Homeless: having no home or permanent place of residence

Displaced Person: a person expelled, deported, or impelled to flee from his or her country of nationality or habitual residence by the forces or consequences of war or oppression

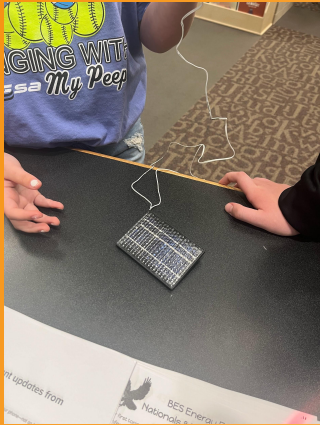


Next, we started researching about homelessness. We learned that homeless people do not plan to be that way. We are all close to being homeless at any time. We felt it was our responsibility to become allies with our community to help the people we see everyday that we have no idea are in need. We also learned that the closest homeless shelter to our community is almost an hour away.

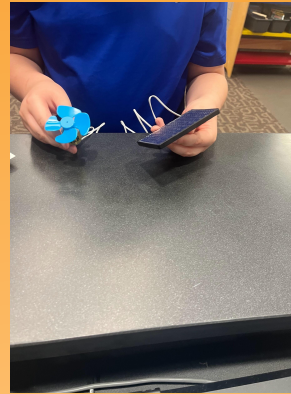
Figuring Out the Energy to Help



How can an energy team help the homeless? We all thought back to last years Energy Day activities. One activity included a hand generated flashlight. We knew things like that would be helpful to the homeless. We also remembered the solar fan activity too. Everyone has access to the sun whether they have a home or not! Now we needed to figure out exactly how these devices change motion or sunlight into electrical energy! We needed to know how they worked before we could share them!



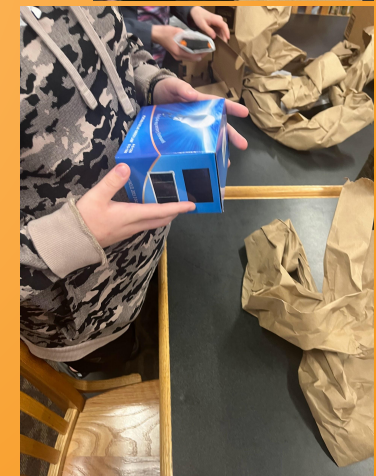
Solar panels are made of photovoltaic (pv) cells. When the sun shines on the solar panel, electrons start flowing through the cell and they generate electricity. We investigated this in action with some different items that have pv cells.



How do solar panels work and how can they help the homeless?

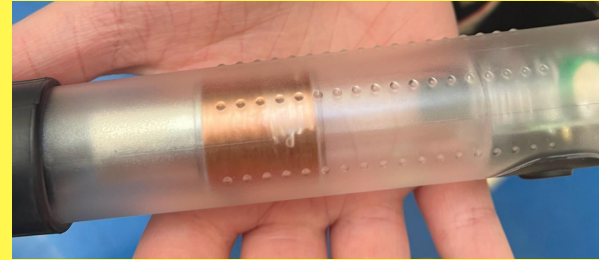
We were able to find some items that would help the homeless that also uses solar energy such as:

- Radio/flashlight/charging station
- Power bank
- Light bulbs
- Fan

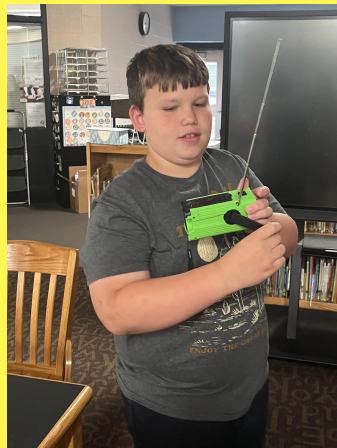


How does a hand-crank generator work?

How does something you shake or crank produce electricity? That is a question we had to answer in order to help our community!

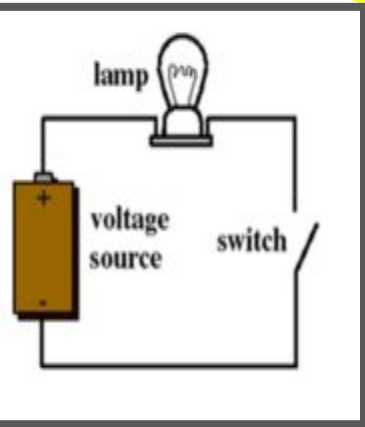
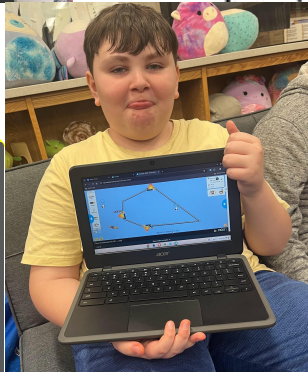
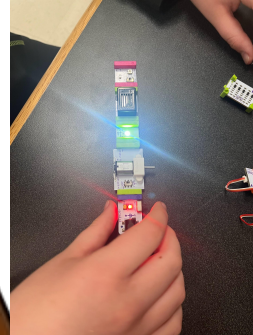


What we learned: Moving a magnet around a coil of wire, or moving a coil of wire around a magnet, pushes the electrons in the wire and creates an electrical current. Electricity generators basically convert kinetic energy (the energy of motion) into electrical energy. It can make a flashlight light up, a weather radio speak, and even charge your phone!



Energy Eagles

How Does A Circuit Work?

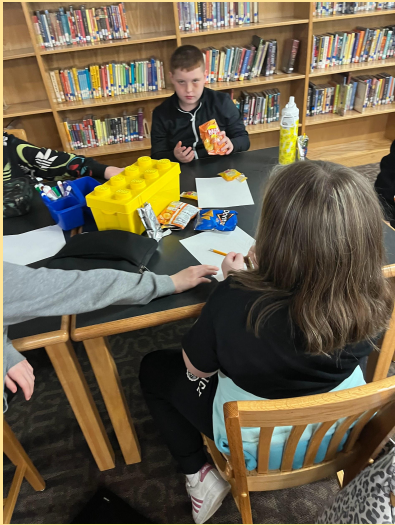
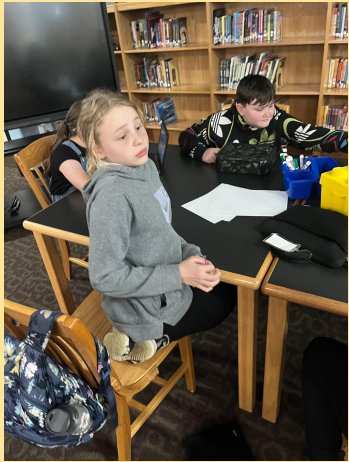


Have you ever wondered how lights in your house turn on and off? A circuit can make a lot of stuff turn off and on but how does it work. A circuit can only work if it's closed but if you open it it stops the flow of energy.

Goal 2: Getting to work!



Hear ye! Hear ye! All About Our Project!



To spread the word about our project and our fundraiser, we decided to write an announcement to share throughout our school. We formed an announcement committee to work together to write our speech.

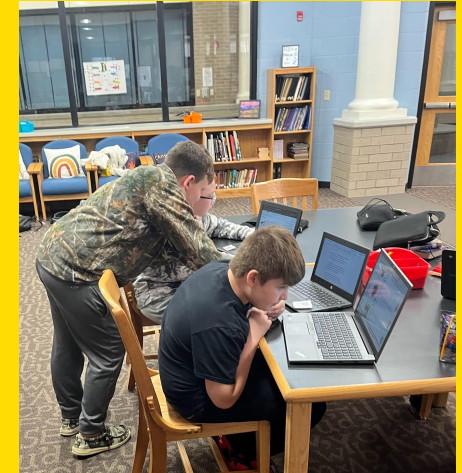
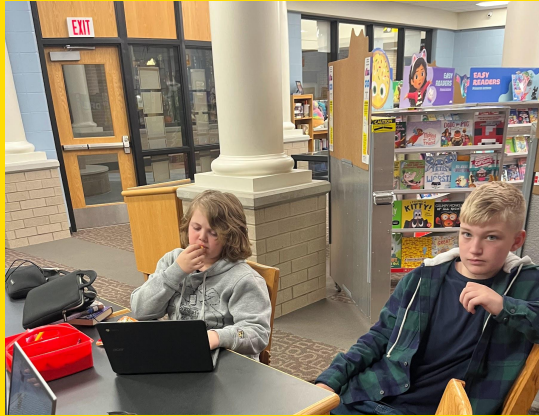


We all agreed that Kahlan and Harper should be "On the Air!"

Click the play button to see our announcement video!










SPREADING THE WORD!



BES ENERGY EAGLES PRESENTS
1 - 2 - 3 - 4 WE DECLARE A
PENNY WAR
 3/25 - 4/12
GRADE WITH MOST POINTS
WINS A TRIP TO THE BES MOVIE
THEATRE

VS

HOW IT WORKS: Each grade level will have their own jug for collecting money located in the main hallway. **ADD POINTS** to your jug by adding pennies and dollar bills. **SUBTRACT POINTS** from other classrooms by adding silver coins to their jug

ADD		SUBTRACT
	Penny = + 1 POINT	
	\$1 = + 100 POINTS	
	\$5 = + 500 POINTS	
	\$10 = + 1000 POINTS	Quarter = -25 POINTS

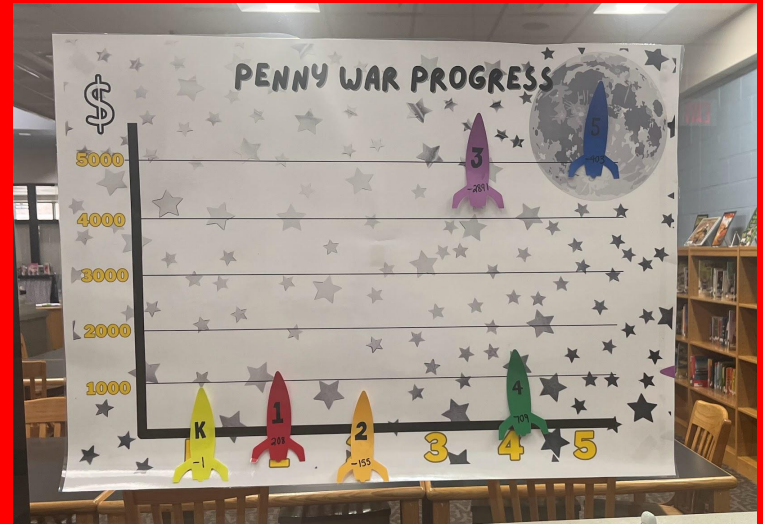
ALL PROCEEDS HELP TO FUND OUR ENERGY EAGLES
 HOMELESS/UNDERSERVED MUHLENBERG COUNTIANS SERVICE PROJECT -
 PROVIDING ENERGY RELATED ITEMS TO HELP MAKE THEIR LIVES EASIER!

Next, we each worked to create a handout to send home with the students at BES explaining the fundraiser and our purpose - helping the homeless of Muhlenberg County with energy related items! We picked this handout to use!



FUNDRAISING TIME!









To raise the money for the energy related items, we held a Penny War. Each grade level competed against one another. Pennies and bills were positive points (penny = 1 point, One dollar bill = 100 points. Silver coins subtracted points from another team (nickel = -5 points, quarter = -25 points, etc.) The Penny War lasted for 2 weeks. We were able to raise over \$1,900! The winning grade level had a movie and popcorn party.

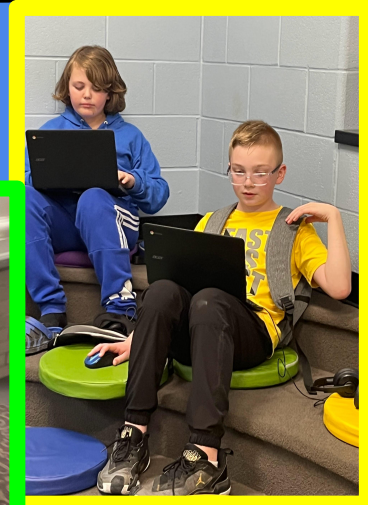











WHEN THERE'S A WISH, THERE'S A WAY.

Energy Team Community Service Project

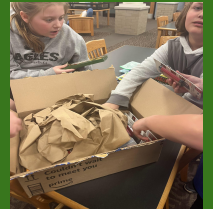
Title

-  **Busy Piggy Camping Essentials Fan with LED Lantern, Solar Tent Light, Portable Tent fan with Hanging Hook, Rechargeable USB Desk Fan for Home, Office, Tent, Car, Emergency Outages**
by BUSYPIGGY |
-  **10400mAh Solar Fan, Camping Fan with Solar Panel, 7W Rechargeable Battery Operated Fan for Outside, LED Lantern, Stepless Speed and Quiet Battery Powered Solar Tent Fan for Picnic, Barbecue, Office**
by Drchop (Unknown Binding) |
-  **Guyuyii 4 Pack Hand Crank Flashlight, Powerful Emergency Light Safety Tool with 3 LED White Light, Built-in Battery, Crank Flashlights for Camping, Home Power Outage, Car, Office**
by Guyuyii |
-  **Solar Flashlights, Solar Flashlight Flashlights For Multi Function 8000 Lumens Led Flashlight With Emergency Strobe Light Emergencies, Led High Lumens, Usb C And Large Capacity Battery Fast Charging**
by E-SHIDAI |
-  **Coghlan's Fuel Stove Tablets, 24-Count**
by Coghlan's (Sports) |
-  **Coghlan's Stove**
by Coghlan's (Sports) |
-  **Solar Generator with Panels Included, Portable Power Station for Home Use, Portable Generator for Camping, Solar Powered Generator with Flashlight for Outdoors Travel Hunting Emergency**
by Upusa |
-  **Solar Generator - Portable Power Station for Emergency Power Supply, Portable Generators for Home Use, Camping & Outdoor, Solar Powered Generator With Panel Including 3 Sets LED Light (green)**
by Upusa |



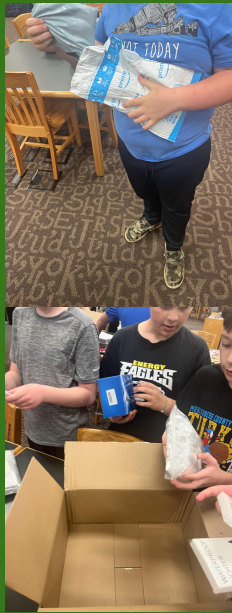
-  **CANWAY Camping Stove, Portable Stainless Steel Wood Burning Survival Stove with Nylon Carry Bag for Outdoor Backpacking Hiking Traveling Picnic BBQ**
by CANWAY (Sports) |
-  **Lixada Camping Stove Wood Burning Stove Portable Stainless Steel Backpacking Stove for Picnic BBQ Camp Hiking**
by LIXADA (Sports) |
-  **HotHands Body & Hand Super Warmers - Long Lasting Safe Natural Odorless Air Activated Warmers - Up to 18 Hours of Heat - 40 Individual Warmers**
by HotHands (Sports) |
-  **3000 Large Capacity Hand Crank Solar Camping Lantern, Portable Ultra Bright LED Torch, 23-26 Hours Running Time, USB Charger, Electronic Lantern for Outdoor**
by Mesqool (Kitchen) |
-  **FosPower Emergency Weather Radio (Model A1) NOAA/AM/FM with 7400mAh Portable Power Bank, USB/Solar/Hand Crank Charging, Battery Operated, SOS Alarm & Flashlight for Indoor/Outdoor Emergencies**
by FosPower (Electronics) |
-  **WONGKUO Solar Charger Power Bank - 2024 Upgrade 36,800mAh Portable Solar Phone Charger, QC3.0 Fast Charger with LED Flashlight, IP65 Waterproof Power Bank Perfect for Outdoor Camping Hiking**
by WONGKUO |
-  **E-SHIDAI Solar/Rechargeable Multi Function 1000 Lumens LED Flashlight, with Emergency Strobe Light and 1200 Mah Battery, Emergency Power Supply and USB Charging Cable, Fast Charging (1PC)**
by E-SHIDAI (Unknown Binding) |
-  **QIO CHUANG Emergency Mylar Thermal Blankets -Space Blanket Survival kit Camping Blanket (4-Pack). Perfect for Outdoors, Hiking, Survival, Bug Out Bag, Marathons or First Aid 1**
by QIO CHUANG |
-  **LED Lighted Beanie Cap, Rechargeable 4 LED Head Lamp Hat, Winter Warm Cycling Hunting Knitted Hat LED Lighted Cap Led Stocking Caps Hat Cap Hands Free Unisex Lighted Beanie Cap (2 Pack)**
by DRQ |
- **Emergency Radio with NOAA Weather Alert, Portable Solar Hand Crank AM/FM Radio for Survival, Rechargeable Battery Powered Radio, USB Charger, Flashlight, Reading Lamp, for Home Outdoor**
by Eoxsmile (Electronics) |

Once we figured out which energy sources would be best for our homeless allies, we took to Amazon to find items to create a wishlist!



Christmas in April!

Using the money from our fundraiser, we were able to purchase a LOT of amazing items that will make life a little easier for the homeless of our county! Opening the boxes was like Christmas, but in April!



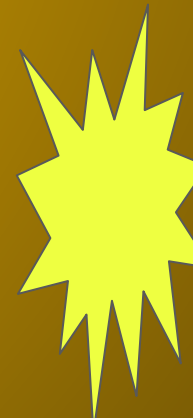
Goal 3: Sharing the Energy Love!



GIVING ENERGY BACK TO OUR COMMUNITY!

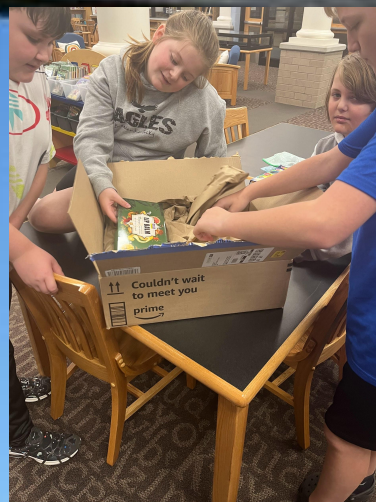
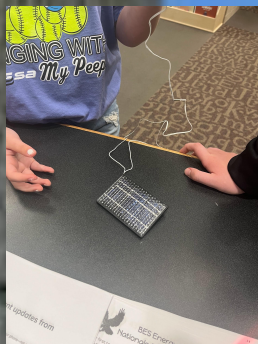
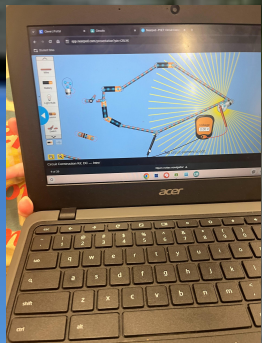
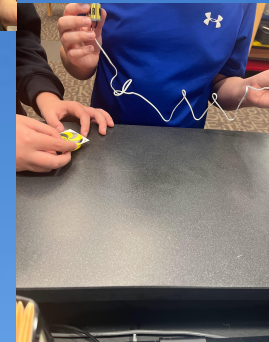
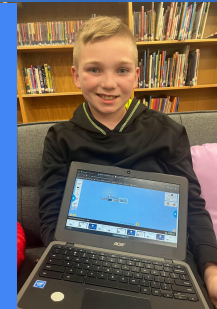


Our Family Resource Coordinator, Mrs. Ashley Romans, is a member of the Help for the Homeless - Muhlenberg organization. Mrs. Romans told our team that these items will greatly help our homeless community members and make their lives easier. It made our energy hearts happy to be able to help!



NOW THAT IT'S ALL SAID AND DONE...

Our team learned so much about renewable energy such as solar and hand-crank generators. We learned how generators work and how electricity flows through circuits. We also learned all the steps in completing a service project. Most of all, we learned there are people in our community that are suffering and the feeling we have helping make their lives better is one of the best lessons that we have ever learned.



We hope that our project has a lasting impact on our school and our community. We hope that people in our community feel that they are never alone and that even though we are elementary students, we can do big things!