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.

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!

Let’s get this Energy Party Started!
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.

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.
How can an energy team help the homeless? We all thought back to last year’s 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!
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.
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!
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!
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.

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!
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!
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!
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!