

# Michie Elementary School

## Jr High

Advisor Ms. Debra Steen  
**Exploring Energy**

**We have completed a lot of energy activities that are connected with our state standards. We used a lot of the NEED Energy activities and online resources to carry out these activities. We have learned about renewable and nonrenewable resources. We completed a lot of group activities this year. We studied the impact of people on the earth, the greenhouse effect, and pollution. we decided to raise awareness of the pollution of our oceans by plastics and other items. We also participated more with the Pepsico Recycling Program and encouraged recycling in our school.**



Jackson, Jeston, Molly Grace, Anna Kate, Skyler,  
Matt, Caleb, Nena, Ashton, Zariah, Marley.  
Group Leaders: Ashton, Molly Grace

## **Reenergizing Teamwork**

**Goal #1 Focus on deepening energy content knowledge**

**Activities and Tasks:** Obtain permission from principal and advisor, take the NEED Energy poll, Participate in energy activities,

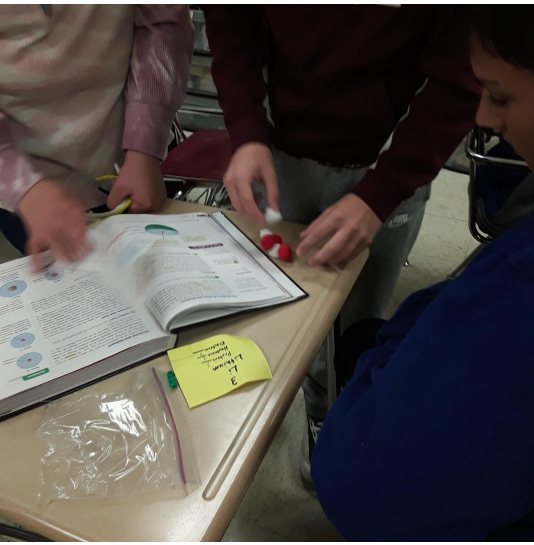
**Energy Content and Resources:** NEED Energy poll, Teacher resources from Energy Camp, NEED Science of Energy, NEED online resources and other Stem resources.

**Student Leadership:** 22 students took the energy poll and 44 students were involved in most activities

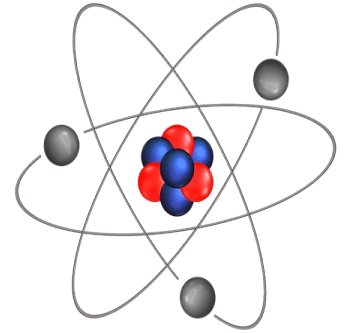
**Evaluation:** First Energy Poll scores were an average of 85% and second Energy Poll scores were an average of 96%. Number reached .



**Non-renewable resources. Here today and gone tomorrow. Reduce, Reuse, Recycle, and Rethink.**

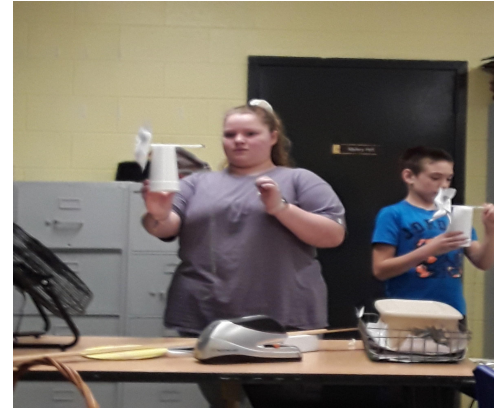
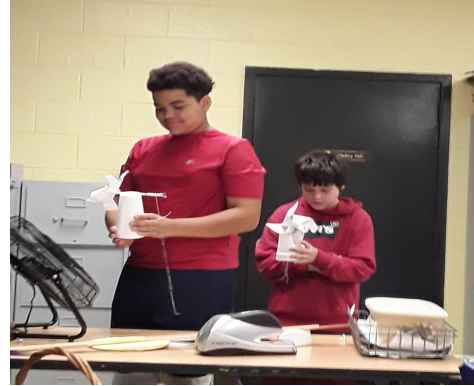
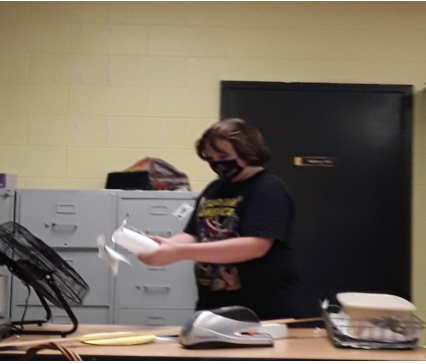


**Don't trust atoms they make up everything!  
We are studying the makeup of atoms and how  
they seem to get the energy flowing. We made  
models to represent atoms and discussed the  
valence electrons and how they can be reactive or  
stable.**

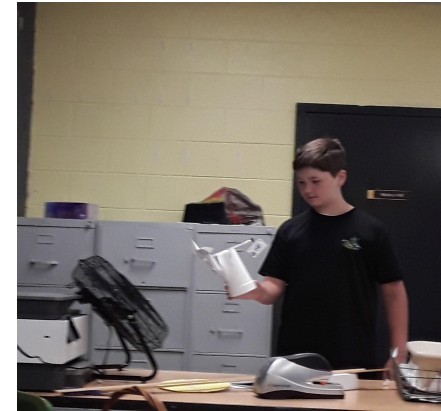
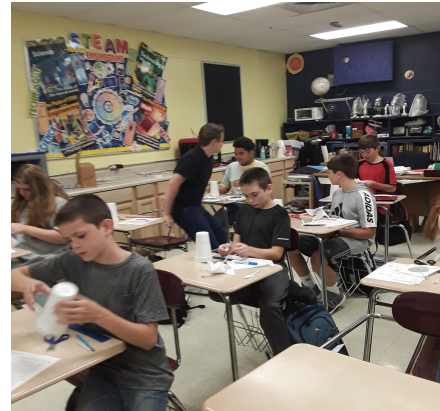
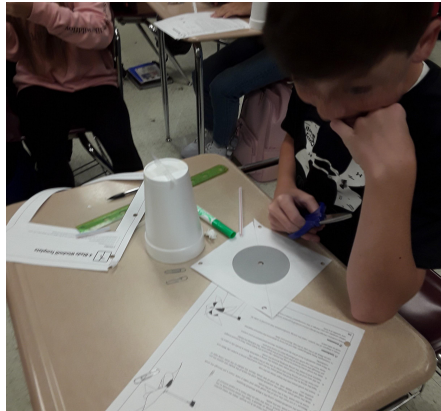
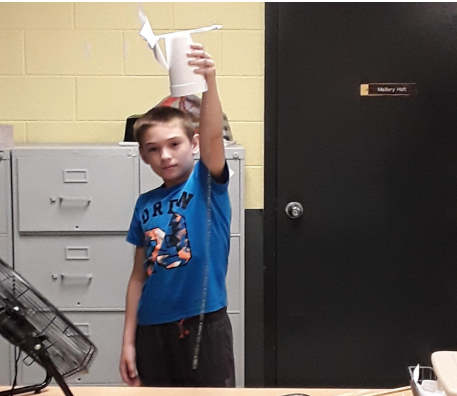




# Renewable Resources: Wind Energy



**Who can design and build the best windmill? Braxton's lifted the most paper clips.**

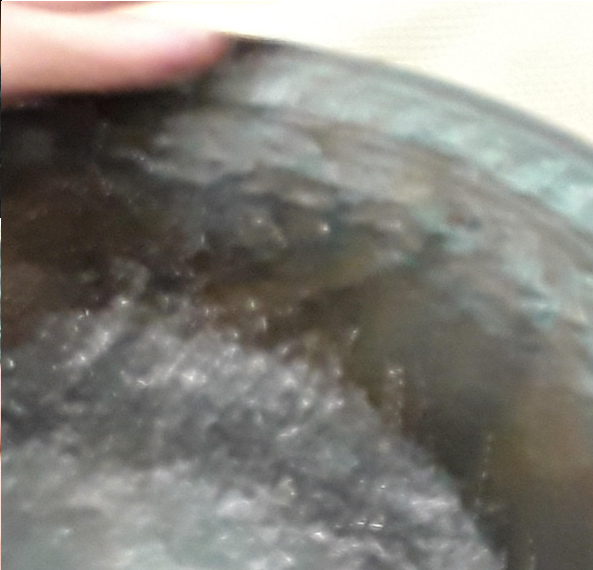




# Mechanical Energy: The energy of sound.

## Who can get the water to go the highest?

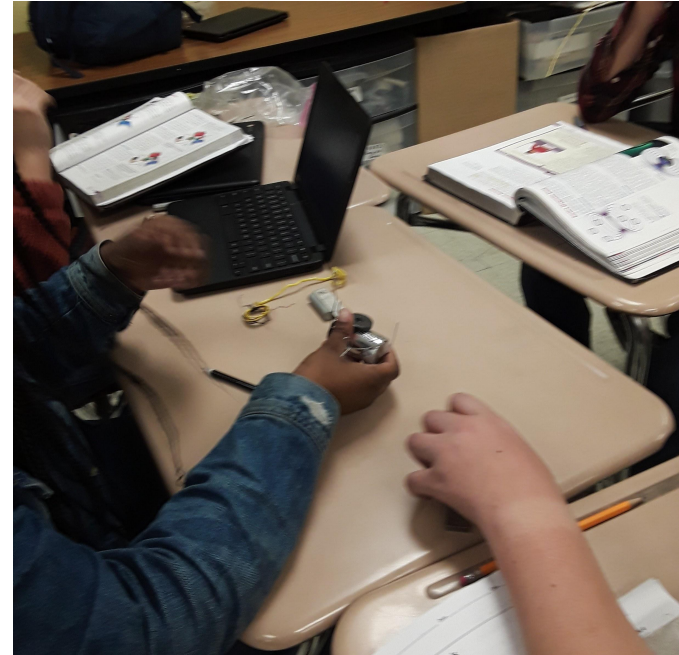
We clean our hands of oil and then dip them in the water and rub the handles to cause a sound vibration that makes the water pop up



# Experimenting with Magnets

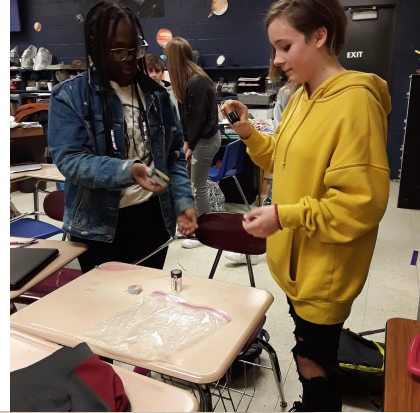
## How do you make an Electromagnet?

You need some copper wire, a nail, a battery and some paper clips. You can make your electromagnet stronger by increasing the coils as demonstrated on the next slide “The Dueling Electromagnets.”





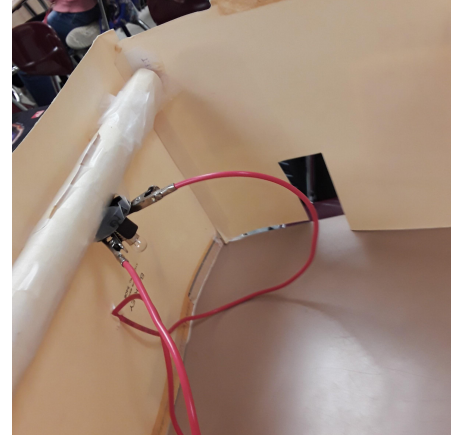
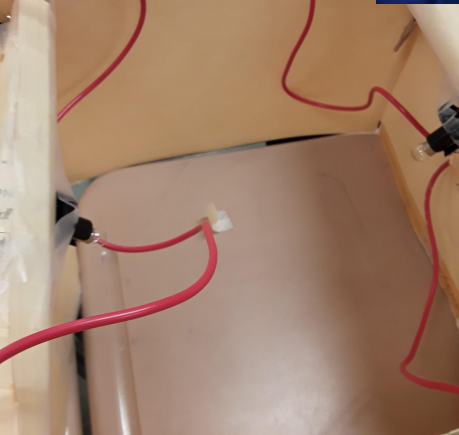
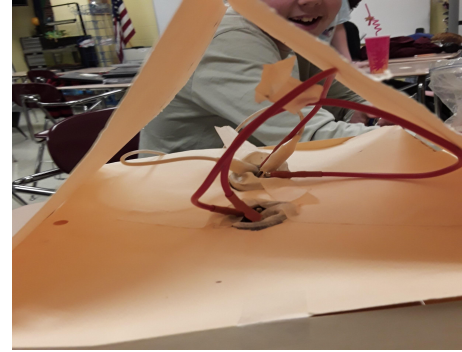
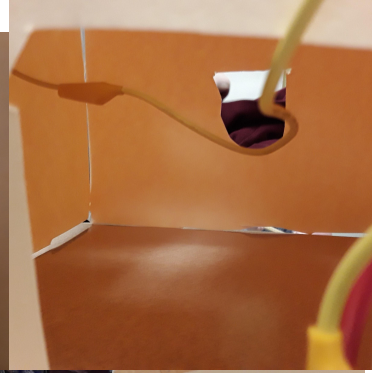
# The dueling electromagnets: Who's is the strongest?





# Building and Wiring Houses

## Can you build a parallel and a series circuit? Powered by batteries. Potential Chemical Energy.

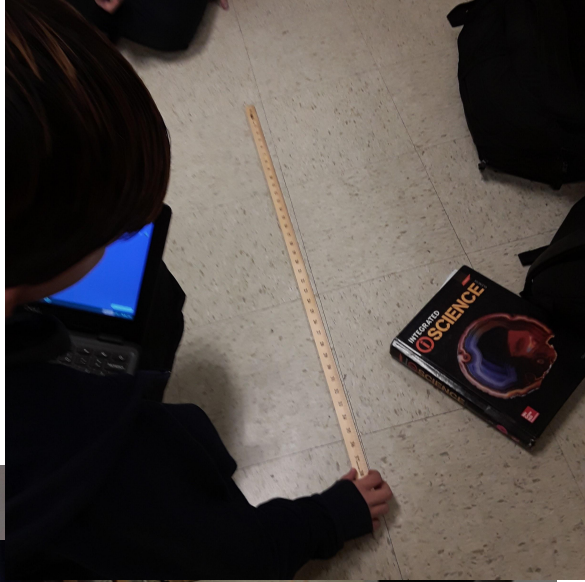
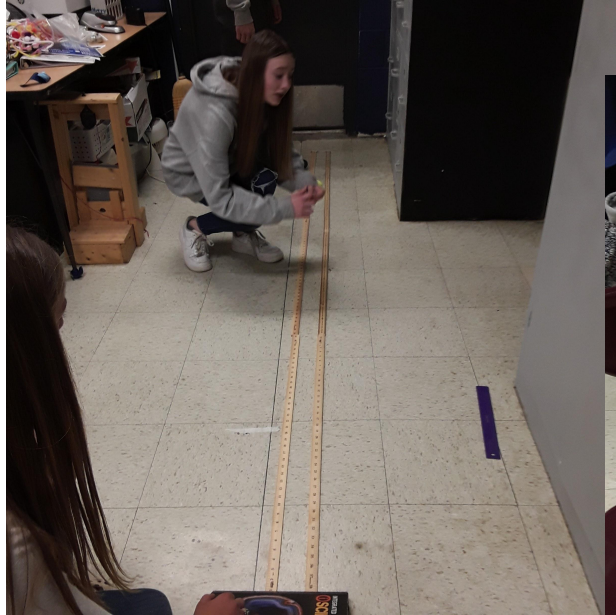


# Designing a house that will work off of electricity but also has a backup generator. Yes it works!





**What effect does the slope have on gravitational potential energy? We changed the slope to three different levels and repeated the trials 3 times. The higher the slope the further the car went down the track.**





**Goal#2: To promote energy conservation, reducing the carbon footprint by the recycling and reuse of items and products of recycled items.**

**Activities and Tasks: Obtain permission from principal and advisor. Promote 4ocean activities and products, and participate in Pepsico Recycling Activities.**

**Energy Content and Resources: NEEDS activities and resources. Pepsico resources.**

**Student Leadership: 4 students talked to principal and advisor. 45 students helped with 4ocean.**

**Total number reached over 7000.**

**Evaluation: Pepsico Recycled Activities Results and total of 4-ocean products purchased**

**This is one of the boxes provided by Pepsico that is placed throughout our school.**



**Michie Participated in the Pepsico Recycling Program in place of some of the other activities because of restrictions on community events.**

**.Miche School participated in the Pepsico Recycling Challenge. This is what we did this year plus because we didn't get the total for at least 2 months. Our summary from April 16, 2021 to April 15, 2022. We recycled about 2500 more pounds this year.**

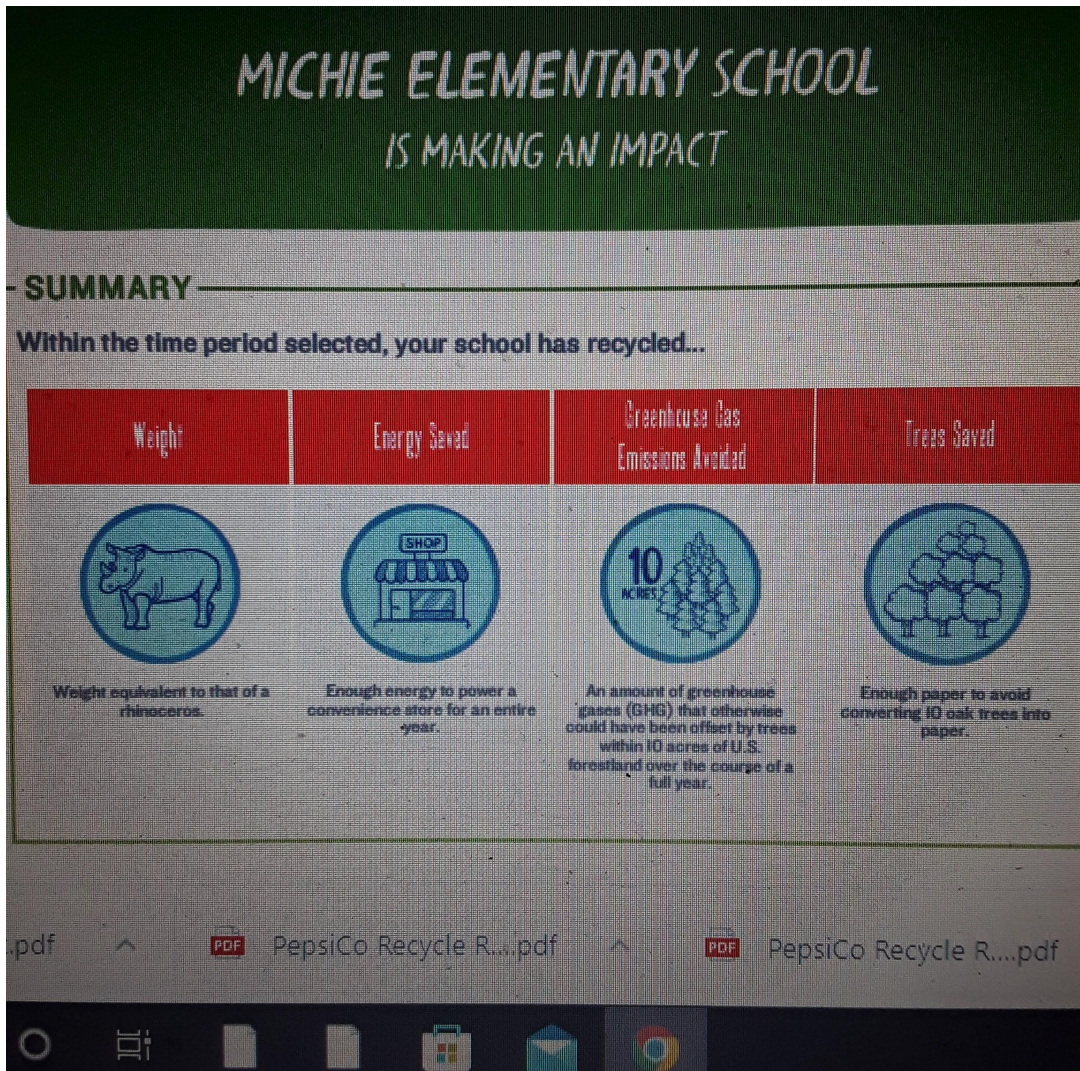
**Total weight of all eligible and other materials recycled: 8,117 lbs.**

**Total estimated # of eligible beverage containers recycled: 44491 containers**





Michie Schools Impact  
from recycling. Our  
goal is to do more next  
year.





**This year we asked our parents to let us know what they purchased to try to get a total. There were 22 t-shirts bought and 15 bracelets bought. Each item is suppose to represent a pound of plastic pulled from the ocean. Next year we are going to try and participate in their reduce carbon footprint activity.**

**22,283,009**

**Total pounds of trash recovered  
from the ocean, rivers, and  
coastlines thanks to the  
ongoing support of the clean  
ocean movement!**



**We're here to  
clean the ocean  
and coastlines  
while working to  
stop the inflow  
of plastic by  
changing  
consumption  
habits**

**Our Jr. High Club has had a good year and are looking to next year and thinking about our goals. We learned a lot about energy this year. We learned about renewable and nonrenewable energy. We completed projects that had emphasis on our use of natural resources, recycling and energy conservation. We explored electricity, wind energy, sound energy to name a few. We completed several NEED activities in our classroom. We studied the human impact on earth with the study of water, air, and land pollution. We participated in projects with Pepsico and 40cean and hope to expand on those next year. We reached a lot of people in our school and community. Total reached was 7498.**

**Resources:**

**NEED Elementary Poll**

**NEED Energy Works**

**NEED Energy Books and online resources**

**State of TN Energy Camp NEED Activities**

**Pepsico Resources**