

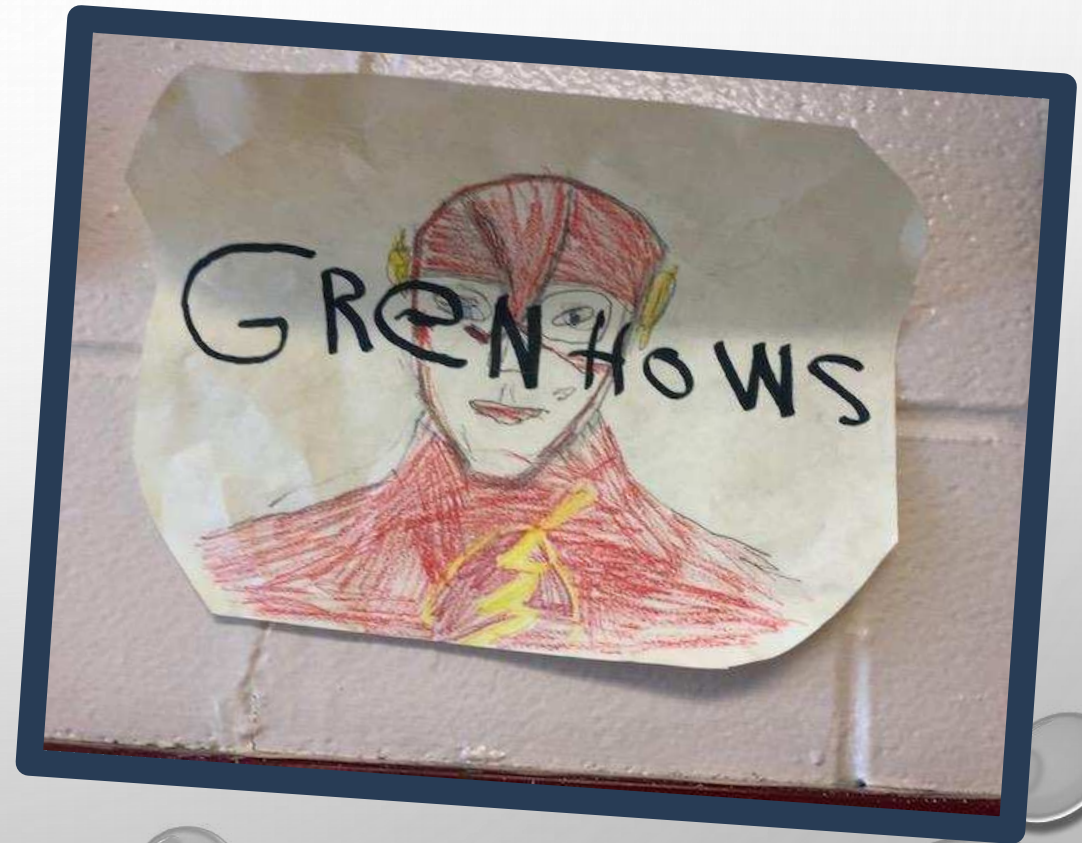
# **H2O AND OTHER SOURCES**

KENNEDY MIDDLE SCHOOL

PROJECTS AND ACTIVITIES EXPLORING ENERGY SOURCES BROUGHT TO YOU BY DUSTIN  
RENEWANZ AND TRACY SELOCK'S AMAZING 5<sup>TH</sup> AND 6<sup>TH</sup> STUDENTS

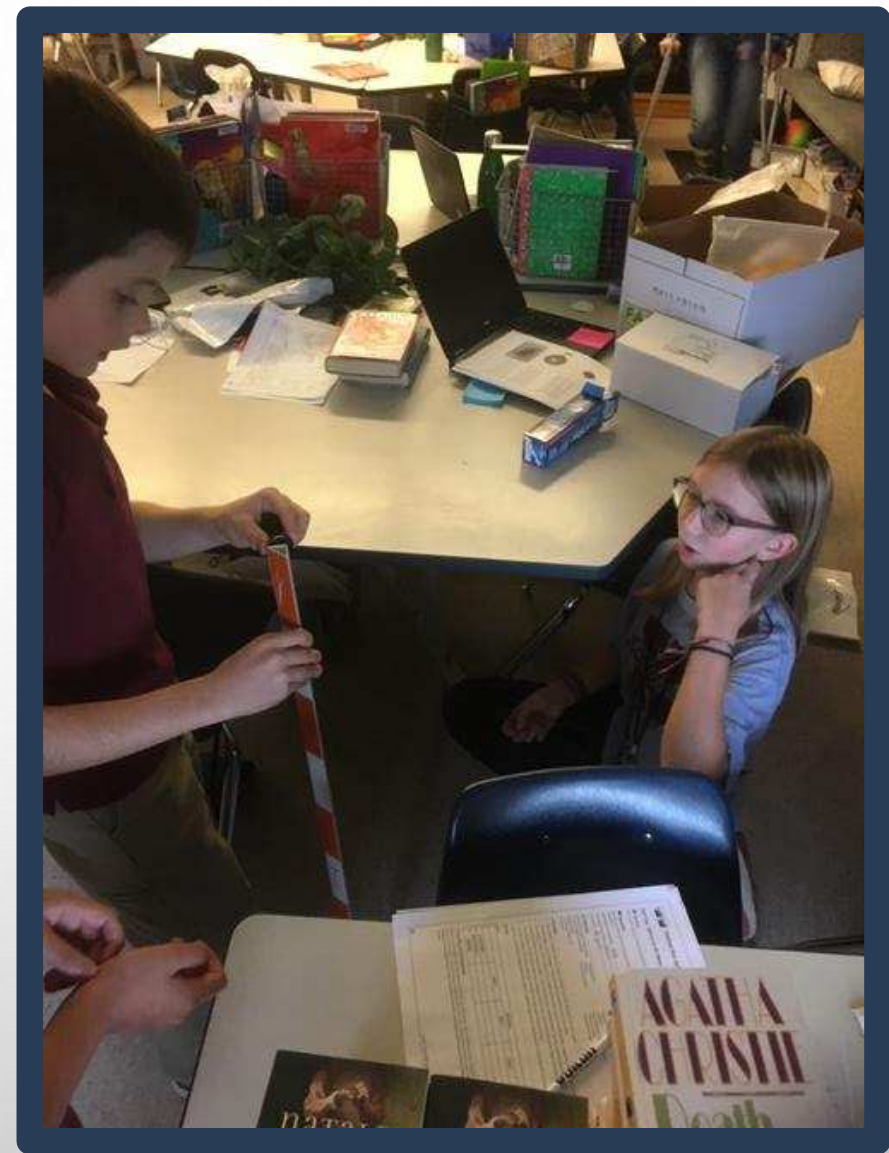
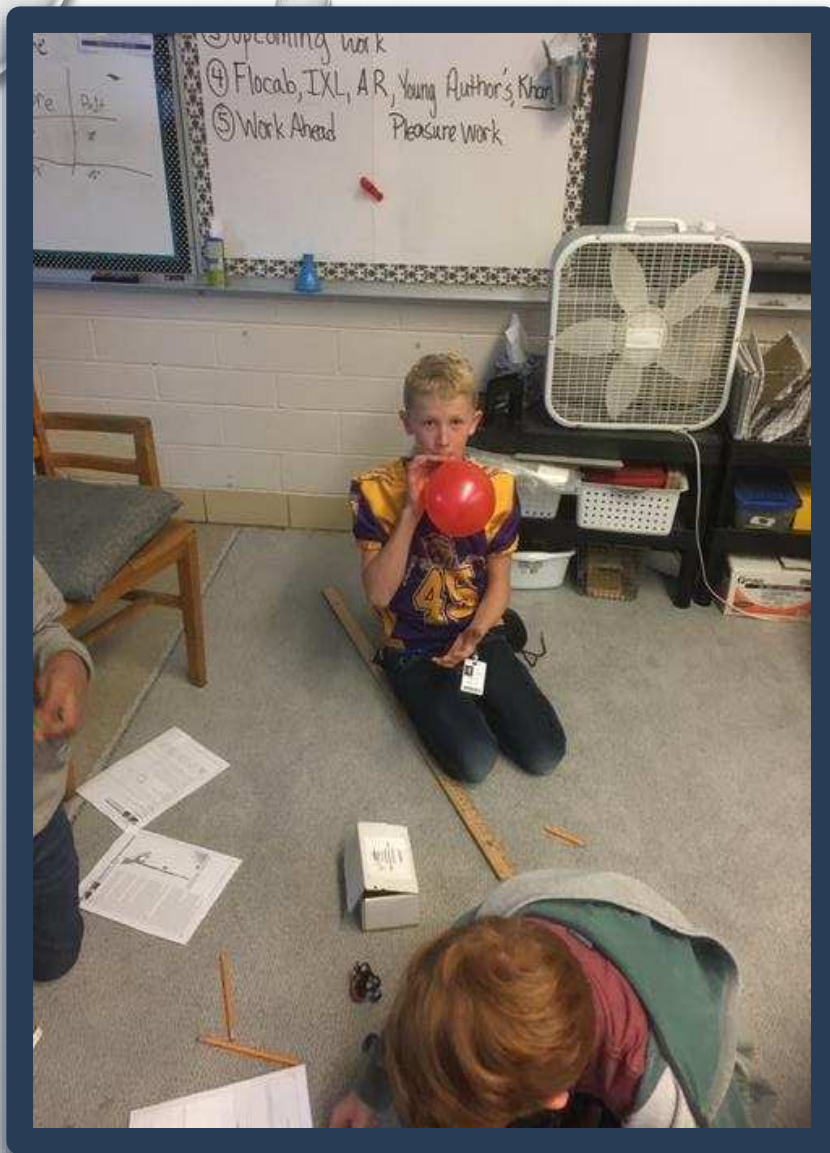
OUR GOAL THIS YEAR WAS TO HELP EDUCATE THE STUDENTS IN OUR SCHOOL, THEIR FAMILIES AND  
COMMUNITY MEMBERS ABOUT THE SOURCES OF ENERGY, ENERGY USAGE AND ENERGY  
CONSERVATION. WE ALSO WANTED TO HELP THE STUDENTS MAKE CONNECTIONS BETWEEN  
WHAT THEY LEARN IN THE CLASSROOM TO THEIR EVERYDAY LIVES.

## A child's drawing on a piece of pink paper, which is placed on a light-colored tiled surface. The drawing is filled with various hand-drawn symbols and text. At the top left, the name 'Mariana.S' is written. Below it, there's a heart with a banner that says 'Let's Travel'. To the right of the heart is a large orange flower. Further right is a globe with a face and a flower next to it. In the center, there's a drawing of a person sitting under a large orange sun, with the text 'Save Energy' written below. To the left of the sun is a heart with the letters 'USA' above it. Below the 'USA' heart is a heart with the word 'Mexico' written above it. At the bottom left, there's a drawing of a flag with green, white, and red stripes. To the right of the flag is a small figure of a person holding a heart. At the bottom right, there's a drawing of a flower and a small box with a heart inside. The drawing is signed 'Mariana.S' in the center.



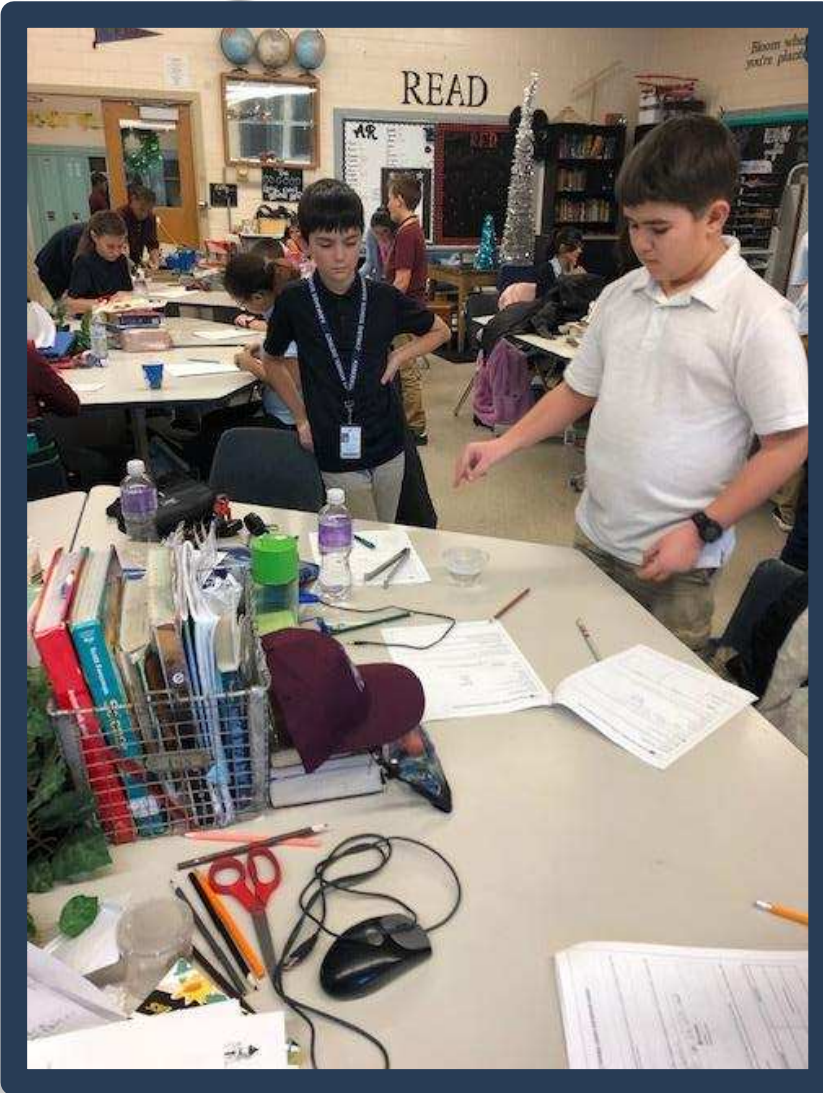
## Activity: Energy Bumper Stumper





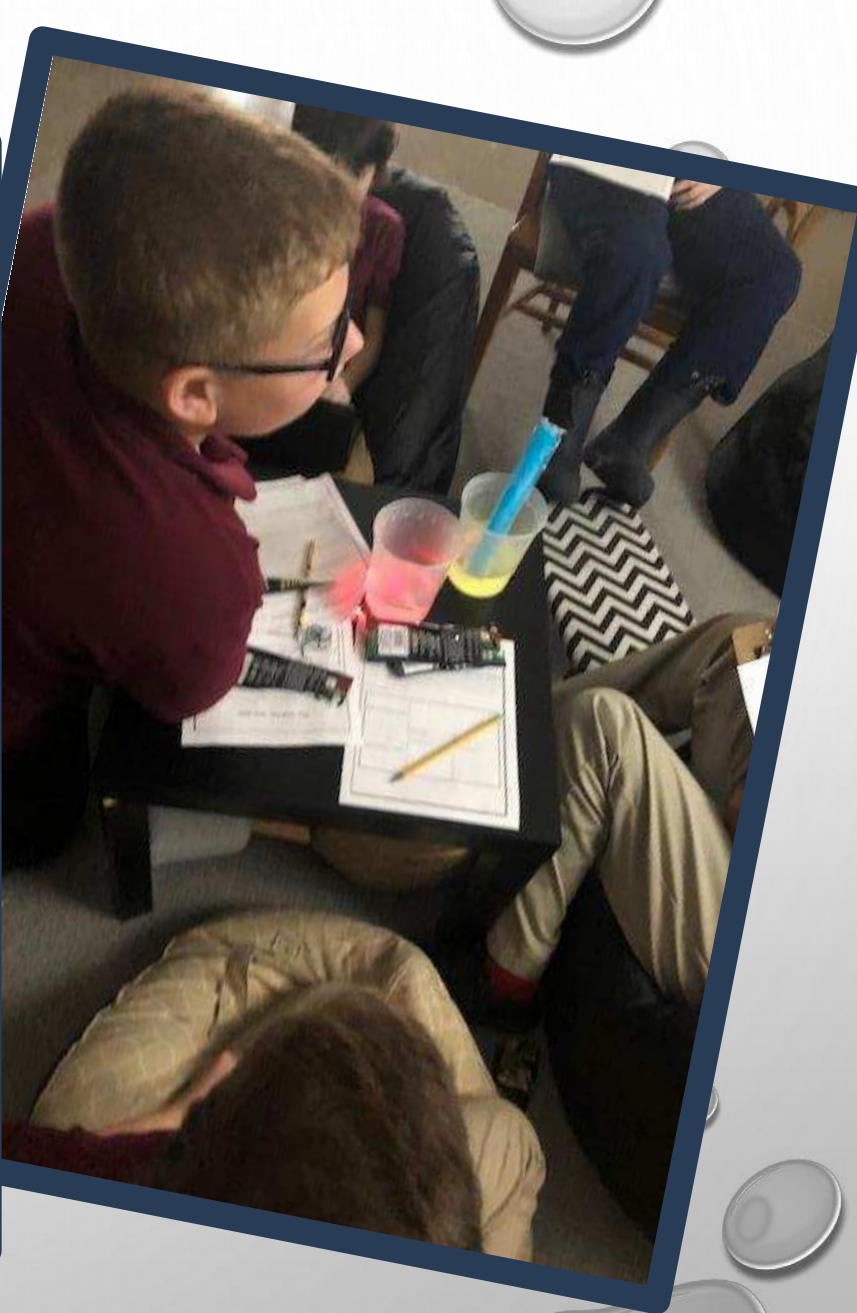
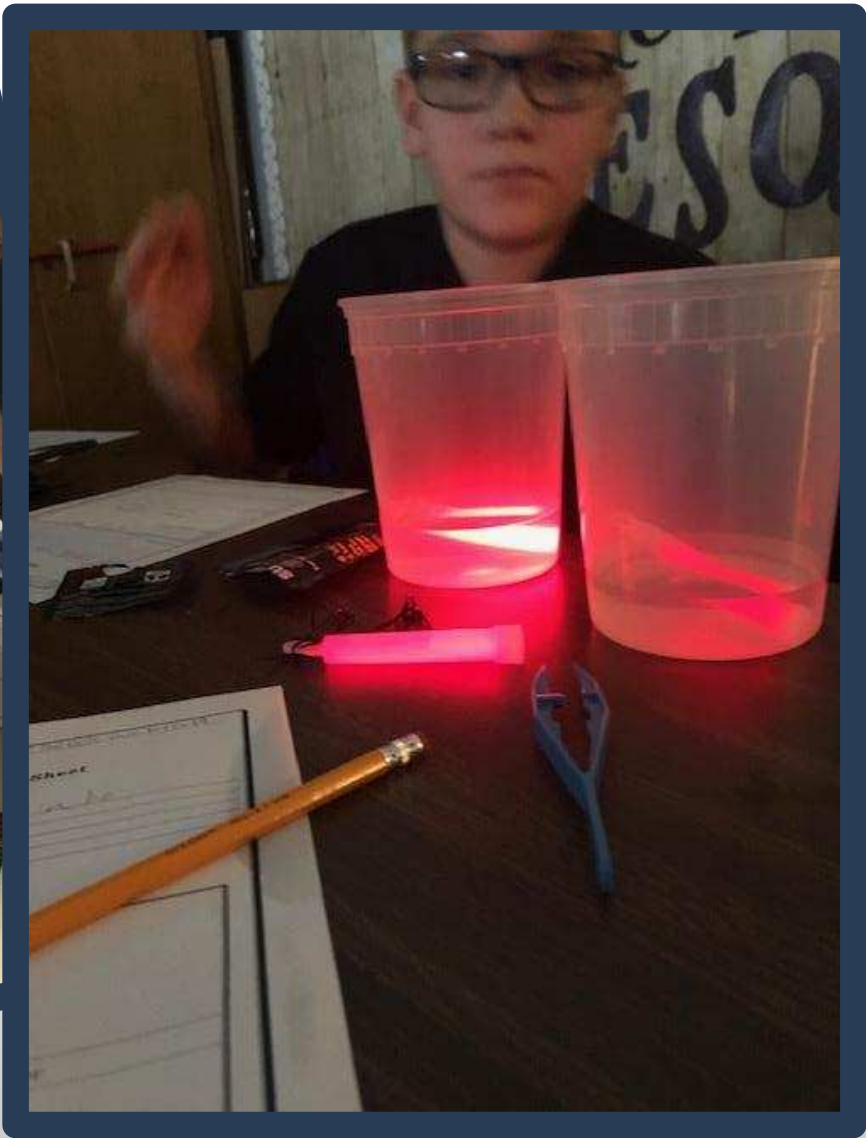
**Station One: Kinetic and Potential Energy**





**Station Four: Thermal and Motion Energy**



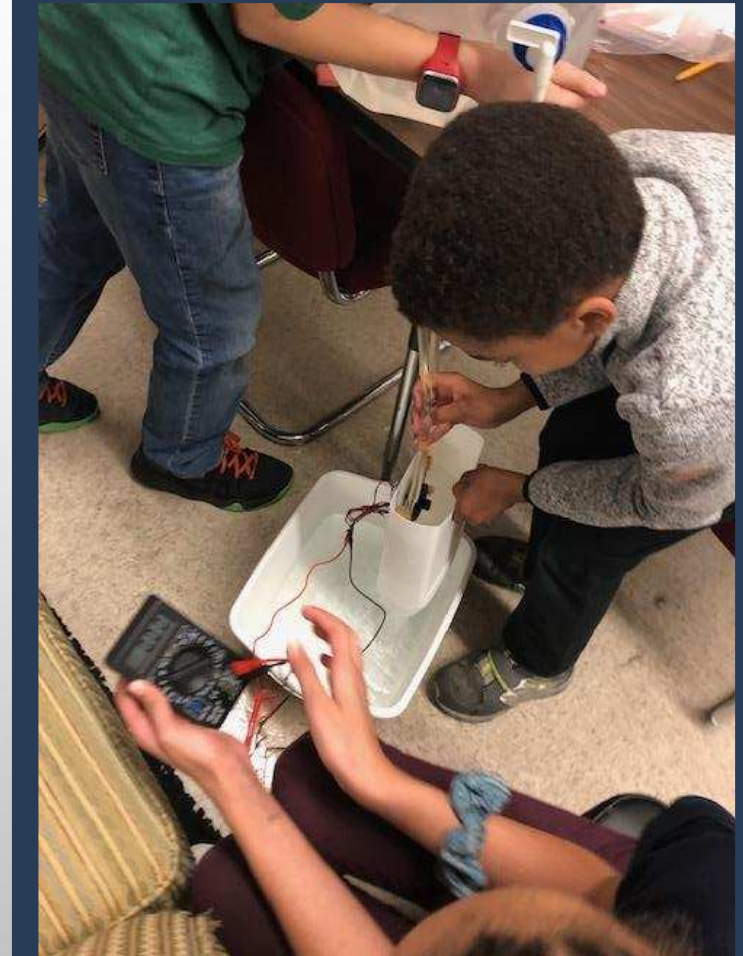
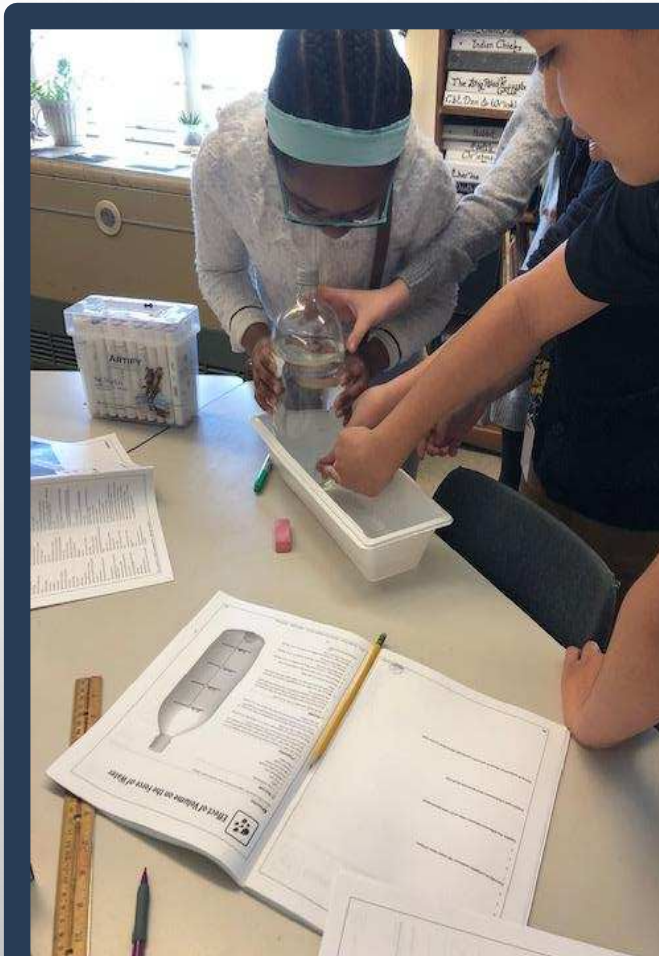
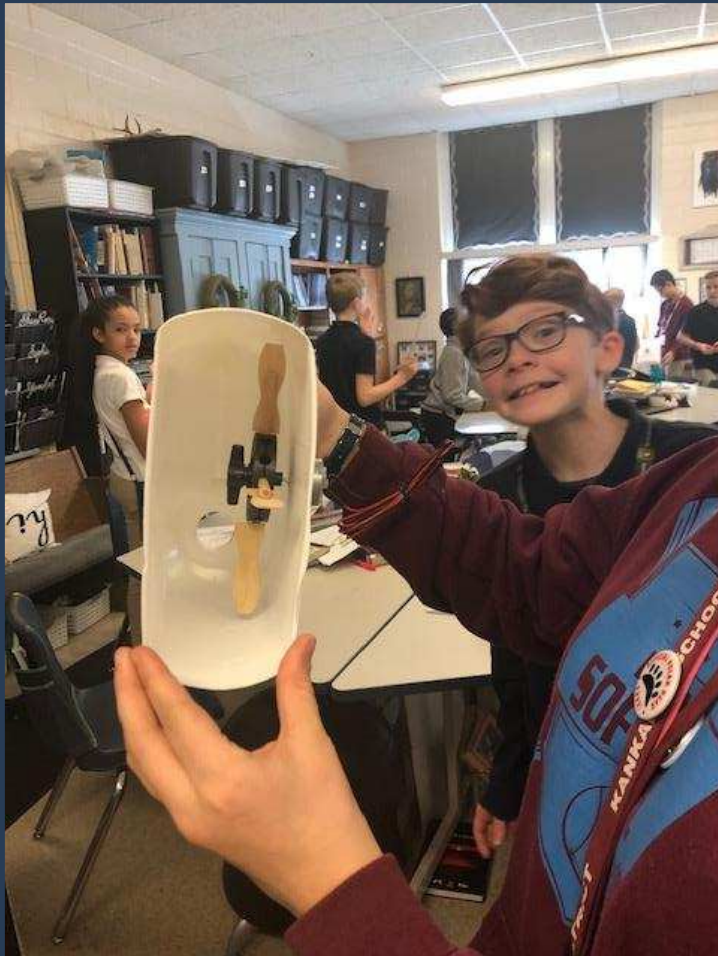


**Station Five: Chemical Energy**



# WATER, WATER EVERYWHERE...

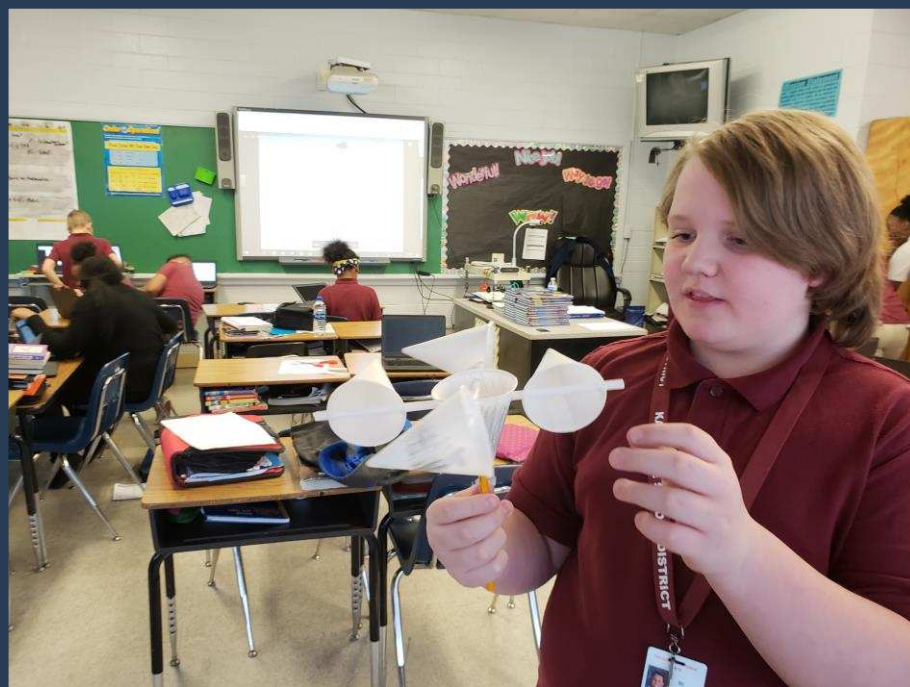
**Our city has a small hydroelectric plant. We discovered that the power generated from the small facility powers our city's waste water treatment facility. We explored the power of water in the classroom as using the materials in the Energy of Moving water kit.**





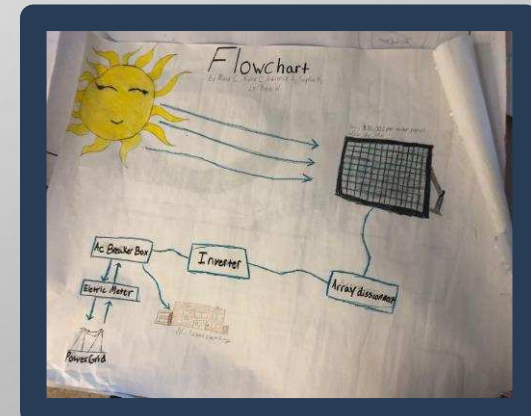
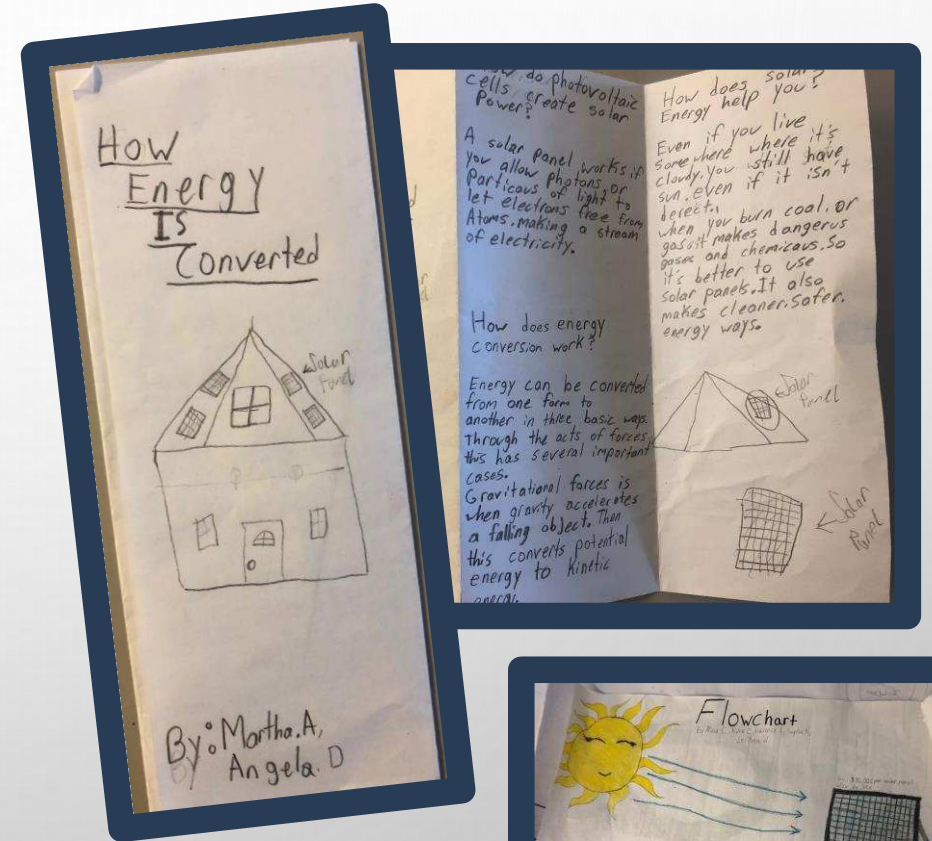
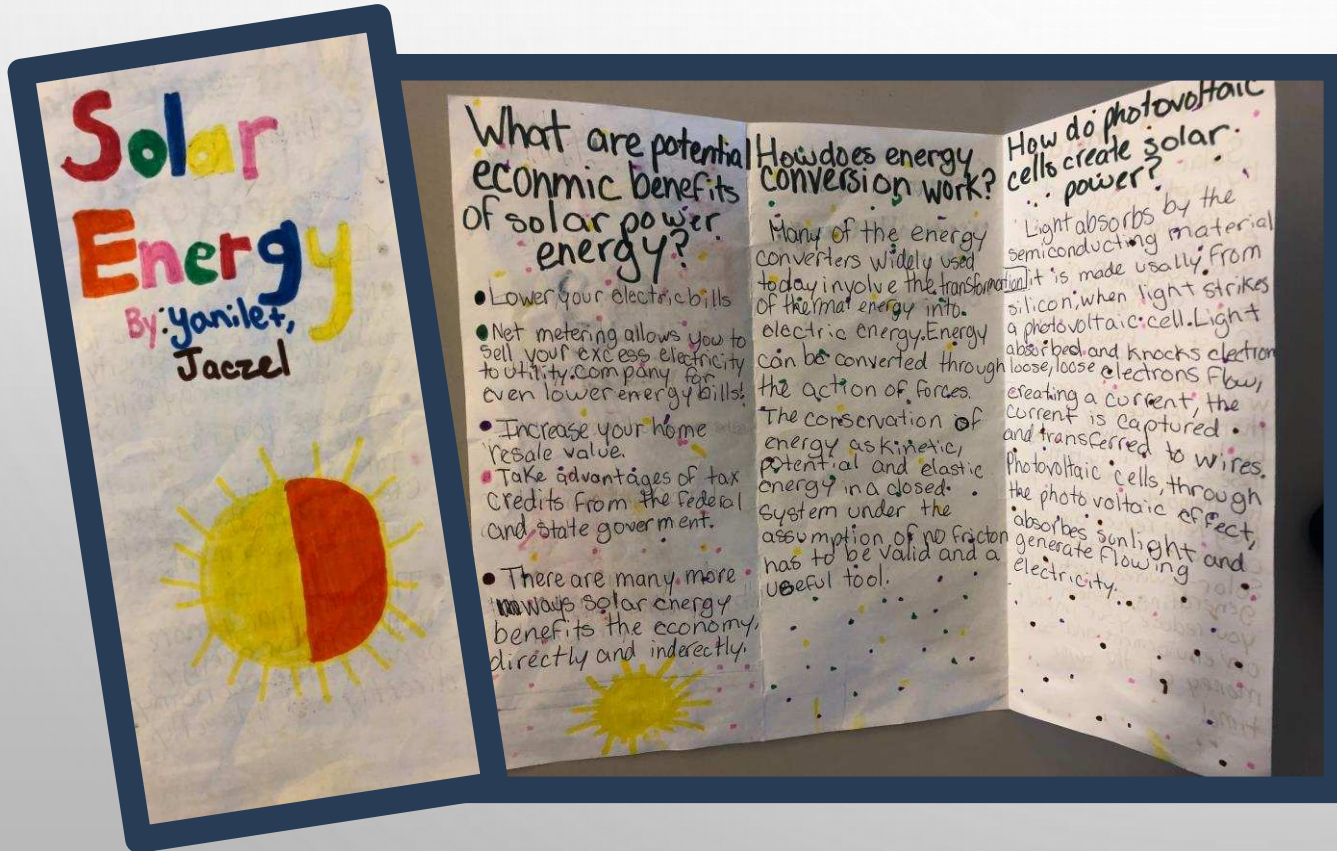
# ...BLOWING IN THE WIND...

**Our community is surrounded by wind turbines. Our students did an exploration of how wind turbines generate electricity using the Wind Energy curriculum.**





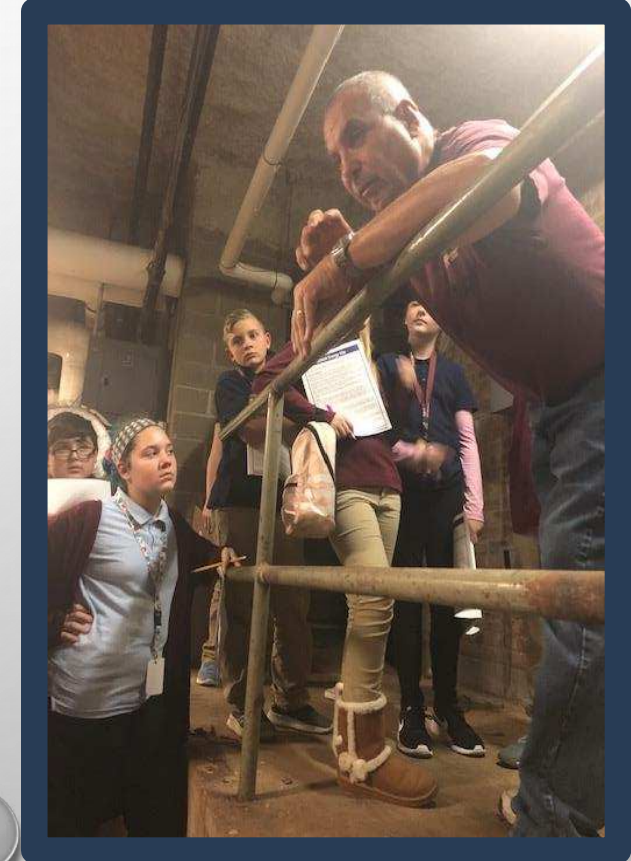
# LET THE SUN SHINE IN...WITH SOLAR EXPLORATION





# GOAL 2: EDUCATE THE STUDENTS IN OUR SCHOOL ABOUT ENERGY USAGE AND ENERGY CONSERVATION

**Energy Audit at Kennedy Middle School-Learning how our school works and how we could make improvements. Even our custodian, Mr. Ron, gets in on the learning process.**



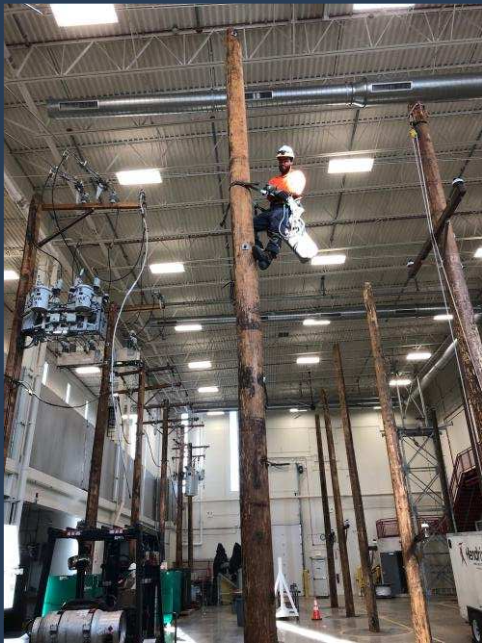


## Field Trips and Experiences

**Museum of  
Science and  
Industry  
Chicago**



**Teacher  
PD at the  
ComEd  
Training  
facility**



**University  
Of  
Illinois  
Engineering  
Open  
House**

**Teacher PD at  
iFly-Wind Power**



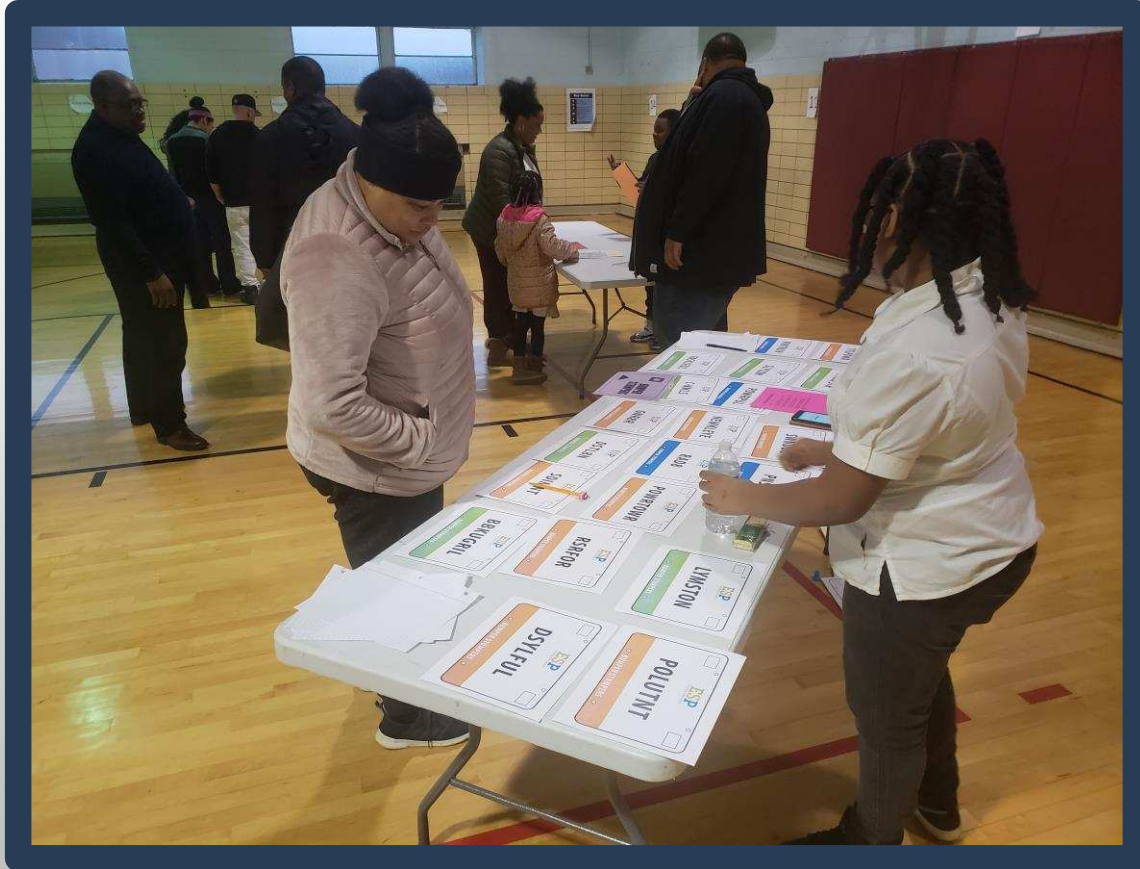
# GOAL 3: TO HELP EDUCATE OUR FAMILIES AND COMMUNITY MEMBERS ABOUT THE SOURCES OF ENERGY, ENERGY USAGE AND ENERGY CONSERVATION.

In early March we held an Energy Carnival/Science fair. Over 200 families and community members came out to learn about the Science of Energy and other amazing STEM topics and occupations.





# Energy Carnival Games





# Science night activities...

**Families try some blade design.**



**Getting oil and gas to the surface is harder than you think!**





**This year we added on to our study of energy. We obtained additional resources from the Illinois State University Center for Math, Science and Technology. We were able to transfer all that we learned from NEED into wiring our own cities from various power sources. We used what we learned about conservation of energy to operate smart homes.**



We used what we learned about energy to wire a city on the smart grid.





# Are You Smart About Your Energy Usage?

## We Are!

