



Short Line School Engineer Energy Kids

Covid-19 Won't Keep Us From Learning About Energy! Advisor: Leslie Lively

The Engineer Energy Kids learned a lot about energy during the pandemic. Students masked up and got their hands and brains busy this year. Although we didn't get to go out into the public to teach, we still were able to learn so much about energy in the classroom and take that knowledge home to our family members. Since we couldn't travel those "Country Roads" to share our information, we used our Twitter, Instagram and school Facebook to reach our community.

Goal: Our goal this year was to complete as many energy related projects as we could during our short time in the classroom.

Activities: This year we completed activities during the virtual NEED Conference, Wonders of Wind, Source of Energy Kit, Searched the NEED website for information for our posters, Energy Escape Room, used HESS toys to learn about energy, and topped it off with some snap circuit fun!

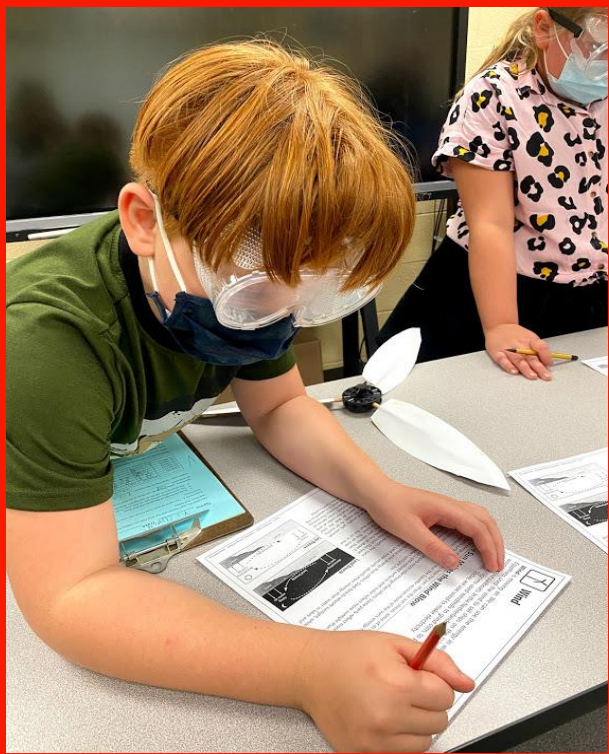
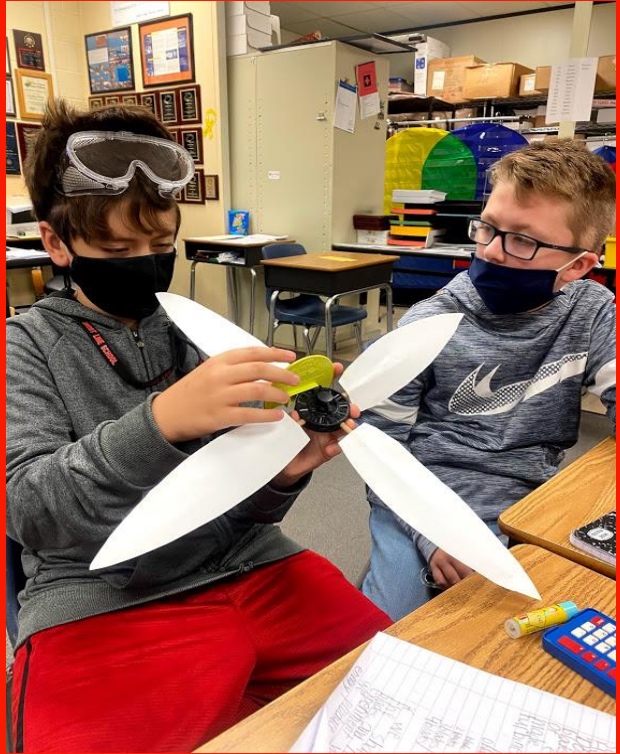
Resources: NEED Conference, Wonders of Wind Kit, Source of Energy Kit, NEED Website, HESS toys, and Snap Circuits

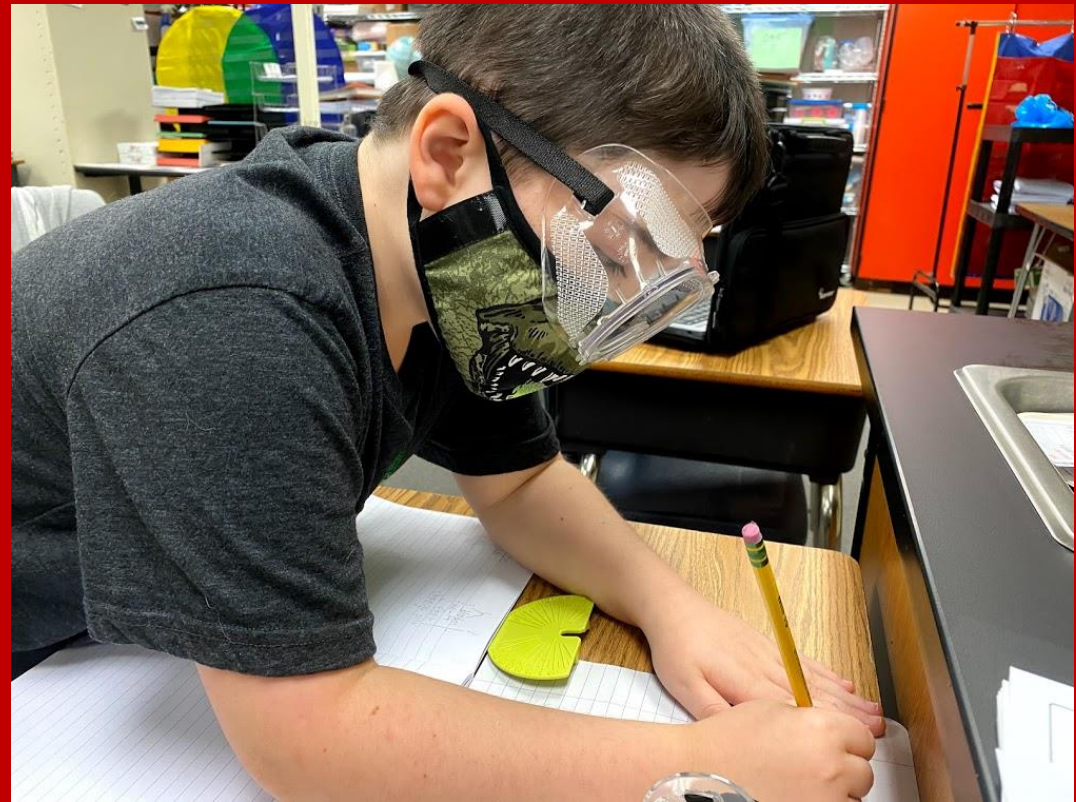
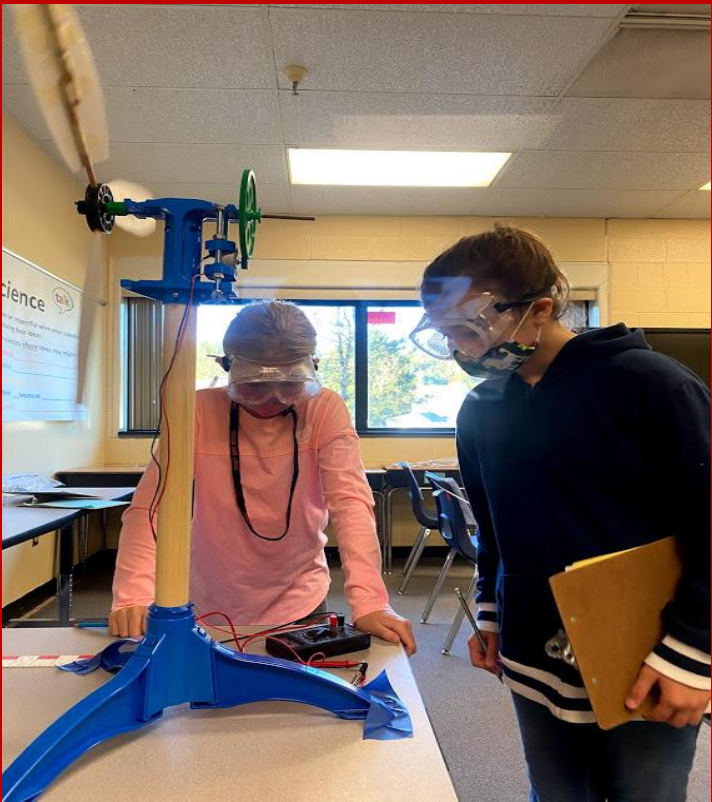
Leadership: We all had a chance to be leaders in Mr. Lively's class. He expects us to be leaders. We would learn about different types of energy and share that information with others in our class. We took an active role in our learning.

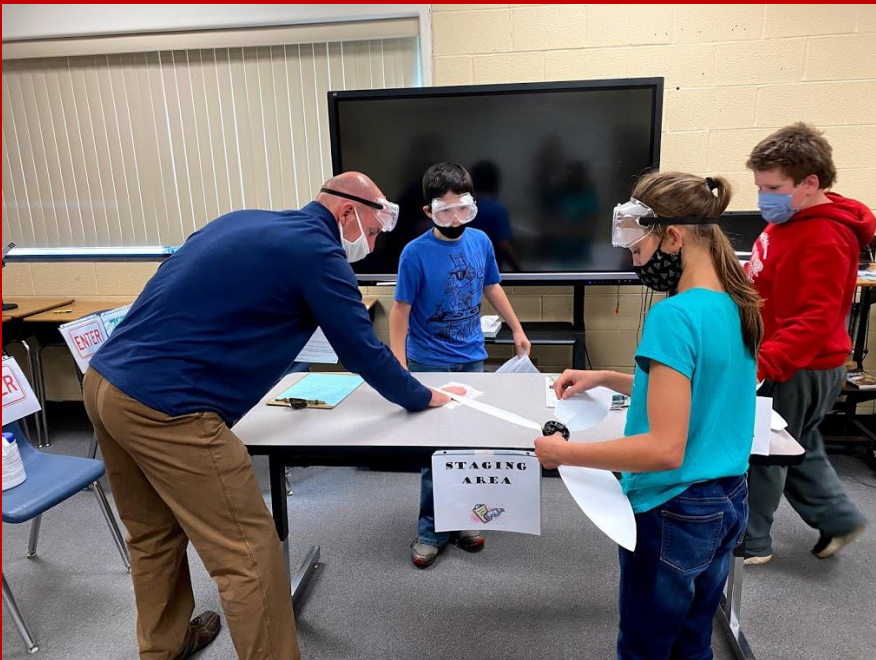
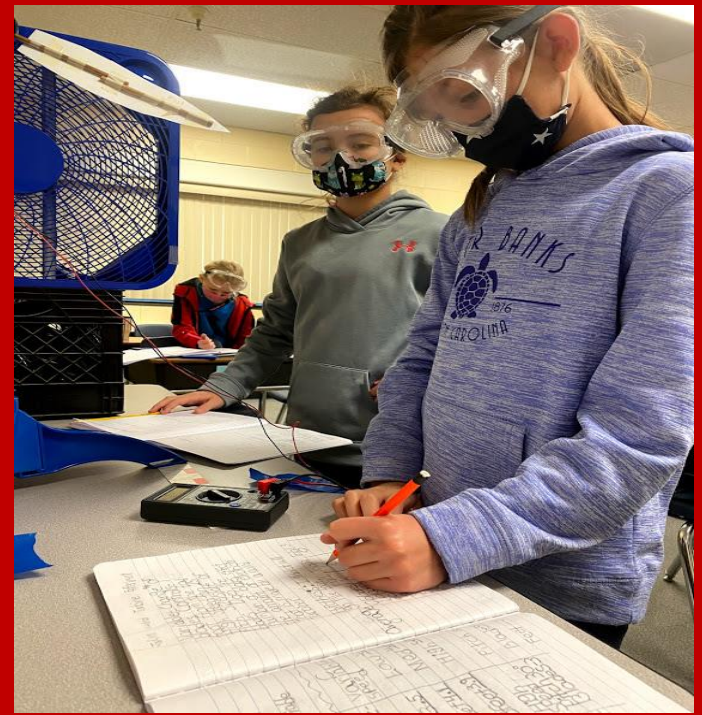
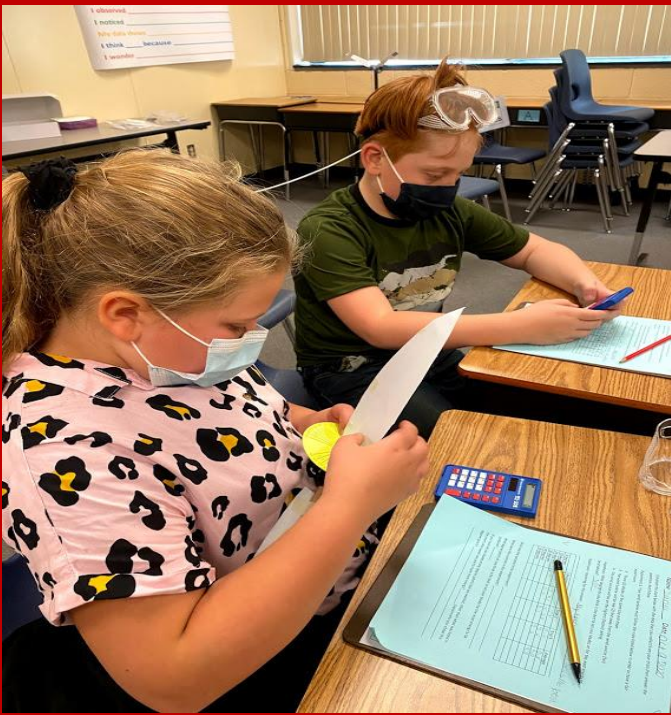
Evaluation: We were evaluated throughout each lesson with mini quizzes and then a test at the end of each unit that we completed. Mr. Lively would also complete walk arounds as we worked on a lesson to ask questions and check for understanding. He would let us share our knowledge as we learned from our hands on activities.

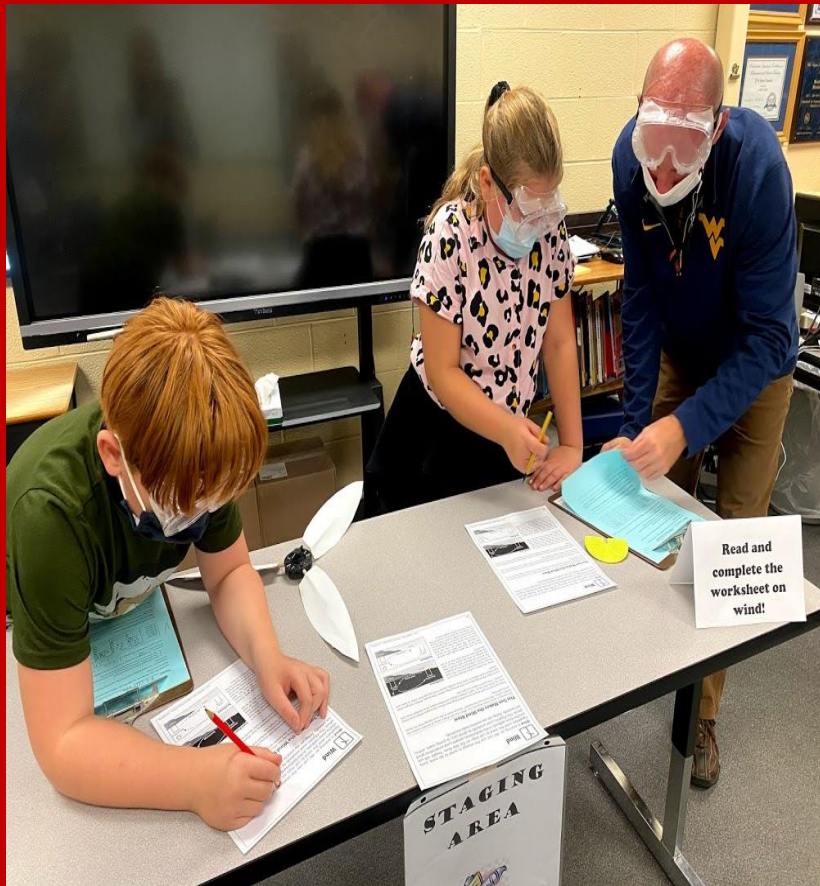


We really enjoyed learning about wind energy. We learned that by designing different blades would create more energy. We also figured out that changing the pitch of the blades would effect the amount of energy. Mr. Lively created a data collection sheet that we had to complete. We learned how to average the amount of energy created with our blades.

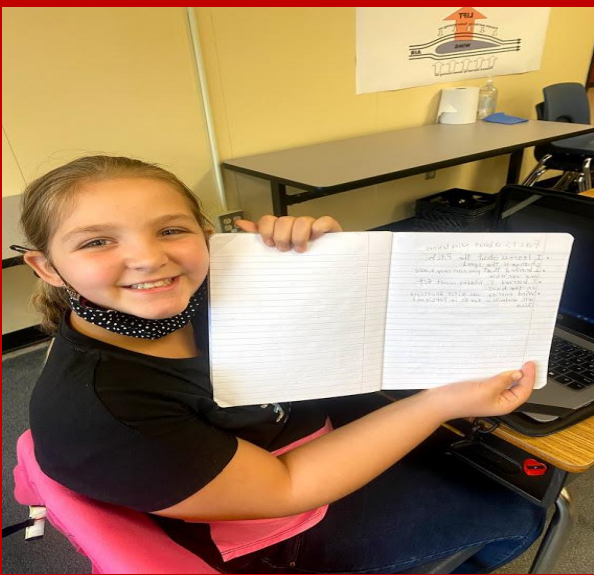




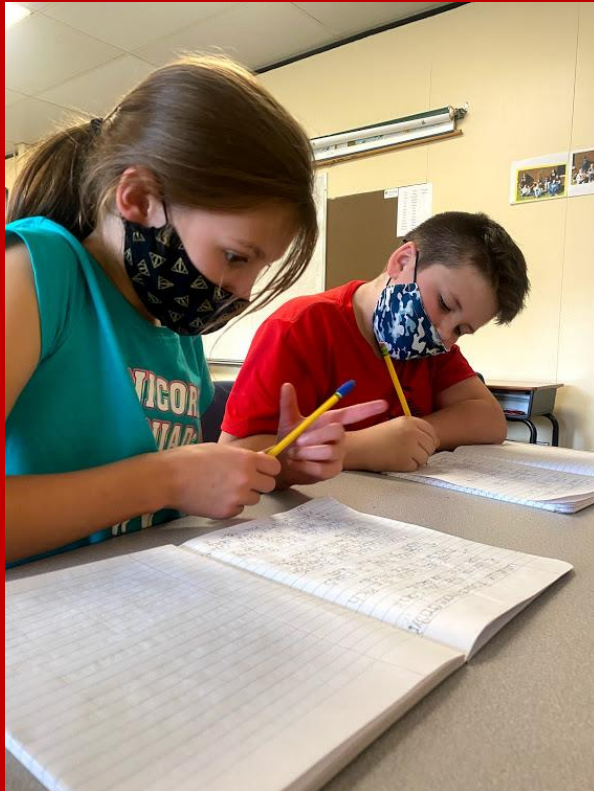


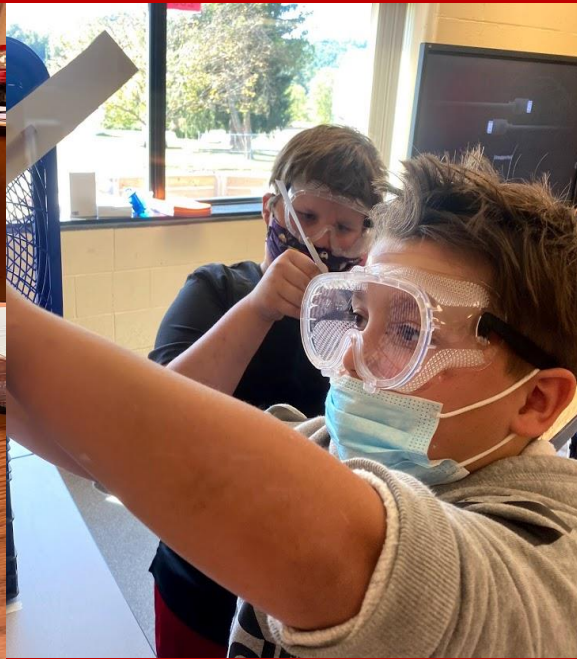
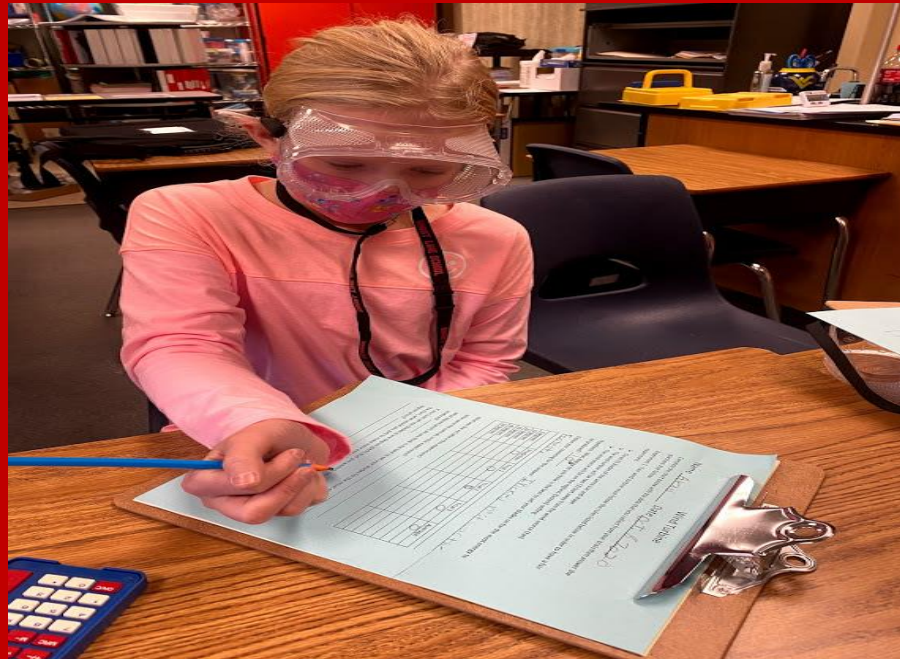
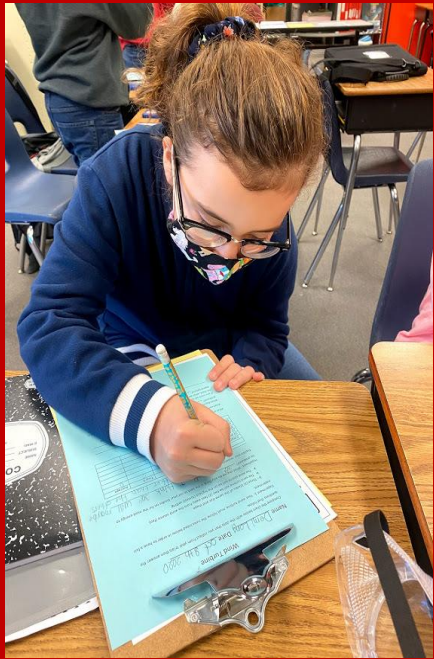
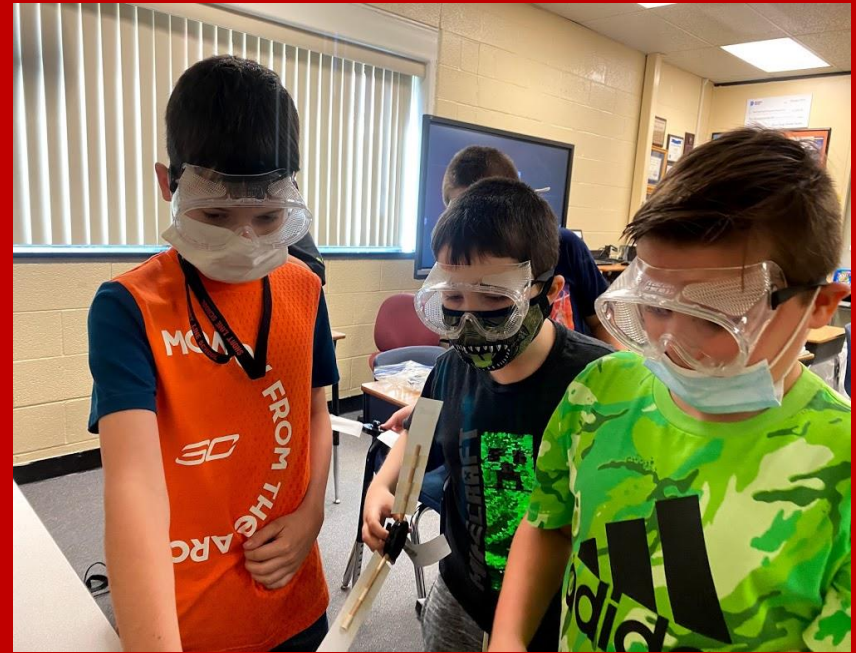
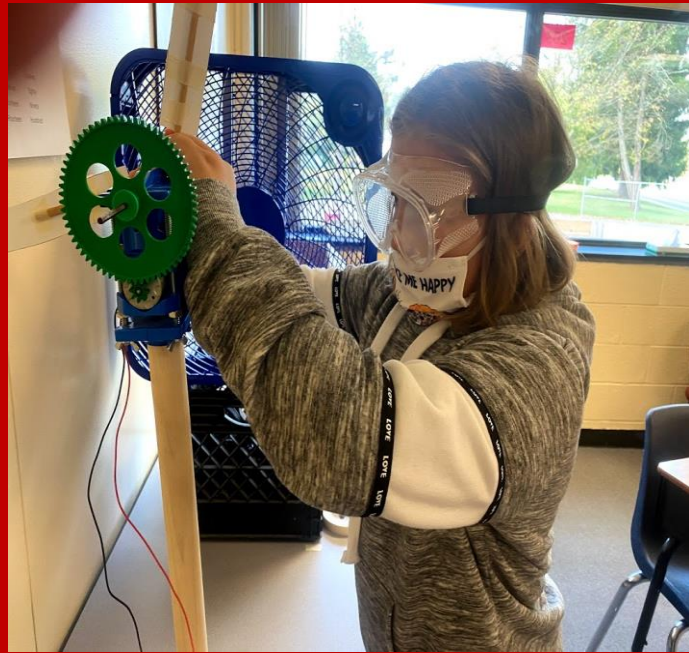
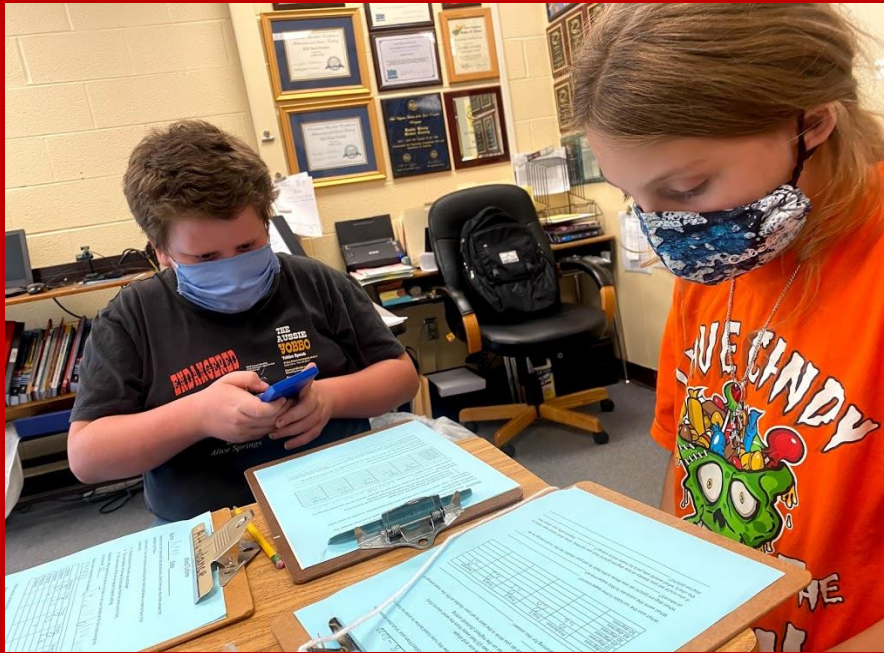


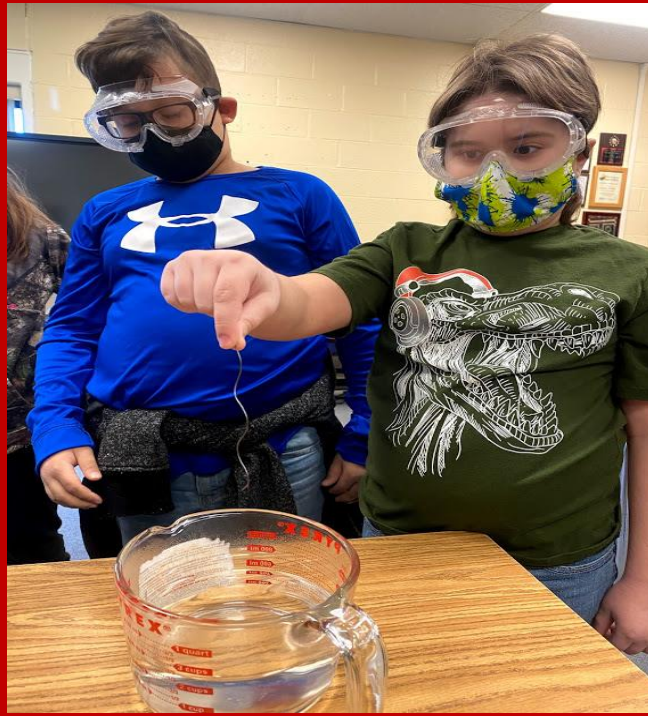
Mr. Lively was nominated for the Presidential Science Award and completed his lesson on wind energy. We had the opportunity to be filmed to show what we had learned. Mr. Lively was a WV state finalist and is now waiting to see how he did at the national level.



In science class, we are always collecting data and making improvements. At the end of our unit we had a competition between all three of Mr. Lively's science classes to see who could produce the most energy with our wind turbines. The competitions make it fun to learn. We know we are all winning because of the learning that is taking place in Mr. Lively's classroom. He is always encouraging us and guiding us as we work through the lesson.

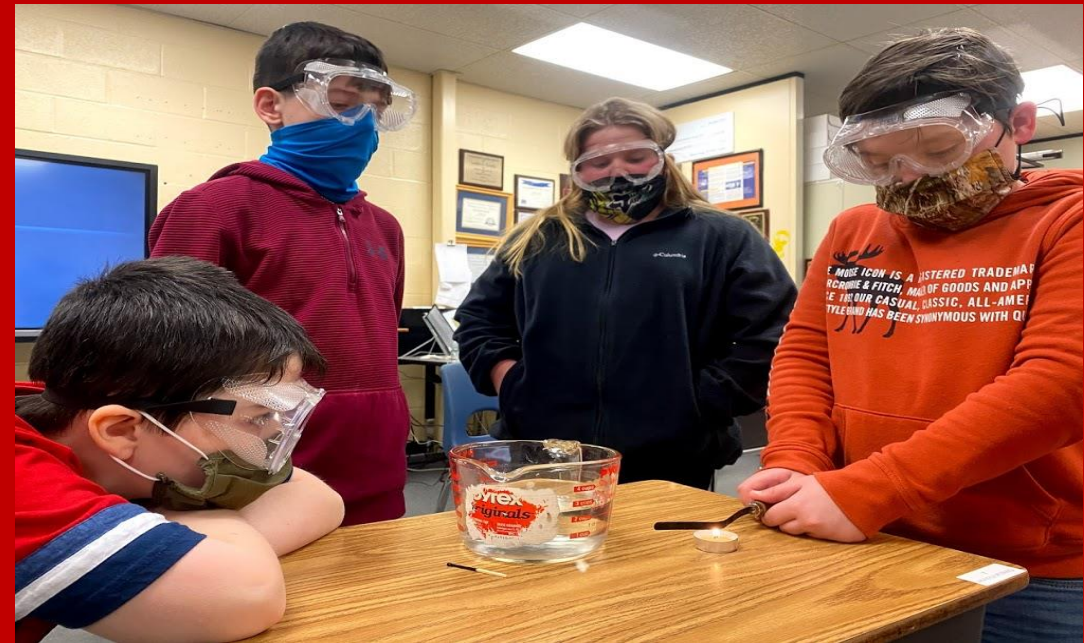
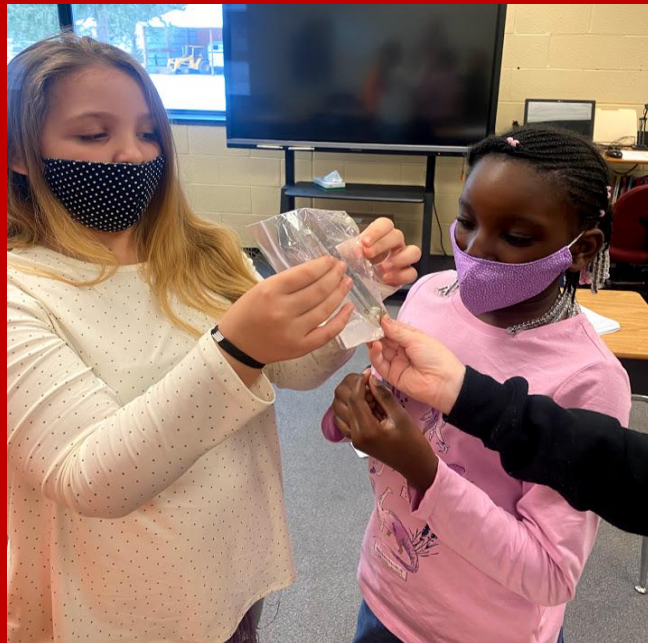
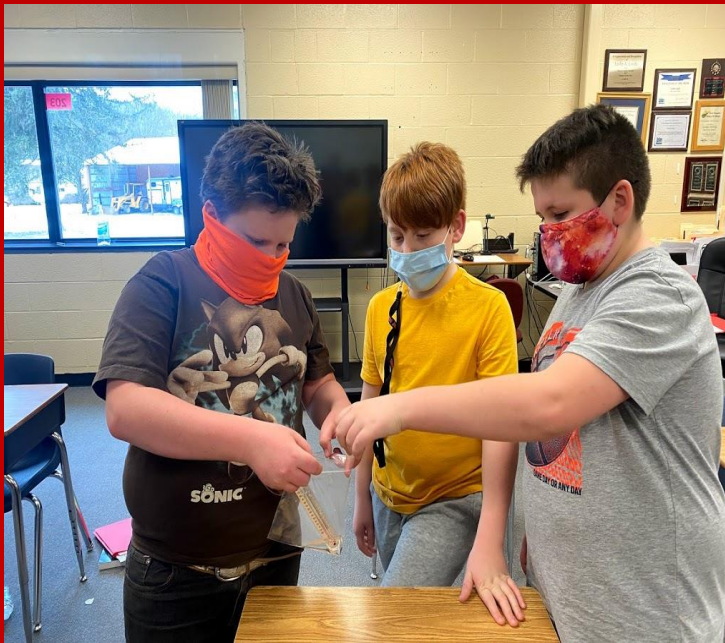


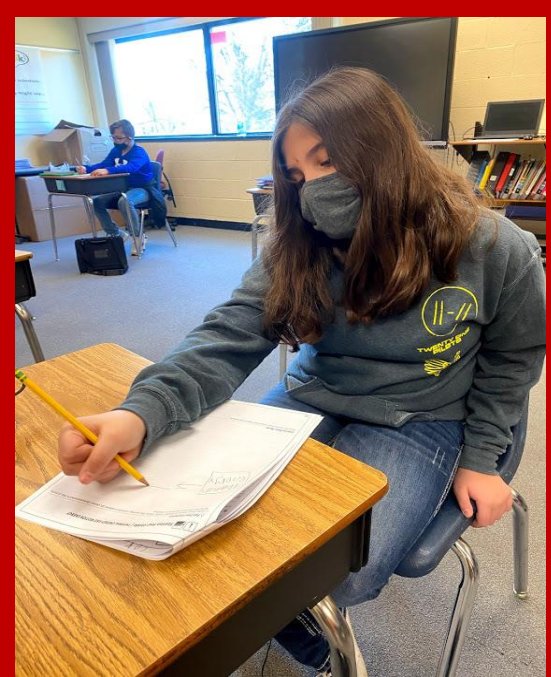


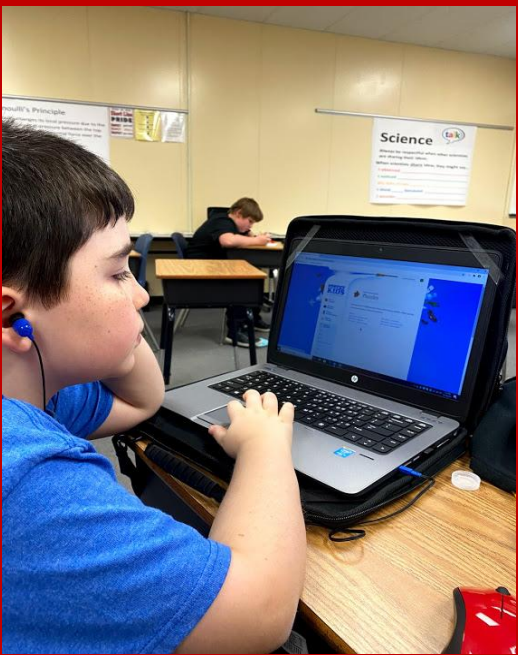


We used the Science of Energy Kit to learn about the forms of energy. Mrs. Christy, our county math coordinator just happened to stop by and joined in on the learning.

Students loved learning about how energy is never lost but transformed from one form to another. We really liked learning about how each of these stations connected to our daily lives in some form or another.

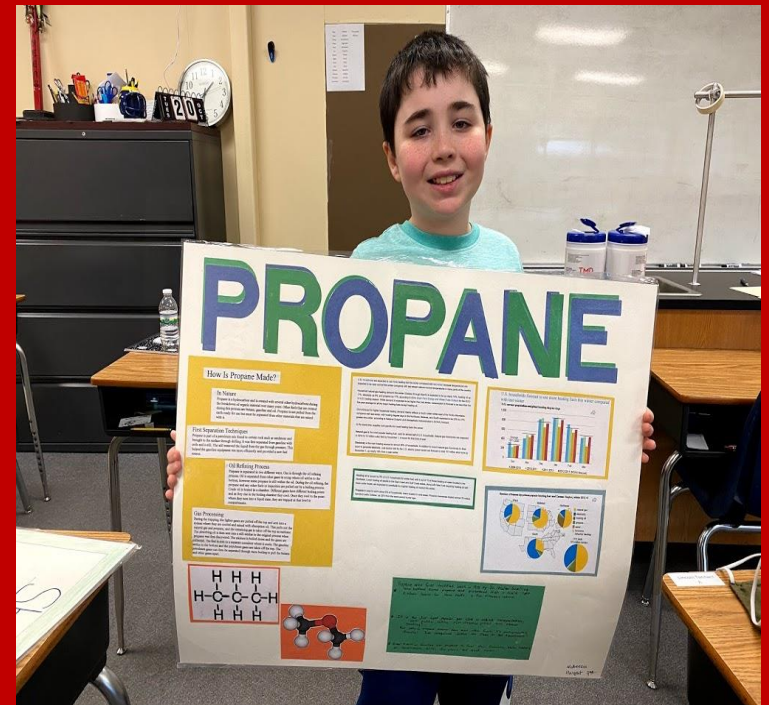
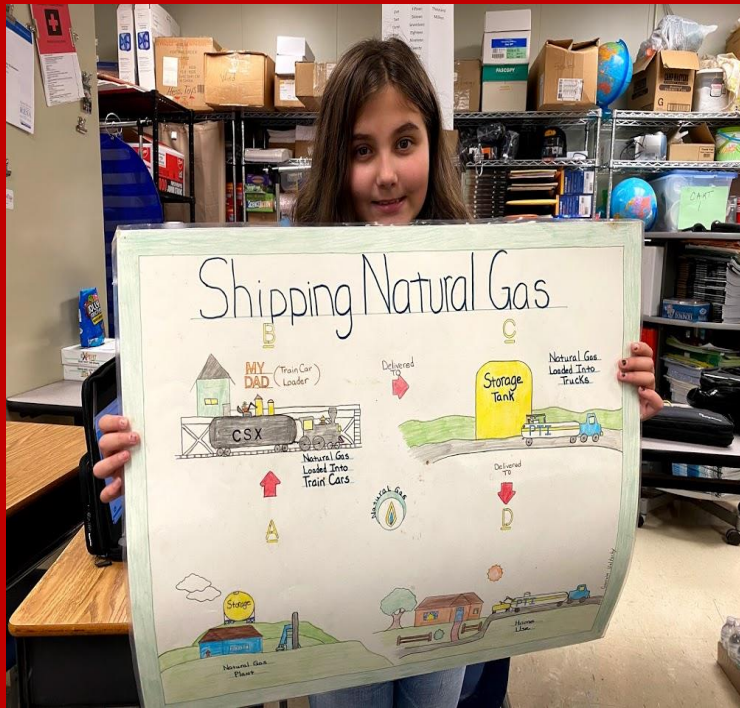






We had the opportunity to explore the NEED.org website to learn more about energy. We also had the chance to see some of the other projects that kids from across the county had completed.

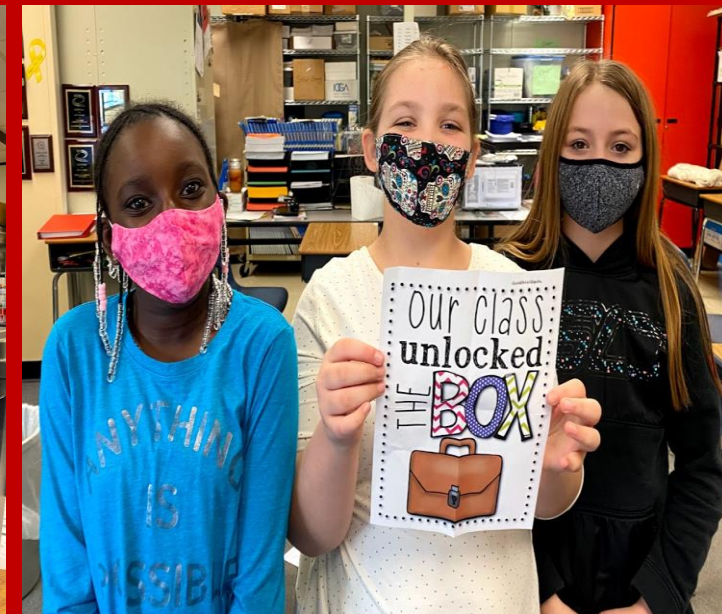
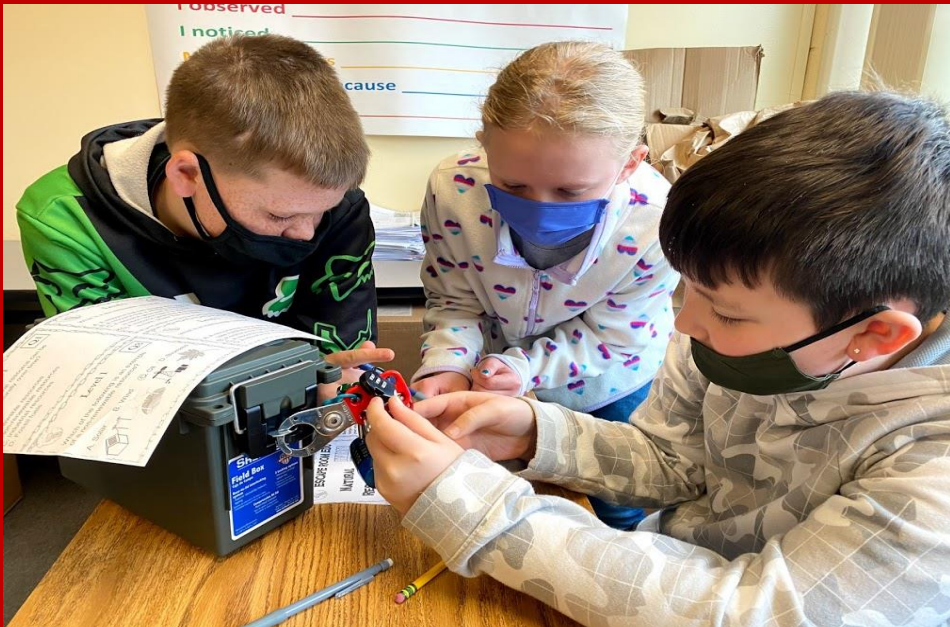
Mr. Lively also pulled out some posters that his previous students had made while learning about energy. The students that made these have now graduated from college. Several of them work in the energy sector.

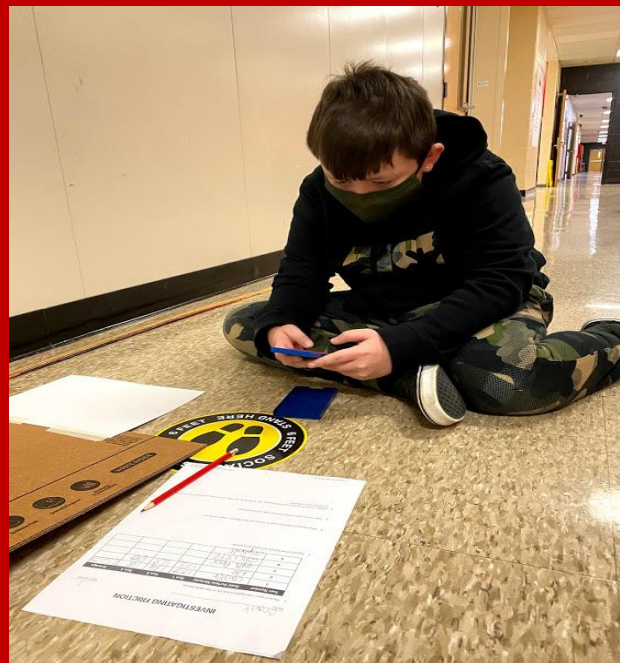




After completing the NEED escape room we asked Mr. Lively to find another one for us to try. We had to complete five levels in order to “Escape the Box”.

We had 45 minutes to complete all the levels in order to get to the prize hidden in the box.





Using our HESS toys we learned about speed, friction, and velocity. Of course, we ended with a drag race competition. We work hard and we play hard in the 4th grade!





Having a little fun while learning. Snap circuits are fun to use all while learning about series and parallel circuits.

