



2025 - 2026

Afton Elementary's

ENERGY JOURNEY

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hello



Dear Friends at NEED,
We have been working hard all year to learn more
about energy so we can make better choices in our
homes, school and community. We also teach others
what we have learned so we are all smarter and
take better care of our resources. We hope you
enjoy the slides showing Afton's Energy Journey.



Your Afton Friends

Afton's Energy Initiative

K-5 SPARK Classes

All students in our elementary schools learn about energy as part of our SPARK curriculum. The teachers attended at least one NEED workshop & use NEED Resources.

Afterschool Program

Over 50 students volunteer to meet after school as part of our Green Team in the Young Environmentalist Program. They participate in activities to care for our Earth.

Schoolwide Programs

The staff and PTO look for free assemblies, programs and presentations to come to our school to teach us more about energy.

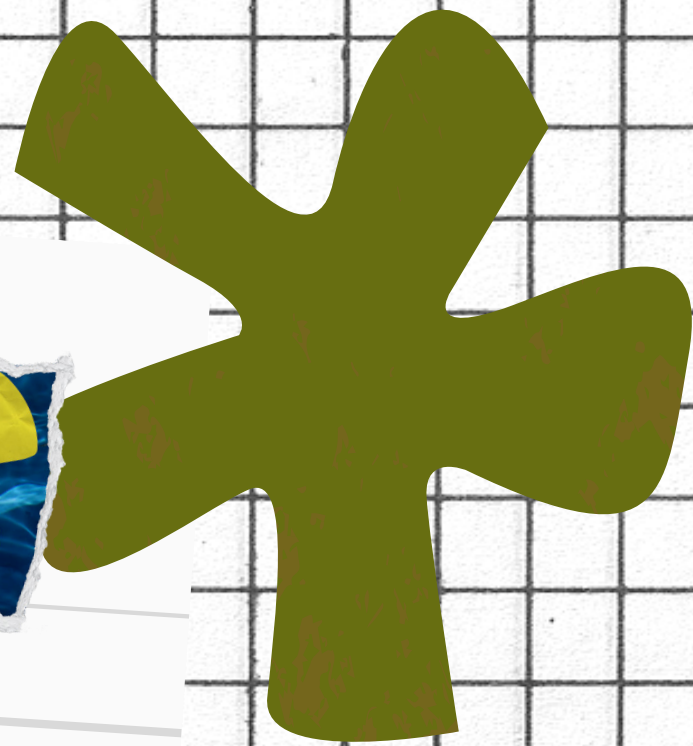
Kids Teaching Kids

The students in the intermediate grades plan an event each year to teach students in our primary grades more about energy.

Empowering Students Schoolwide

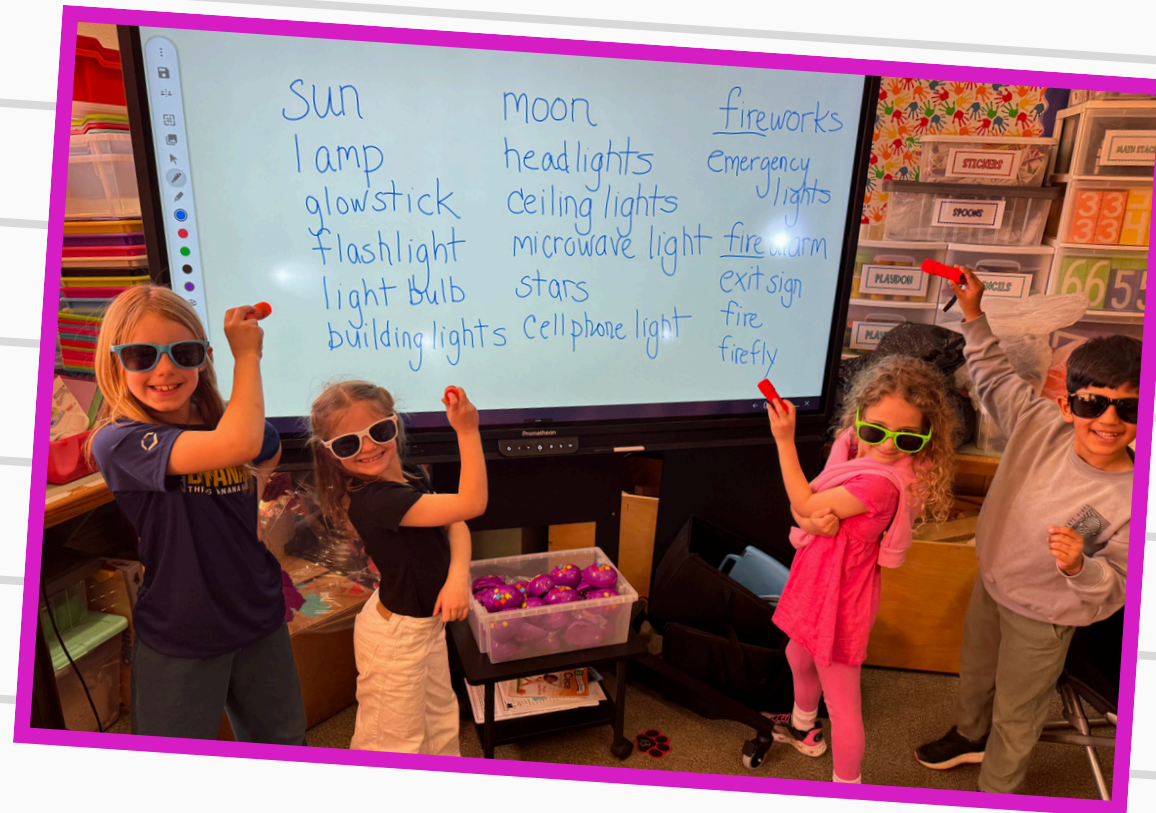


SPARK CEASs



All students at Afton Elementary participate in SPARK (STEM) class once each week. Across all grade levels, energy is now a component of the curriculum, with instruction supported by NEED resources. Students build an understanding of energy types, transformations, sources, and conservation through engaging, hands-on learning experiences.

- Kindergarten
- 1st Grade
- 2nd Grade
- 3rd Grade
- 4th Grade
- 5th Grade



MOTION ENERGY

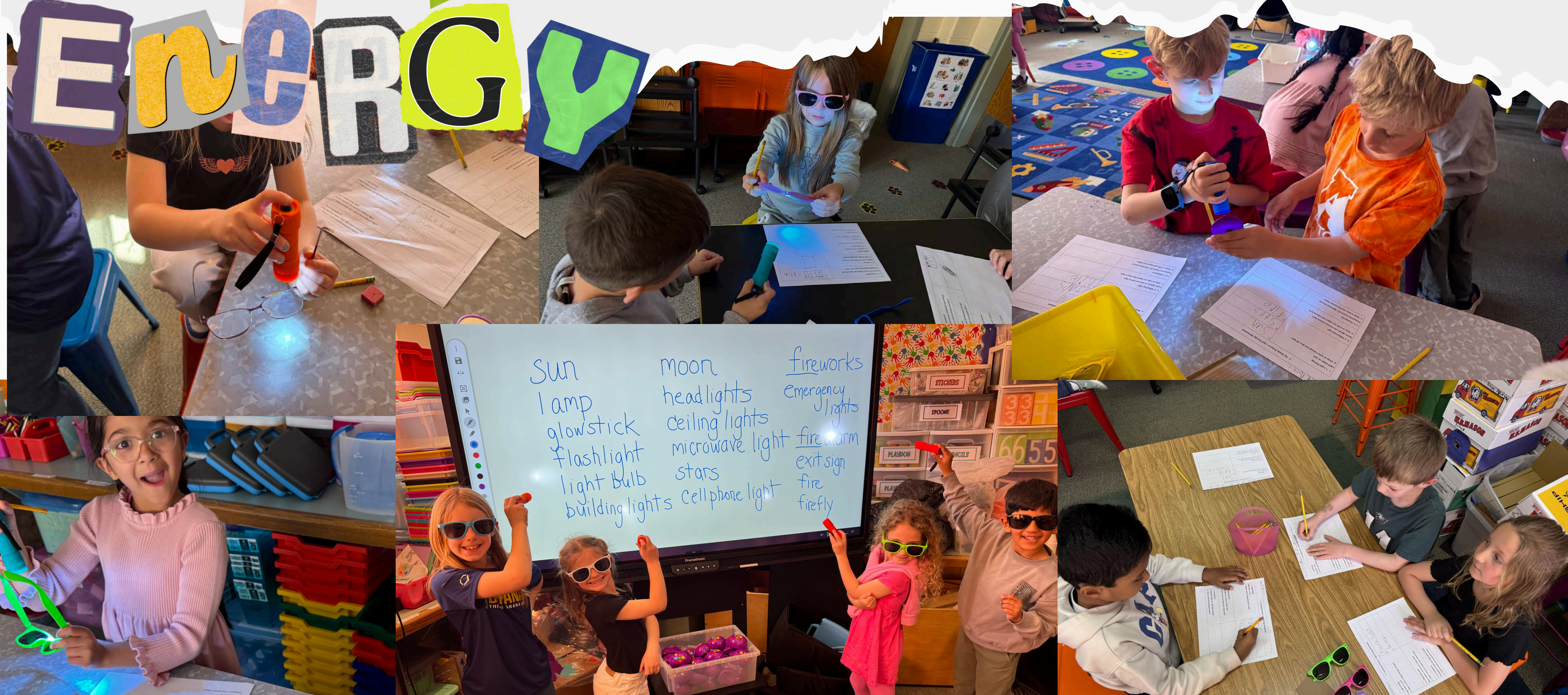


Kindergarten students learned about **MOTION ENERGY**. They used basic coding to get Robot Mouse to move. The Robot Mouse was put in **motion** by using **energy** from **batteries**.



Light Energy

1st graders investigated light energy by exploring natural and human-made sources. They observed how flashlights transform stored **CHEMICAL ENERGY** into **LIGHT ENERGY** learning how energy can change forms.



ENERGY 4 ANIMALS

2nd graders explored how animals get the energy they need to live and grow by consuming food. They learned that this energy is stored as **CHEMICAL ENERGY** and how animals are classified as herbivores, carnivores, or omnivores based on what they eat. They created biome box displays to show an animal's food that provides it with energy.





WASTE 4 R'S

3rd graders explored the power of the 4 R's - **REDUCE, REUSE, RECYCLE & REPAIR**. By reducing waste, reusing materials, and recycling properly, students know they can help conserve energy, protect natural resources, minimize landfill use, and even lower costs for their family. Students are learning that small actions can lead to big benefits for our environment.

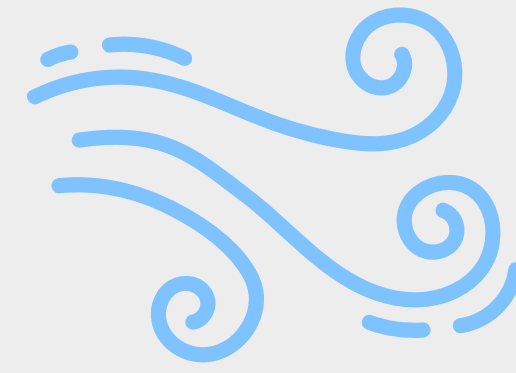
Coming Soon: BIOMASS IN A BAG on Zoom with Ms. Emily.

ENERGY TRANSFORMATION

4th grade students investigate how **POTENTIAL ENERGY** transforms into **KINETIC ENERGY** through the design and construction of marble runs. As they plan, build, and refine their designs, students observe energy in motion, analyze how height and structure impact speed, and apply problem-solving skills to optimize performance. **Coming Soon:** Renewable Energy Sources

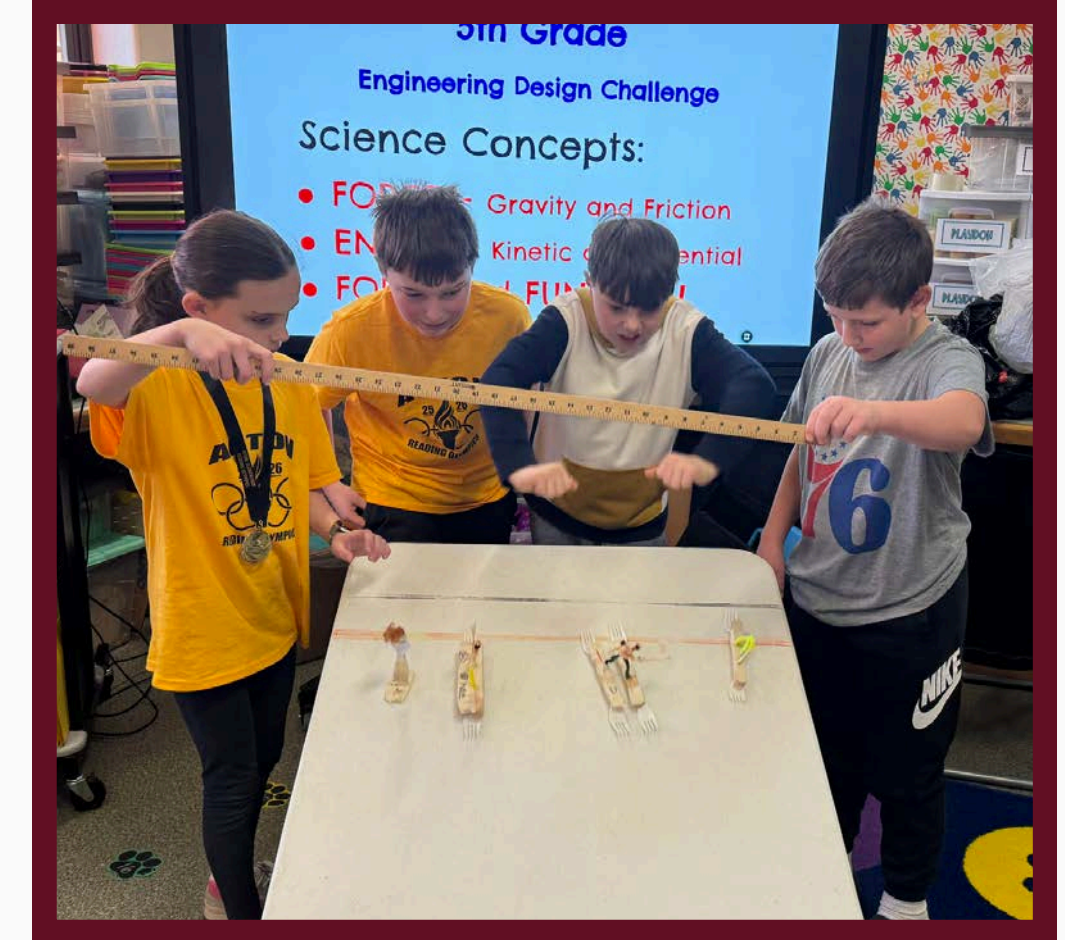


ENERGY



TRANSFORMATION

5th grade students explored **KINETIC** and **POTENTIAL** energy, as well as **ENERGY TRANSFORMATIONS**, through hands-on engineering design challenges. Working in teams, they applied these concepts while designing and testing catapults and ski racers. **Coming Soon:** Renewable and Nonrenewable sources in May and June.



CLEAN UP

4th and 5th Grade- Fall 2025

Environmental after school volunteers learned the importance of proper waste disposal through hands-on campus cleanup.



FALL 2025 Bulb Planting



Students in the after school Environmental Program (YEP) explore how plants use light energy from the sun to support growth and development.

GROW **TH**



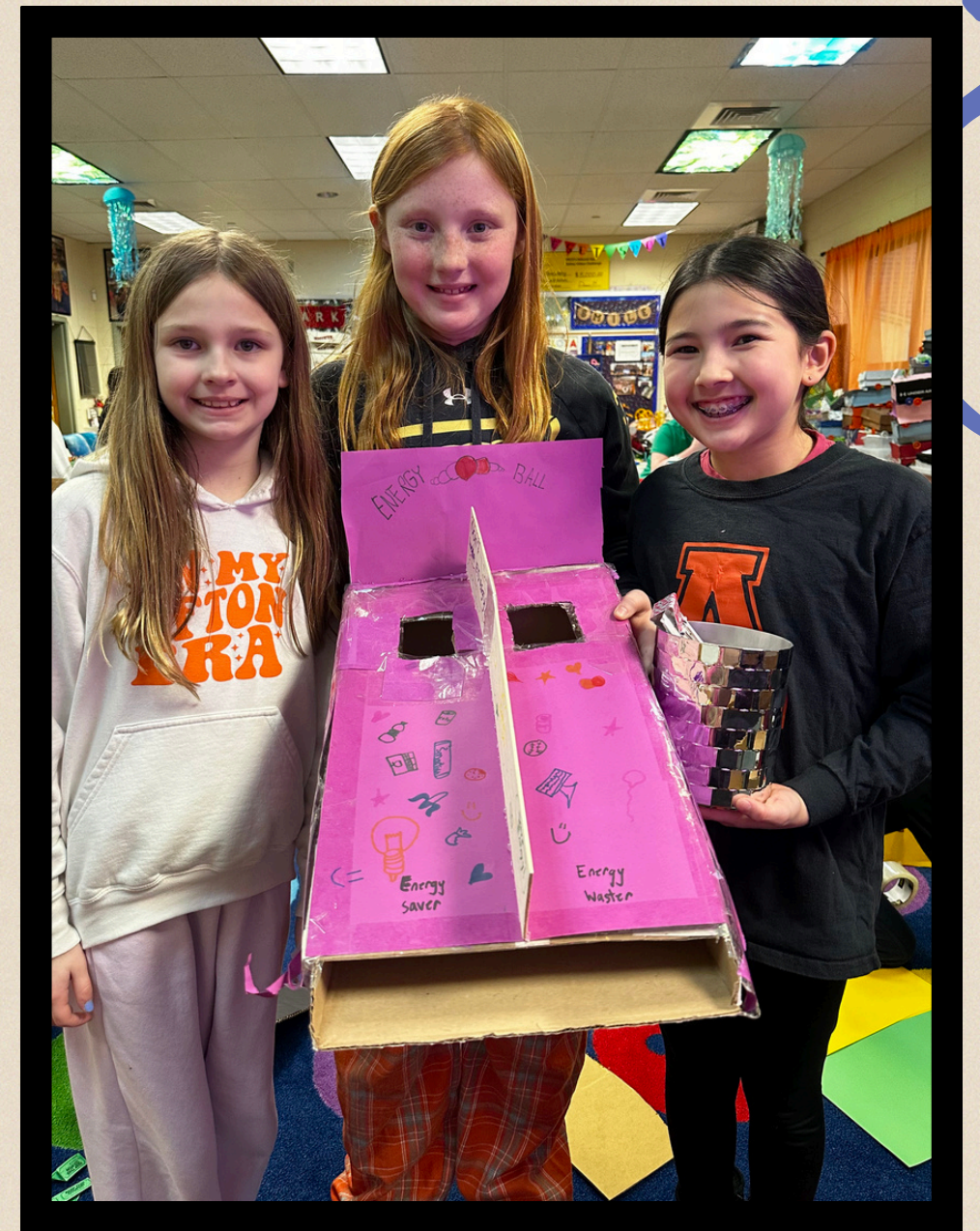
SCHOOLWIDE



NTC Space Station Conservation Assembly for K-5 sponsored by PECO



Litter Presentation to primary classes by Diana from PA Resources Council



Primary Energy Carnival created and hosted by 3rd and 4th grade

ENERGY

CARNIVAL

3rd and 4th graders took on the role of teachers, designing engaging games for the **Primary Energy Carnival** to help younger students understand key energy concepts.

LITTER BINGO



ENERGY RESOURCE TOSS



ENERGY SAVER or WASTER



GARDEN PEOPLE

In our YEP meeting we started planning for our garden. We researched different plants and walked the campus to pick a site for our new garden. We are excited to start planting now that the last frost has past. We look forward to seeing our plants use **RADIANT** energy to grow. We were awarded a \$500 grant to help buy materials.



What is it? (tool/ plant- explain)	Growth Timeline (if needed)	Link
Plant Lettuce	28 days (baby) 50 days (full)	
Double Daffodils Mixture	2 months	https://www.krebs.com/products/2-months-of-double-daffodil-mixture?srsltid=AfmBOopQJH8xocnS6Wm6mai_YkuRtnkV4A26
Procut Sunflower		Get Procut sunflower seeds from Park Seed on Amazon.
Zinnias	60-70 days	https://share.google/R3XdIQovppEYJmQF
Carrots	55-80 days for harvest	https://seedtofork.com/carrot-grow-guide/
Cornflowers	50 days	https://www.gardendesign.com/flowers/easy.html
MoSS RoSe	Around 90 days	
watermelon	less 90 days	https://anniesheirloomseeds.com/products/crimson-sweet-watermelon-citrullus-lanatus?currency=USD&
cherry tomatoes	50-60 days	https://www.gurneys.com/collections/cherry-tomatoes?srsltid=AfmBOopQJH8xocnS6Wm6mai_YkuRtnkV4A26
Carrots		https://anniesheirloomseeds.com/products/amsterdam-forcing-carrot-daucus-carota
Annual Phlox	50-65 days	https://www.gardeningknowhow.com/ornamental/flowers/fast-growing-flowers-to-start-in-spring-for-bloo
CoSmoS	45 days	https://www.gardendesign.com/flowers/easy.html
Marigolds		https://mr-fothergills.com/products/marigold-french-dwarf-double-mixed?variant=50844362801365&country
Tool Set	no growth	https://www.amazon.com/GROWIT-Treasured-Gifts-Mom-Gardening/dp/BOEW6X2XND/ref=sr_1_3.sspa?crid=68B
Mexican Flower	60 days	
Hoe and Cultivator Garden Rake with 14" Wooden Handle, Sharp Hoe Blade & Sturdy 3 Claw Tines, 2-in-1 Heavy Duty Gardening Hand Tools		
Spider flower	80 days	
mustard greens	less than two months	
lettuce	60 days	