



Conservation & Compassion

Saving Resources & Helping Others



Clarke Middle SEAT in Athens, Georgia worked to improve energy education and conservation while showing compassion to others in need!

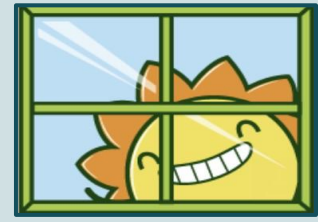
Team Sponsors:
Audrey Hughes
& Javan Winston



Science, Energy, & Adventure Team (SEAT) members at Clarke Middle School learned energy basics by using NEED resources, taking field trips, and consulting with experts. The team led by example in the school and community.

The team taught others during the Athens Water Festival, Energy Awareness Month, Insectival, the Vulture Festival, America Recycles Day, Young Scientists Day, the Classic City STEAM Festival, and Twilight. Team members supported the American Red Cross, World Wildlife Fund, Humane Society, and Gorillas on the Line. They created art and wrote poems with conservation themes. Energy Education Week was a week of learning and experiences for students, teachers, and community members. SEAT led Family STEM Night and team members completed STEM projects that focused on energy and sustainability. They promoted conservation and compassion with their work and project this year!

Learn & Teach Others



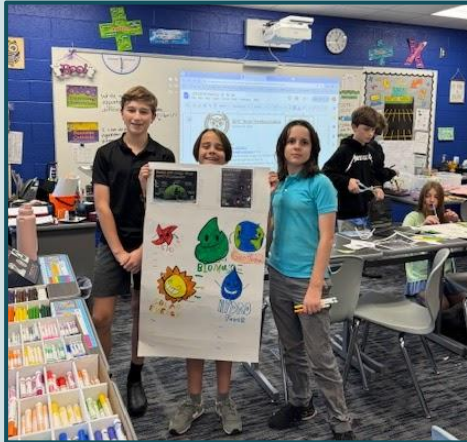
Goal #1: Educate 500 students and community members about energy during the Fall & Winter

Energy Content:

Learned using NEED resources: Science of Energy, Energy Carnival, Energy BINGO, and Energy Infobooks

Student Leadership:

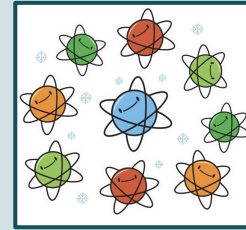
- Coordinated Solar School Day for CMS 7th graders and the Athens Career Academy
- Organized 7th Grade field trips to the State Botanical Garden of Georgia & UGarden
- Created and shared Energy Awareness Month Lessons
- Partnered with Rivers Alive to clean local waterways
- Hosted a Family STEM Night
- Coordinated guest speakers
- Distributed newsletters



Learn & Teach Others

Goal #1 Evaluation:

- Taught 725 students at Clarke Middle
- Taught 1,035 Community Members
- 39 team members learned
- 4 Field trips for 590 students
- 1,000+ adults received e-newsletters
- 60 students volunteered at CMS



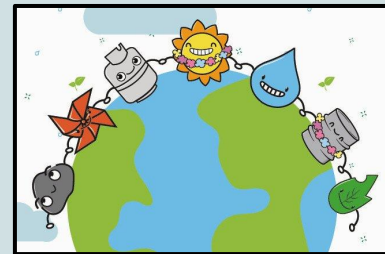


Recycle for Good: Save Energy & Help Others!

Goal #2: Conserve and save energy and resources by reducing, reusing, recycling, and repurposing

Energy Content:

- Learned how recycling saves energy by reducing industrial energy demand and fuel for transportation needs
- Studied how composting reduces waste and saves energy
- Learned how the use of water, recycling, and energy are interconnected
- Led a collection drive for Hurricane Helene victims and donated recycling proceeds to the American Red Cross
- Promoted the Team's Recycle for Good Campaign (items that can be recycled are collected and sold, then earnings are donated to the World Wildlife Fund, Animal Shelter, UNICEF, and the American Red Cross)
- Sponsored and led America Recycles Day
- Primary Resource: NEED's Science of Energy



Recycle for Good!



- Aluminum Cans
- Batteries
- Cell Phones
- Chip Bags
- Health & Beauty Product Containers
- Plastic Bags

RECYCLE FOR GOOD



Goal #2 Student Leadership:

- Recycled and donated earnings to the American Red Cross and World Wildlife Fund
- Collected pet care items for the Animal Shelter
- Worked at the Holiday Market
- Recycled Christmas Trees
- Recycled cell phones for Gorillas on the Line
- Trick or Treated for UNICEF
- Educated others about what we learned
- Made posters to advertise the Recycle for Good Campaign

Evaluation:

- 1,802 people learned that recycling saves energy
- 725 students learned and participated in the Recycle for Good Campaign
- Donated \$350 to the World Wildlife Fund & the American Red Cross from recycling proceeds
- Donated \$850 to the Athens Area Humane Society
- Collected \$256 from Trick or Treat for UNICEF
- Recycled 56 Christmas Trees
- Recycled 35 cell phones





Grow & Cook Your Food... + Eat Lower on the Food Chain!

Goal #3: Promote the consumption of local foods, cooking at home, and eating lower on the food chain at Clarke Middle to reduce processing and transportation energy demand

Energy Content:

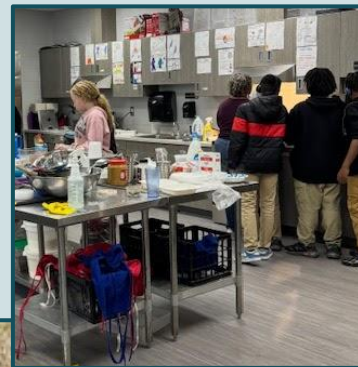
- Read and studied NEED's Transportation Fuels
- Learned how to grow, harvest, and prepare local foods

Student Leadership:

- Maintained the school garden and greenhouse
- Cooked with local foods
- Experimented with vegetarian and insect-based dishes
- Advocated for serving local and vegetarian foods more often with district nutrition staff

Evaluation:

- Local foods are served 2x per week
- Vegetarian foods are available more often
- Ate lower on the food chain 3x at our meetings





Conservation STEM Projects

Goal #4: Investigate, create, and invent STEM projects with energy and conservation themes

Energy Content:

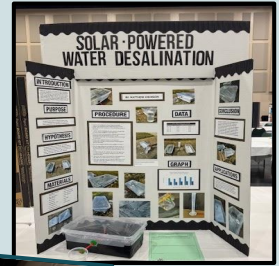
- Used NEED's Science of Energy, Energy & Our Rivers, Energy Around the World, Transportation Fuels, Wind for Schools, & Energy From the Sun

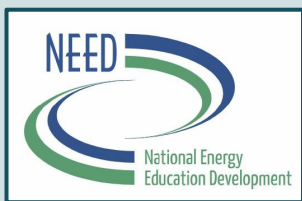
Student Leadership:

- 18 students entered designs in the Water Tower Engineering Challenge
- 52 students completed energy and sustainable resource STEM Fair projects

Evaluation:

- 70 students experimented, investigated, and invented designs to improve energy efficiency and sustainability





Energy Education Week

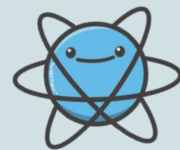
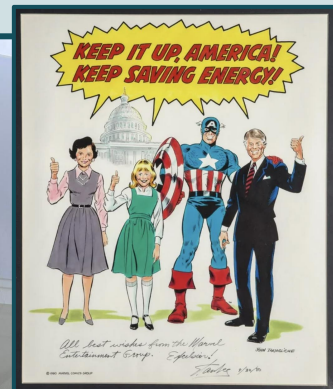
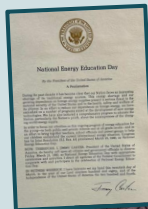
Goal #5: Educate 1,000 people about energy and conservation during Energy Education Week and the month of March (Happy 45th Birthday, NEED!)

Energy Content:

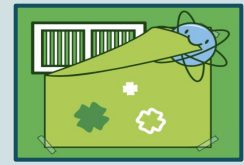
- Used NEED's Science of Energy, Coal, and Electricity to create lessons

Student Leadership:

- Lobbied the mayor to declare Energy Education Week
- Shared energy education lessons with 42 teachers and 830 students
- Displayed EEW Art and Literary Works
- Took Field Trips to the Carter Center and MLK Historic Site
- Shared Energy Education Week lessons



Energy Education Week



Student Leadership:

- Created and taught lessons for PreK-8 students
- Sent lessons to educators
- Spoke about energy at a school assembly
- Shared information about Energy Star and energy basics



Goal #5

Images
linked to
EEW
Lessons!

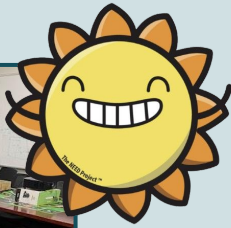


Evaluation:

- Shared information with 128 adults directly
- Taught ~830 students
- Taught at least 2,500 others with student created art and poetry on Athens-Clarke County Government's web page and displays at the Lyndon House Art Gallery



Goal #5

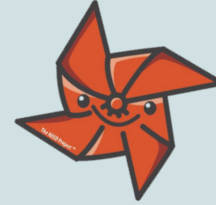


Kids Teaching Kids FUN Energy Lessons: @ Barrow, Holston, CMS, & More!





Share Energy Information!



Goal #6: Collect 250 Energy Star Pledges and share energy conservation information with 500 people

Energy Content:

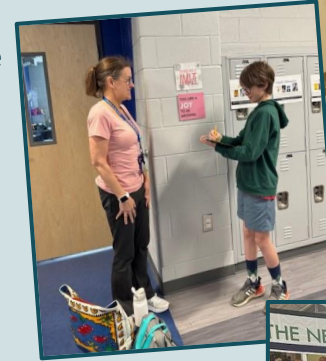
- Learned energy basics, energy sources, & energy conservation information from NEED resources

Student Leadership:

- Advertised and hosted booths at these events: Athens Water Festival, Barrow, Holston, & Clarke Middle Family STEM Nights, Insectival, Vulture Festival, Classic City STEAM Festival, NEGA RSEF, Green Life Exhibition, NSTA, and Twilight
- Lobbied elected officials at the local, state, and federal level about energy education and conservation
- 4 Team members served on the Clarke County School District Sustainability Committee

Evaluation:

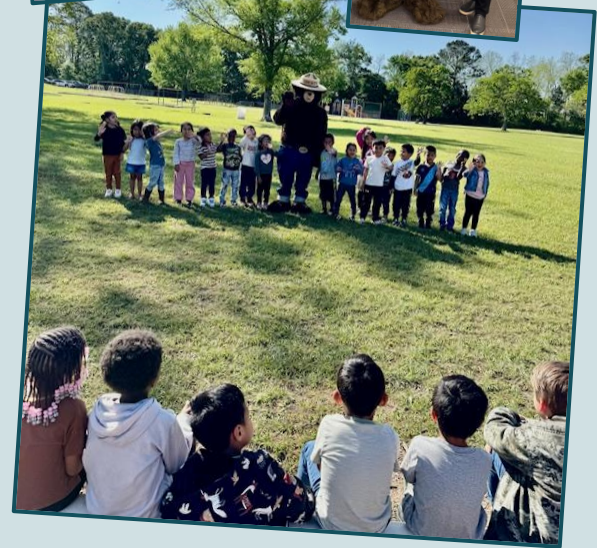
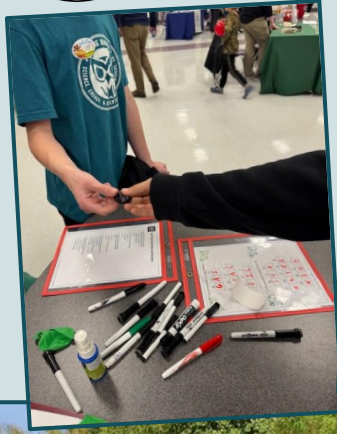
- Shared information 9,521 times with others
- Collected 286 Energy Star Pledges

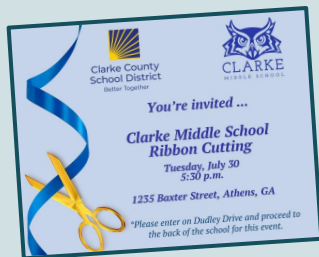




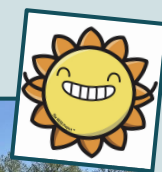
Share Energy Information Everywhere!

Goal #6





Solar is on the Way to the new Clarke Middle!



Goal #7: Influence officials to build a more energy efficient Middle with solar power

Energy Content:

- Learned energy basics, energy sources, & energy conservation information from NEED resources

Student Leadership:

- Advocated for energy efficiency and solar panels with city leaders, school board members, district officials, and the architectural team
- Served on the CMS Building & CCSD Sustainability Committees
- Collaborated with the Educational Energy Collective to get solar panels on all district schools in the future
- Conducted a school energy audit and created a conservation plan

Evaluation:

- A new, energy efficient Clarke Middle opened in August!
- Solar Panels for Clarke Middle were approved by the School Board in December of 2024! They should be up by June 2025!





Learn About Energy

Goal #8: Increase our energy content knowledge

Energy Content:

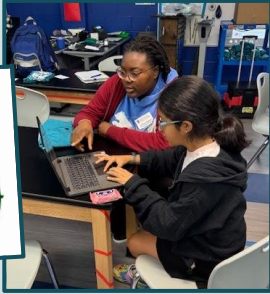
- Learned from NEED, Energy Star, NASA, EIA Energy Kids, the Carter Center, National Geographic, Georgia Tech, Piedmont University, UGA, and UNICEF resources
- Learned about energy from experts visiting our school, on field trips, and Zoom interviews

Student Leadership:

- Invited virtual and in-person guest speakers
- Organized and took field trips
- Extended our learning with self-selected Science and Engineering projects

Evaluation:

- Average score on the Energy Poll before instruction = 30.5
- Average score on the Energy Poll after instruction = 90





The **Science, Energy, & Adventure Team** promoted energy and resource conservation while showing compassion for people, pets, wildlife, and more! SEAT members learned, investigated, and created meaningful ways to help others become educated about energy and resource conservation.

