



Judith P. Hoyer Montessori School
Upper Elementary NEED Project
Ms. Cheryl Strong

The goal of the JPH Upper Elementary NEED Project was to help scholars discover different types of energy and their usage, and to share gained knowledge with the JPH Community.



GOAL #1: To increase scholars awareness about different types of energy.

ENERGY CONTENT ACTIVITIES

- We made solar ovens.
- We built solar powered houses and cars.
- We created hydro-powered turbines.
- We built telephones.

STUDENT LEADERSHIP

- Scholars were responsible for selecting and creating projects.
- Scholars explained the type of energy associated with each project.

RESOURCES

- Station Five Guide
- ESP/NEED Project

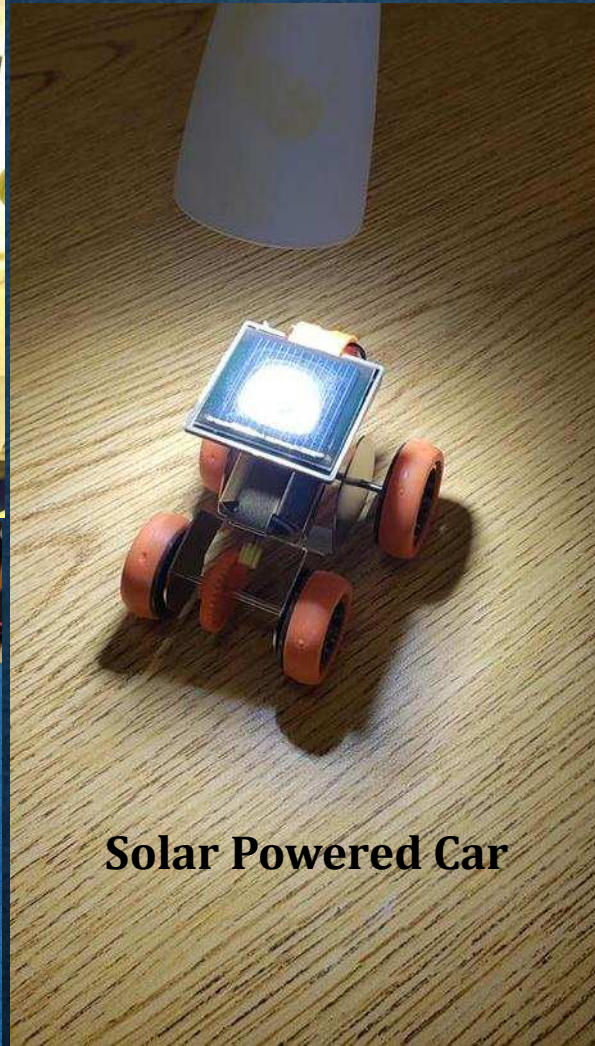
EVALUATION

- Teacher monitored all scholar led activities.
- Scholars acquired knowledge and participation.

Solar Energy Projects



Solar Powered House



Solar Powered Car



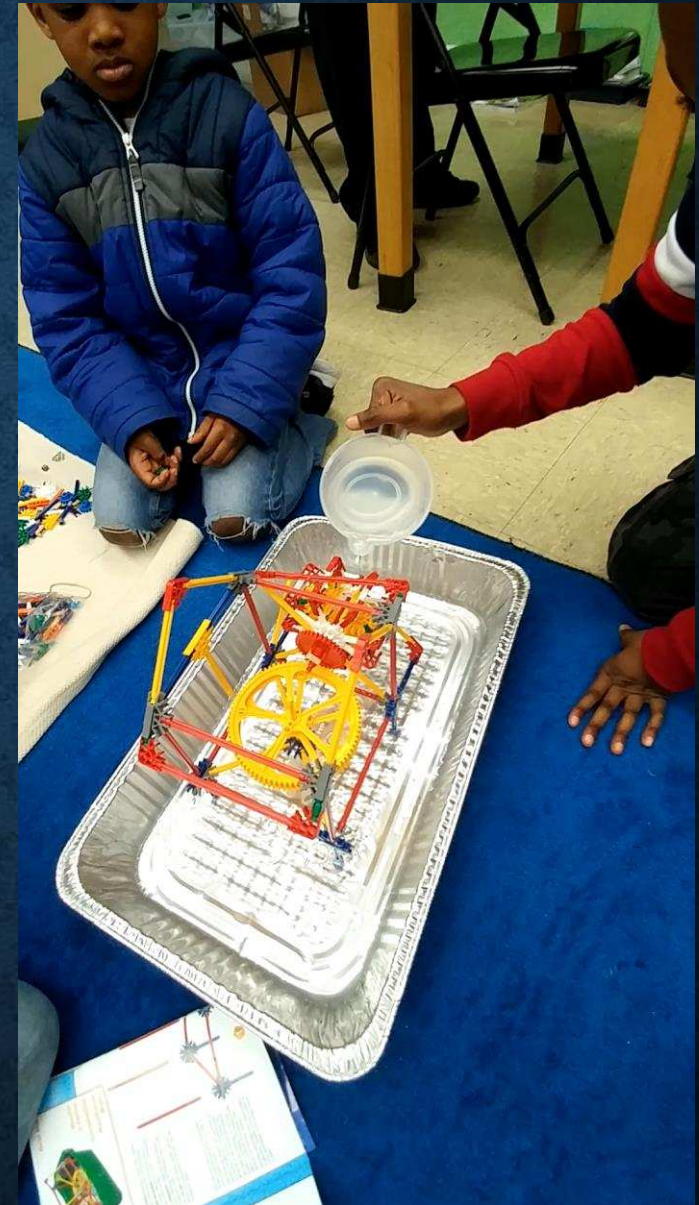
Solar Powered Oven



Classroom Energy Experiments



Hydro-Powered Energy



GOAL #2: Scholars will learn about energy consumption and how to be more efficient.

ENERGY CONTENT ACTIVITIES

- Scholars discussed energy consumption and ways to reduce usage.
- Scholars listened to guest speaker from PEPCO and Exelon.
- Scholars participated in Energy Audit of the school.

STUDENT LEADERSHIP

- Scholars tested the watts of lights, the quality of the air, and the temperature of the water.

RESOURCES

- Guest speaker, Todd Rogers
- Individual assessments

EVALUATION

- Scholar participation
- Teacher guidance and input

Energy Presentation and Audit



GOAL #3: To increase Energy Awareness in the JPH Community

ENERGY CONTENT ACTIVITIES

- Upper Elementary Scholars hosted an Energy Fair.
- Scholars exhibited projects highlighting various types of energy.

STUDENT LEADERSHIP

- Scholars managed the Energy Fair.
- Scholar shared and discussed energy products with Energy Fair participants.
- Scholars demonstrated Kinetic Energy Gymnastics and Dance

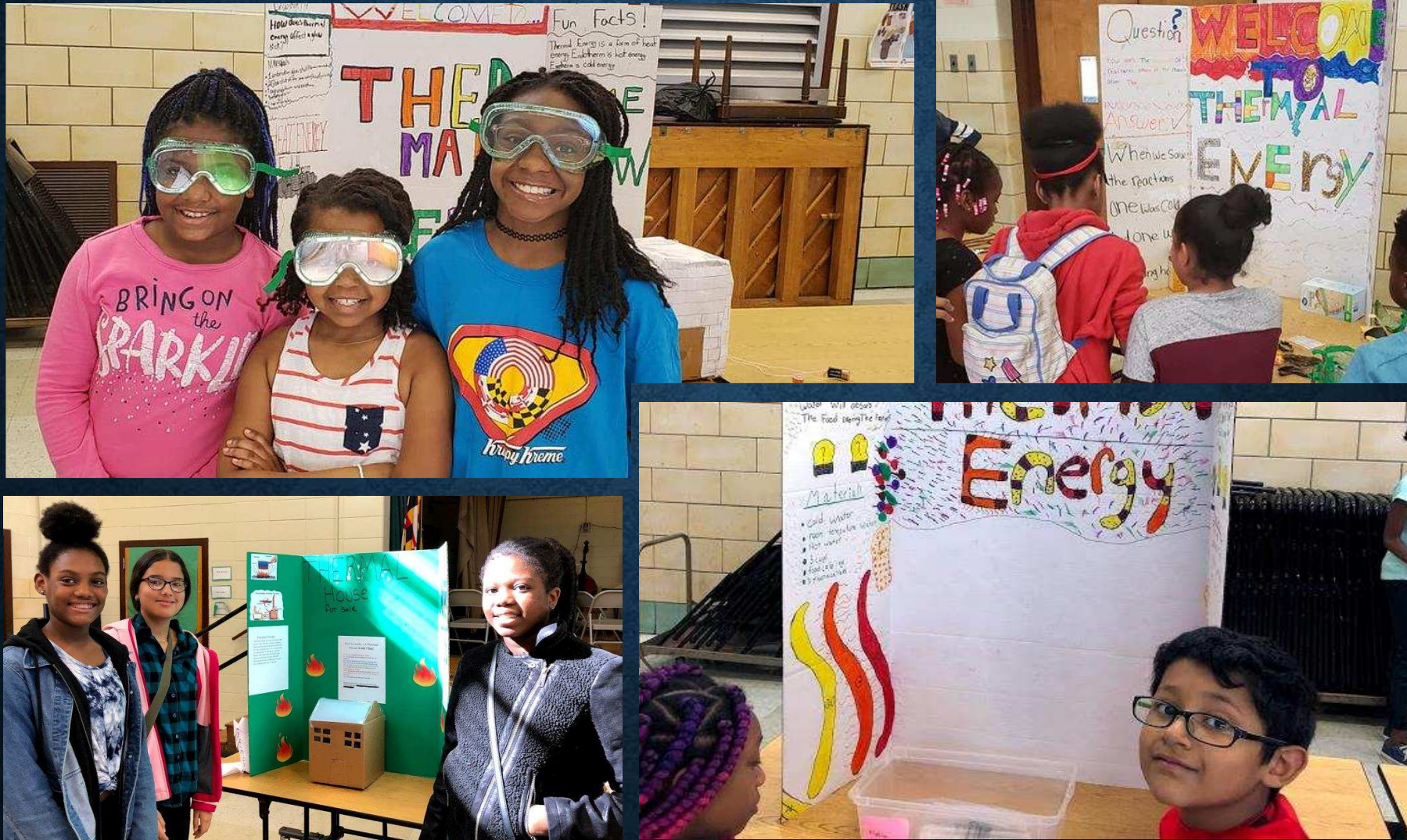
RESOURCES

- ESP/NEED Project
- On-line Websites

EVALUATION

- Quality of scholars' exhibits
- Energy Fair Participants

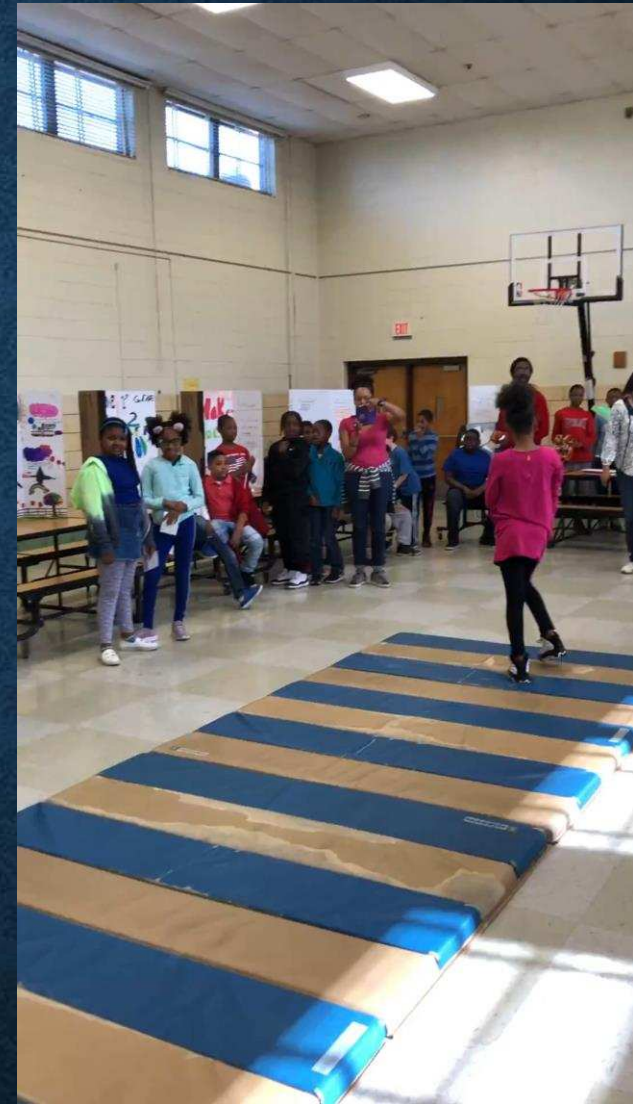
Thermal Energy Projects



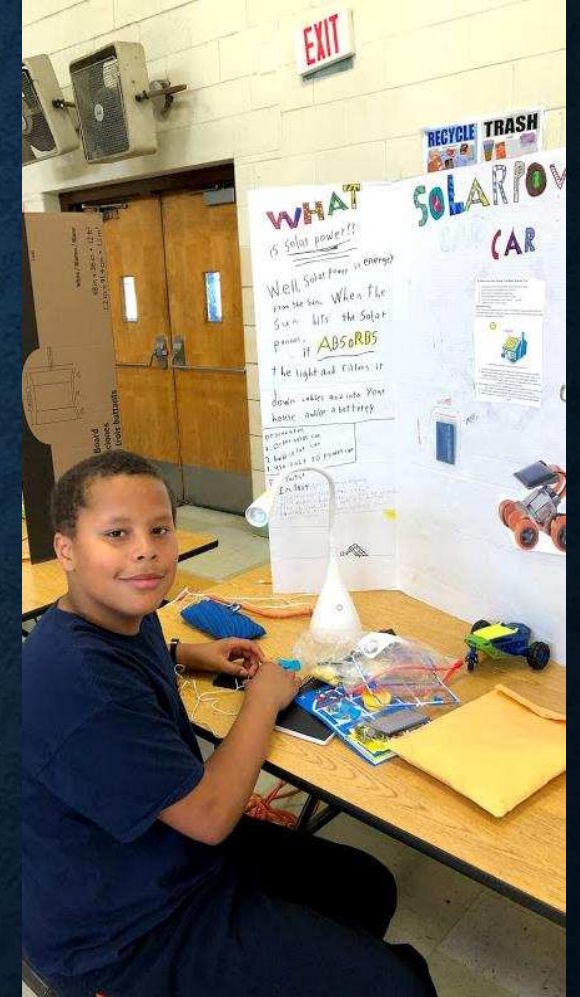
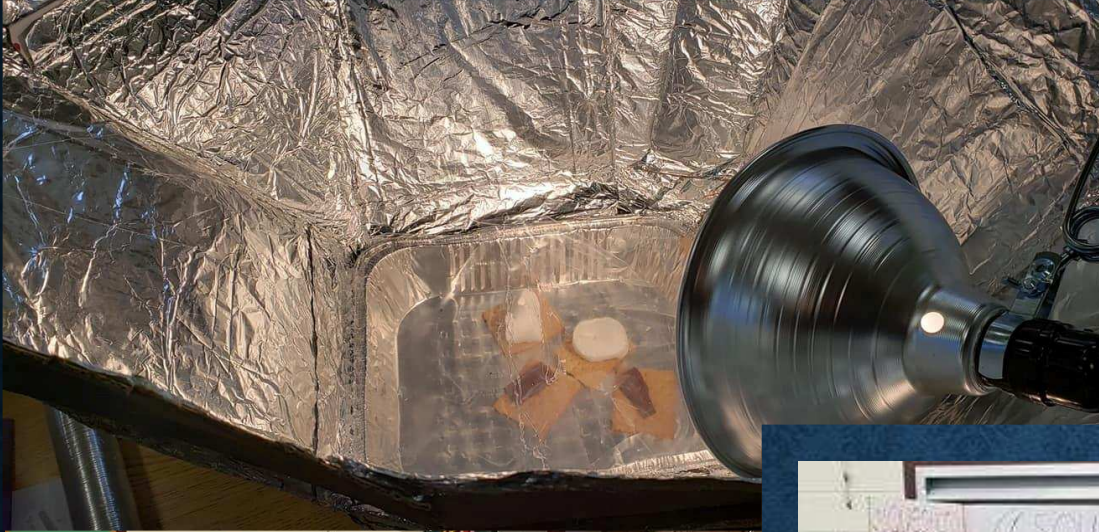
Static and Wind Powered Energy Projects



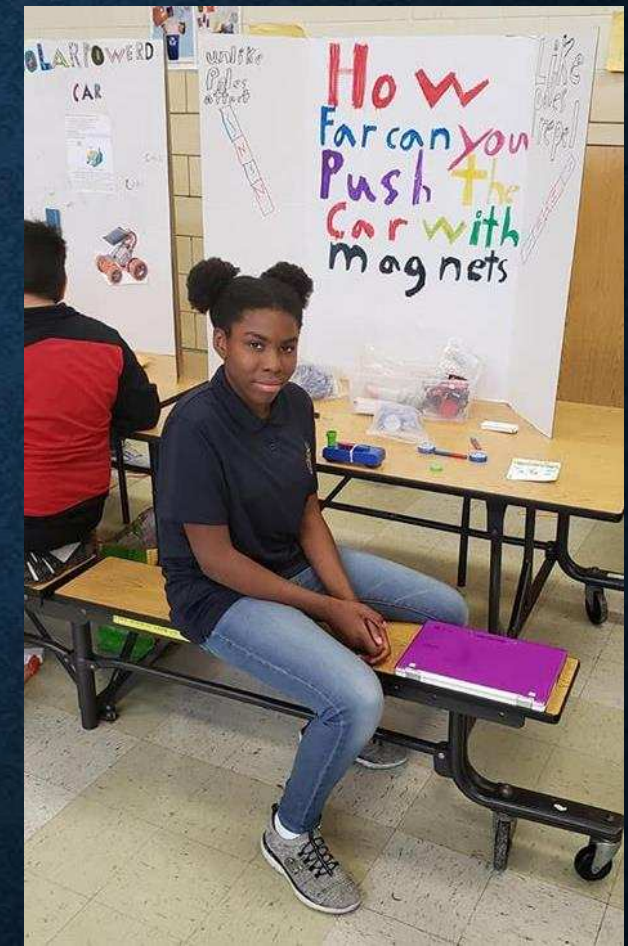
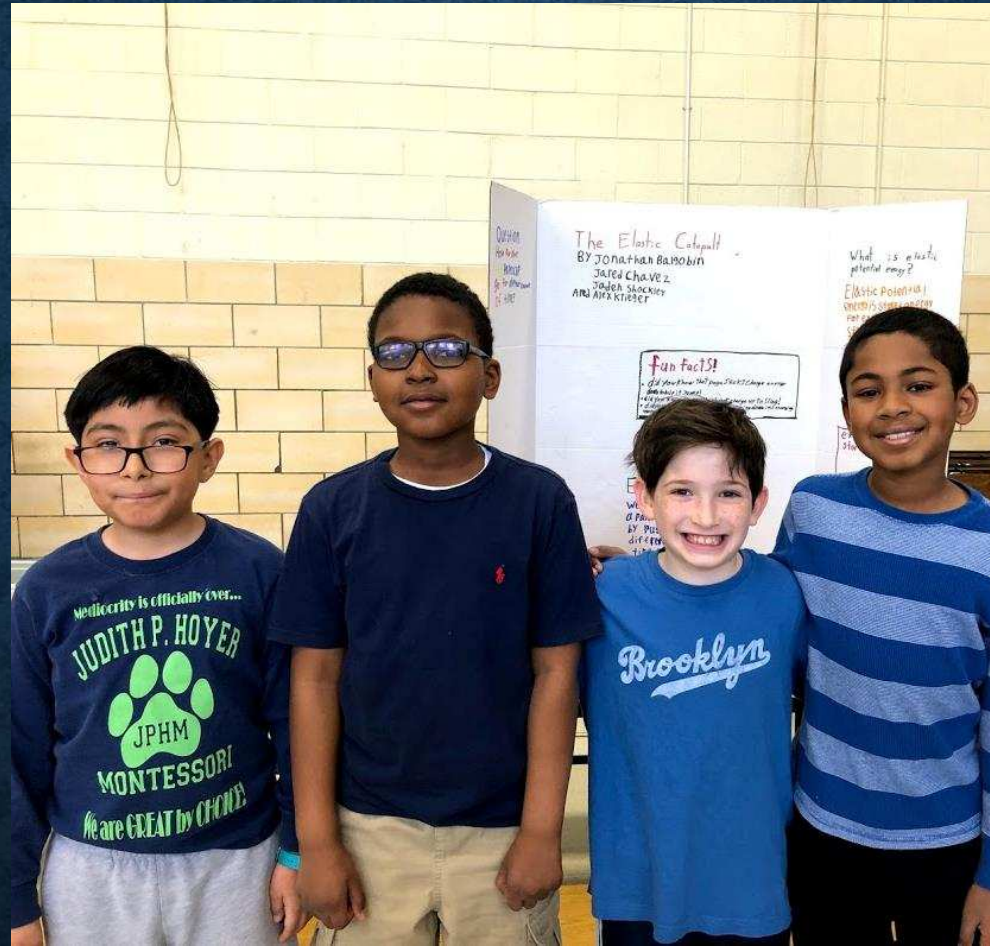
Kinetic Gymnastics Energy Projects



Solar and Sound Energy Projects



Magnetic and Potential Energy Projects

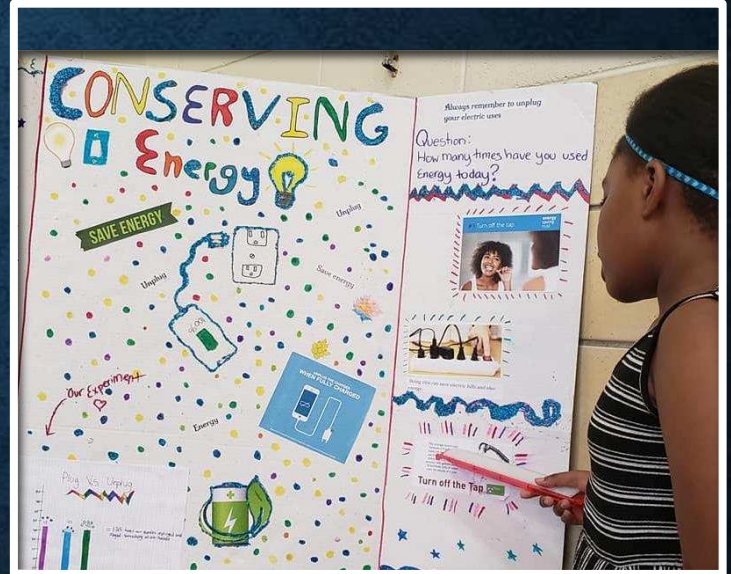


Kinetic Dance Energy Projects



Judith P. Hoyer Montessori School 2019 NEED Project

The upper elementary scholars at Judith P. Hoyer Montessori School have enjoyed learning and sharing about different types of energy and their usage through the NEED Project. It has been a rewarding and enlightening experience for all through hands-on discovery and collaboration. The scholars at JPH Montessori School have an increased understanding of energy, various types of energy, and the importance of energy conservation.



NEED Project Coordinator: Ms. Cheryl Strong

Principal: Ms. Tracey Spivey-White

Student Project Coordinators : Eryn Barnes, Heather Williams, and Morgan Carey