IRVING PARK ELEMENTARY
ENERGY TEAM

Changing Our World

Proudly Presented By:

Circuit Masters

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EnergyTeam Goals

1

Teaching Energy Wise Concepts on Solar Energy and Kinetic Energy

- To accomplish our goal, we built solar ovens and used them to make s'mores with the Kindergarten. We also built 2 rollercoasters to demonstrate kinetic energy.

2

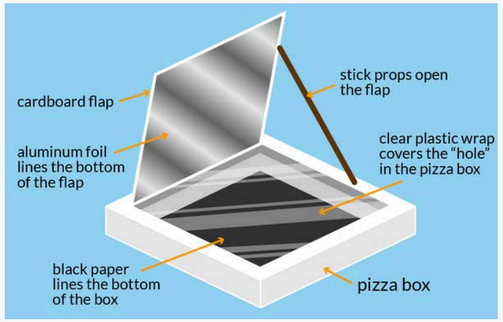
Reusing, Recyclling items to build sensory boards for our autistic children at IPE

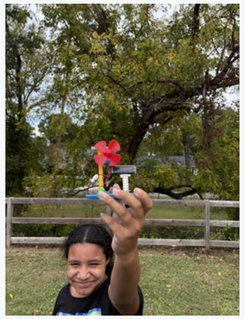
- We made our sensory boards for the autistic children in the adapted class and some for Kindergarten out of recycled toys, fabric, and sensory items.

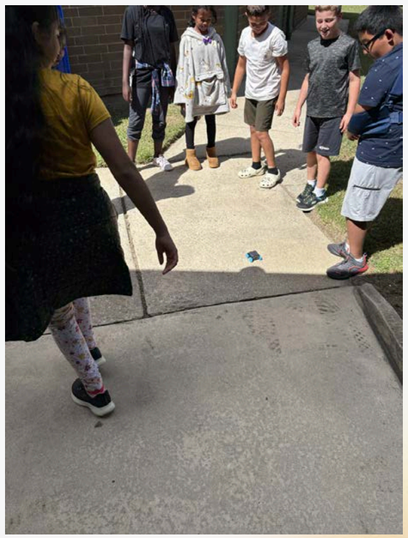
We used the solar energy information sheets from NEED to learn about our topic.

Building Solar Ovens

We built the solar ovens using recycled pizza boxes, Styrofoam , tin foil , and plastic wrap

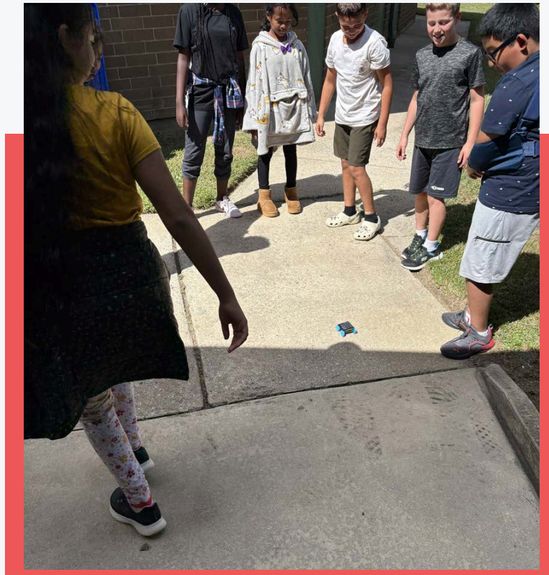




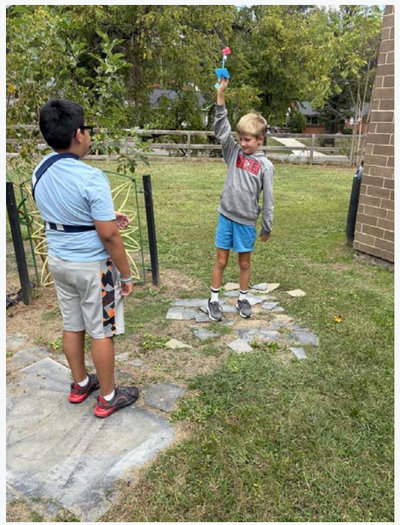


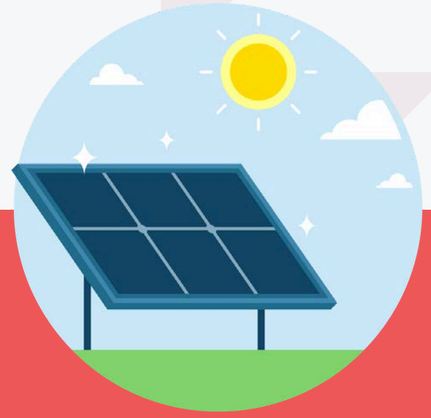
- Building Solar ovens with pizza boxes
- Studying the NEED information sheets and the web on solar energy
- Presenting to Kindergarten and 2nd grade

Learning about solar energy and building solar cars



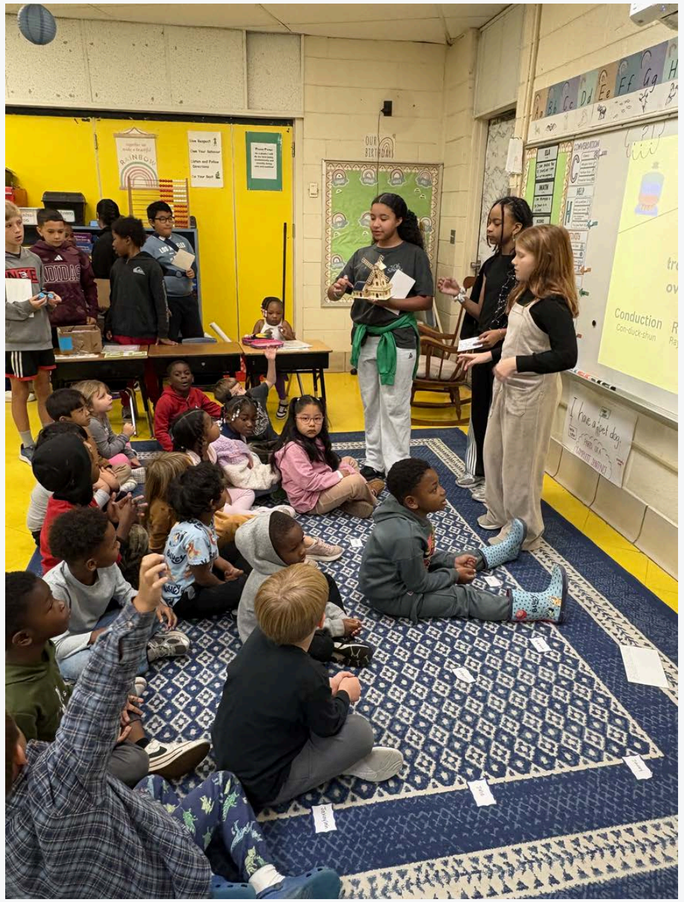
Testing out the solar car





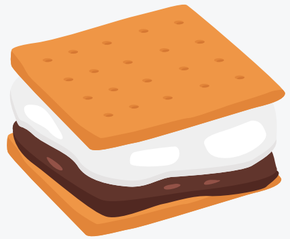
We built the solar car, with solar panels, motors,screws, wheels, and wires.
we built them to see how solar energy powers different objects and it demonstrates how objects can be powered by solar energy. The solar panels use the suns energy to convert to usable power.

Solar Energy Presentation to Kindergarten



We presented on solar energy. The children really enjoyed the presentation and models!

Cooking with our Ovens



When we made our s'mores!

- It took 3 hours to cook
- We had to turn the tables during cooking so the sun would hit the foil equally
- We built seven ovens and cooked enough s'mores for 30 people
- We ate the s'mores while we showed our solar powered models.

Step 1: Cooking in our ovens

First we made a oven for our s'mores then we put them outside to cook. We built a total of 11 ovens. there were about 7 s'mores in each solar ovens.

Step 2: How we positioned our ovens

Second we placed the ovens on a table directed towards the sun letting the s'mores melt. The flap with the tin foil was the part that needed the sun.

Step 3:What was the outcome?

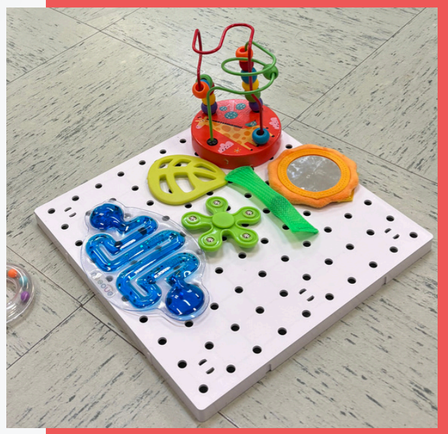
Using the sun's energy the s'mores melted creating a yummy treat.

Eating S'mores from our solar ovens with Kindergarten

Solar Beads with 2nd Grade presentation and outside to watch our solar beads change colors

We presented solar energy to second grade using solar beads as an example.
solar beads are pony beads that look clear until you put them in sunlight then they'll turn either pink, yellow , blue,or purple

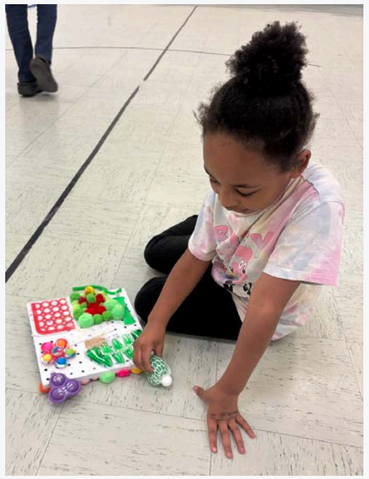
Building the Sensory Boards

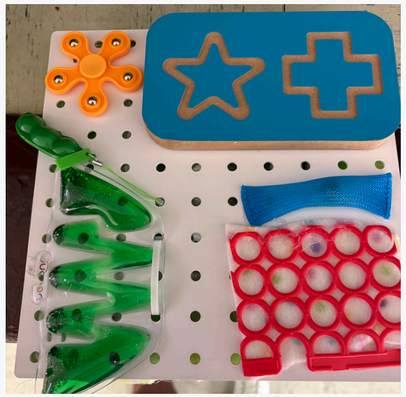


In doing our reserach we learned that autism Spectrum Disorder (ASD), is a neurodevelopmental condition affecting how people communicate, interact, behave, and experience the world.

We built the sensory boards to help calm the Adapted PE class children. We also made them for kindergarten. They both enjoyed the boards and the teachers were grateful to get the boards.

Resuse, Reduce: Using Recycled to Build Sensory Boards





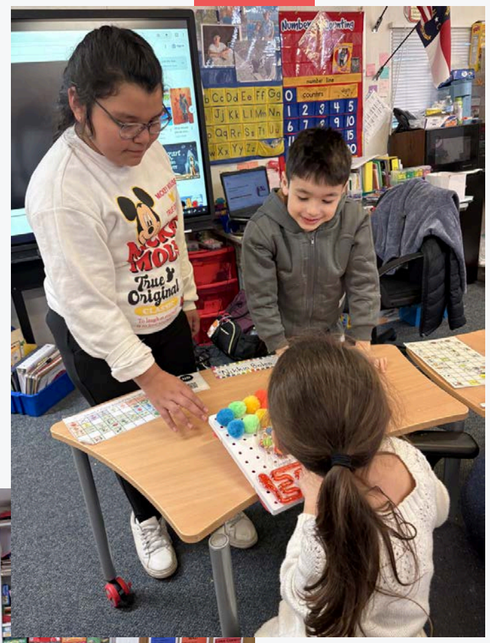
Sensory boards are used to help students with sensory issues remain calm. We made sensory boards for our adaptive class. We made them using recycled products.

- We used recycled materials from a store called reconsidered goods
- It took us about 2 weeks to build.
- Our conclusion was the students enjoyed the sensory boards

Each Kindergarten class received a sensory board.

Sensory Boards in Action!

We went to the adapted classroom to present. The students in the class were very excited to use our sensory boards and they really liked them. As they used them they got very calm.



Learning about Kinetic Energy: Field Trip to Charlotte Motor Speedway

We learned about kinetic and potential energy, and we also learned about noise vibration, force, and motion.

At the motor speed way we learned that there are multiple different types of energy. for example there is kinetic energy, potential energy, and so much more.

Learning about Kinetic Energy

Drag Racing

Lesson on Force and Motion

Building Roller Coasters to Demonstrate Kinetic Energy

We made our roller coasters out of paper, glue, tape, and cardboard. It took us about a month and a half to create our roller coasters.

A roller coaster does not have an engine but instead uses a pulley system to bring the car to the top of the hill.

The roller coasters will be used to demonstrate potential and kinetic energy.

Presenting to 3rd grade: Kinetic and Potiential Energy

When we presented to 3rd grade they were separated into groups of 4-5 people. They came to us in groups and for the different activities they learned about potential and kinetic energy

Presenting to 4th Grade Kinetic and Potential Energy

When we presented to 4th grade they learned about potential and kinetic energy in groups of 7-8 people using fun activities. We presented this by using the butterflies, pull back cars and the roller coasters we built.