

May 2023 GET City Updates



This monthly newsletter is created to inform parents of the different STEM activities their youth are participating in at the Boys and Girls Club through the GET City program.

GET City is a STEM program primarily for 6th and 7th grade students that focuses on three areas:

- Building STEM expertise
- Building STEM citizenship
- Educating others

What's being made?!

Get City kids had a blast creating new and valuable innovations that enhanced their happiness and our sustainable community. Through STEM projects, they also gained hands-on experience with STEM practices and skills such as design, prototyping, and product development. They leveraged technologies such as artificial intelligence and augmented reality to gain insights and implement green energy solutions. Their creativity was a key element of STEM, as it enabled them to explore, test different possibilities, and experiment with different solutions.

Our overarching goal is to better understand the particulars of how and why youth co-make in life-based and STEM-rich ways with families and communities, such that we can better infrastructure community-based maker programs in support of youth learning and well-being.

Questions? Contact:

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GET City Spotlights

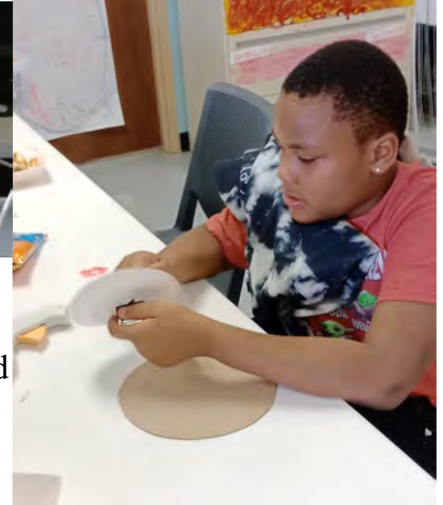


Light up skateboard Kenneth

Kenneth realized it was too dark to ride his skateboard safely at night. That's why he came up with a brilliant idea: adding LED lights to his board. He used his imagination and skills to turn his skateboard into a glowing masterpiece.



Merry-go-around Christopher



Chris has a vision to add more games to his school playground that are not only fun, but also educational and eco-friendly. With this in mind, he designed an innovative prototype of a merry-go-round that generates electricity from the kinetic energy of the spinning motion. As kids spin the merry-go-round, it powers a turbine that creates energy.

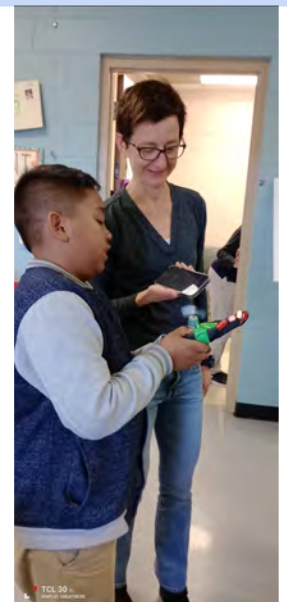
The energy can be stored in batteries and used by the school for various purposes. This way, Chris hopes to inspire his classmates and teachers to learn more about renewable energy sources and how they can benefit the environment.

Iron gloves Tim

Tim likes to invent new games and gadgets. He made Iron gloves inspired by his favorite superhero, Iron Man.

Tim wants to have fun with other kids and people. His gloves improved over time as he explained:

“I have my new Iron gloves, which have LED lights and a motor. I put a piece of tape on the motor and it spins around really fast. At 1 point, it only had a motor and it was not very stable, but at 2 point I added an electric thing. I also used duct tape and LED lights to make it look cool. I want to find out how to make it shock people when I touch them, but not like a shock [not too much].”



GET City Spotlights



Green Drums Damir

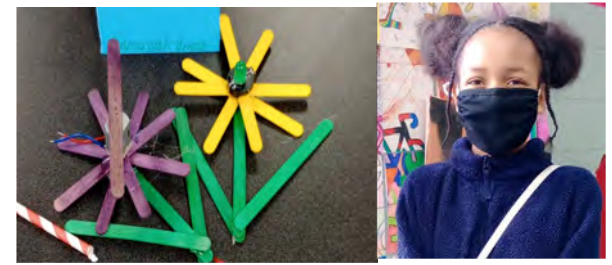
Damir loves music and plays drums at his church. However, he identified problems with the sound system, especially in the winter. He said: "Sometimes it's kind of hard to hear the music and the singers at the same time, so I wish there was some kind of energy to make that balance together so we could hear both things. And the sound cuts a lot in the winter." During his process to design Green Drums using alternative energy, he came up with multiple ideas such as using a hand generator to operate the drums, generating electricity from the drumming motion, and lighting up the stage using the drum's energy.



Damir tested his prototype and thought of ways to improve it and implement his ideas

Light- Up Colorful Spring Flower Samariyah

Samariyah wanted to express her love to her sister by designing flowers for her sister's wall room. She said: "My sister likes flowers, so I made two of them. One has a green light and the other has a motor that makes it spin like a small fan."



Boats

Other kids, such as Tony and Jerome, spent time investigating and designing different shapes of boats. They learned from that boat design is a complex and fascinating process that involves many factors, such as hull shape, stability, speed, propulsion, and aesthetics. Some of them added lights and motors to their boats to make them faster .



They tested their boats in the water and compared their performance and appearance. They had fun and gained valuable knowledge about boat engineering and physics.



Robot hand Sheitan



Sheitan is fascinated by robotics and wants to create his own hand robot. He cuts a carton into the shape of a hand and connects the fingers with wires. He hopes that his hand robot can perform various tasks, such as grasping, lifting, and spinning objects. He keeps trying to improve the hand by adding more features and functions.