

November 2023

# GET CITY



## NEWSLETTER

### This month in Get City

Starting this month, the youth at Get City are beginning the program with an activity to understand '**Carbon dioxide**'. This involves hands-on activities such as measuring CO<sub>2</sub> levels with a device, making a poster about urban CO<sub>2</sub> emissions and tree canopy, and building their own CO<sub>2</sub> models to visualize the negative effects of CO<sub>2</sub> on the environment.

### GET City Program

STEM program primarily for 5th - 7th grade students that focuses on three areas:

- **Building STEM expertise**
- **Building STEM citizenship**
- **Educating others**

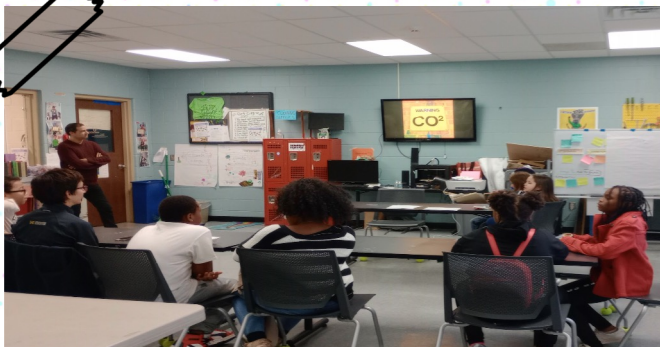
Our overarching goal is to better understand how and why youth co-make in life-based and STEM-rich ways with families and communities.

### Measuring Carbon dioxide(CO<sub>2</sub>)

The youth watched a fun video about **carbon dioxide** to learn more about its role in climate change. They developed new ideas about what CO<sub>2</sub> is, what absorbs and releases CO<sub>2</sub>, why it is considered an invisible pollutant, and what happens if its level increases.

Then, they used a device to measure and document **the amount of CO<sub>2</sub>** in the Get City room (*at the beginning and at the end of the meeting*) and in various locations in the club, both indoor and outdoors (*once a month*).

After measuring CO<sub>2</sub> levels in various locations and at different times, the youth engaged in an experiment to measure **the amount of CO<sub>2</sub> produced upon combustion**. They observed the increase of CO<sub>2</sub> levels due to the combustion process.



(They are watching the video about CO<sub>2</sub>.)



(Tony is igniting the piece of paper. )

## Poster Activity: Urban emission & Tree canopy

Youth explored the role of **trees** in helping to prevent climate change. They used on-line scientific tools to search and analyze data on transportation emissions and tree canopy coverage in various cities including Lansing, and other cities where their loved ones live.

For this activity, each group selects two cities and examines the data related to transportation emissions and tree canopy. The findings are presented on a poster for the entire group.

(The findings)

City	Population	Tree Canopy %
New York City	11,000,000	23.2%
Atlanta, Georgia	4,749,000	24%
Dallas	9,740,000	33.9%
San Antonio	2,791,000	35%
Lansing	1,510,000	24%
Grand Rapids	510,000	36%
Ann Arbor	197,000	28%
North Las Vegas	703,000	37%
Little Rock, AR	853,000	51%



## CO<sub>2</sub> Model

In this activity, the youth actively modeled "Mapping the Carbon Dioxide in Our Environment", exploring the role of human actions in this environmental aspect. First, they planned by choosing the location, deciding the model's size and shape, and picking sources emitting or absorbing CO<sub>2</sub>.

This comprehensive approach ensures that each group creates an insightful and environmentally conscious model, vividly portraying the dynamics of CO<sub>2</sub> in the chosen environment.



*They were encouraged to use as many recycled materials as possible!*





**Marz & Tony** chose to represent two train trucks to symbolize the emission of gases into the air, highlighting the impact of climate change and pollution. They made a factory with a smoke, which pollutes the air. They depicted the burning trees due to the forest fires. Tony elaborated on the details, emphasizing the connection between the fallen tree and the representation of a blowout causing the tree to burn down.



**Antonio** chose Boys & Girls Club as a location. Due to many people in the club, the huge smoke comes out of the chimney. He connected the tree and the club with a smoke to show their connection. He thinks the smoke can feed the tree and the tree gives off the oxygen into the air.



**Daizhanay** made a CO<sub>2</sub> factory that has smoke coming out of the chimney. She put a tree next to the factory. She said the tree is dying due to the smoke. The animals in the bushes are dying too. She also made a CO<sub>2</sub> car that emits gas into the air.



**Amilia & Aiden** chose Mt. Hope school as a location. They made a school with a graffiti to make it look more realistic and put two trees and smoke coming out of the school. One tree is falling. They also made a car using a juice box.



**Alicia** designed the trees aesthetically with colorful straws. She drew some animals to show how severe impact the factory coal can have on these animals. She also built two places - the heaven and the hell.



**Have Any Questions? Contact** 📞  
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**Our mentors:** Angie, Wisam, Orwa, Jinshil, Lillian, Aliyah, Jaylen, Chris (training mentor)