2020-2021 City Model Slideshow

School/Organization: **Pottsgrove Middle school**

Educator Name: **Mrs. Frasca**

Future City Team Name: **D'Matherine**

Delete all PURPLE text before submitting the slideshow for judging. Keep text that is black.

Section I

CITY DESIGN

Residential Zone- Lucy+Natalie

Our residential zone is where most of our Fire and Police department work to give the residents protection and safety.

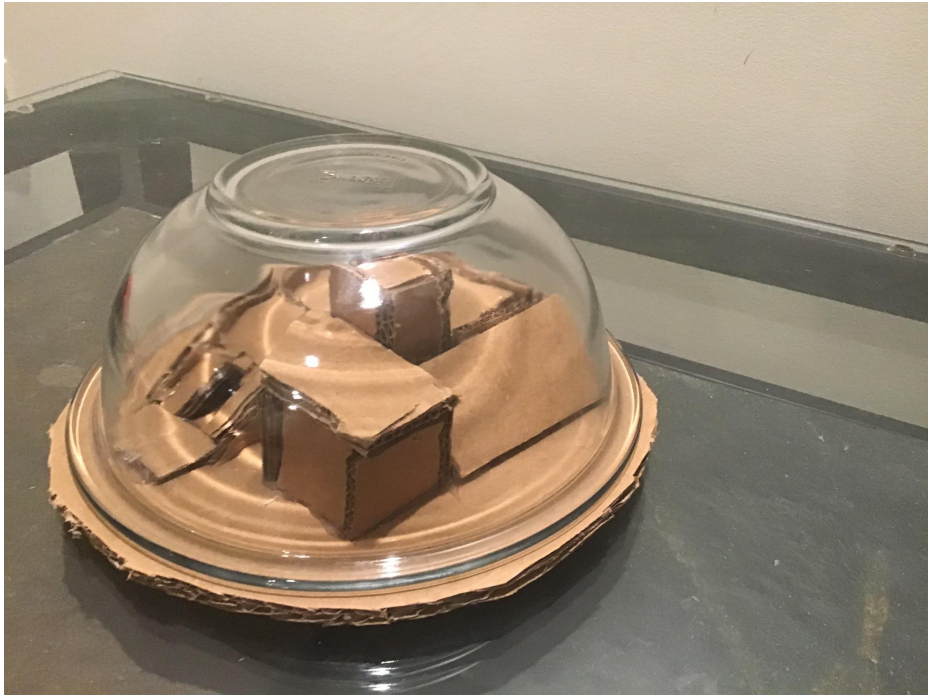
Even though the residential zone is a part of the city, it has its own township to represent it. All houses in the zone are single family middle class type homes. Also, there are enough extra houses to prevent overpopulation and homelessness. The residential township is located at the northern area of the city.

Commercial Zone-Caysen

Our commercial zone has many features such as a shopping plaza, a theater, a K-12 school, a large park and playground that is paired with a one in two sports field next to it, and the city hall.

With the commercial zone featuring many stores, a school, and a city hall, there are many job opportunities solely at the zone itself. The commercial zone is located in the center of the city.

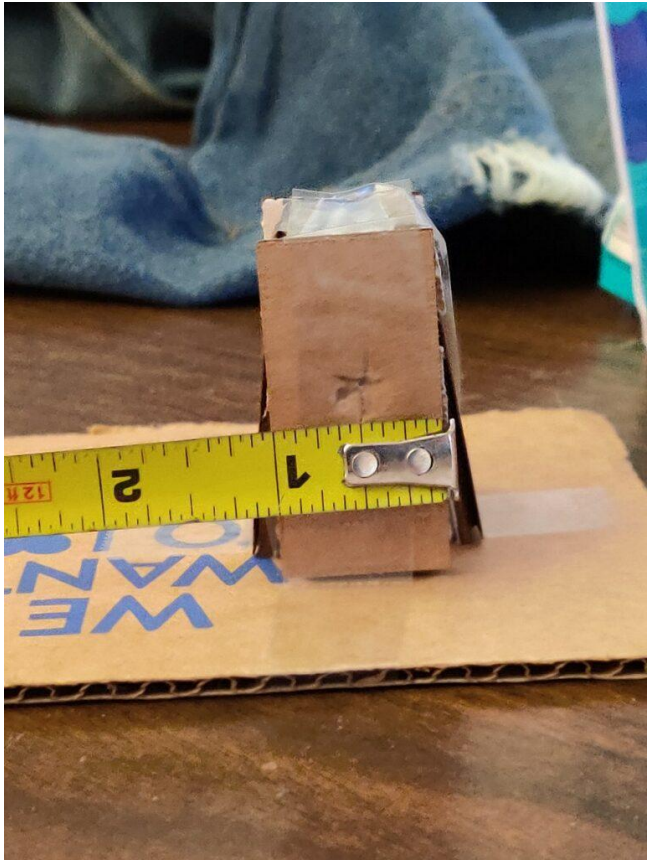
Industrial Zone-Zeke+Andy



In the industrial area is where the majority of our Amazon workers work. This is because our industrial zone is solely made for the purpose of the distribution center. However, even though the distribution center is the main purpose of the industrial zone, we also house the water extracting system and the oxygen cycle generator here. The zone is located at the south eastern border of the city.

The distribution center can also be utilized as a factory in case anything needs to be built for the city down the line.

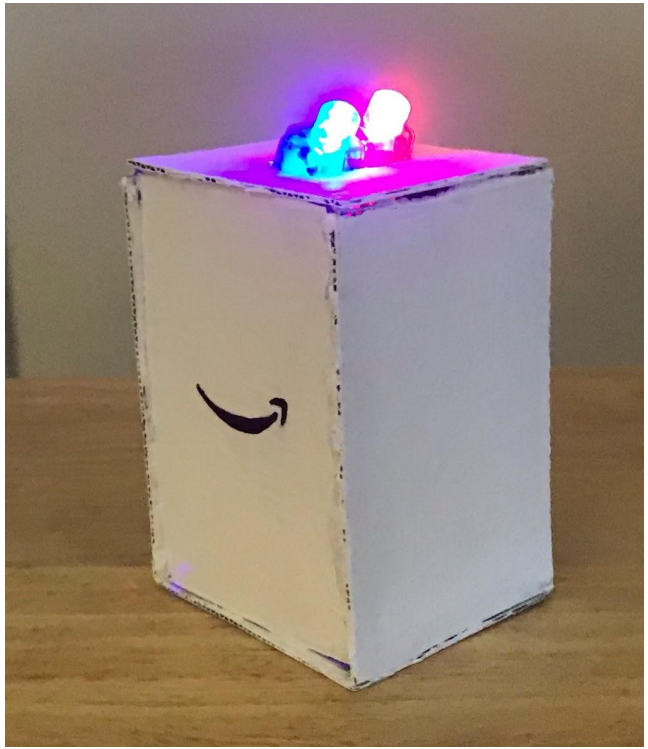
Infrastructure Example 1



These are oxygen generators used to create the reaction that plants use when making oxygen.

One of the challenges is the risk of not having enough oxygen to supply everyone. If people start to lose oxygen, there are back up air tanks in each house. The reality is if the generators fail, people die and the whole population is wiped out.

City Services Example 1



For city services we have EMS, Fire, Police, hospital, dentist, pediatrics hospital, and lastly, a doctor's office.

We have taken the same crucial needs that humans have on Earth in case of an emergency. All of these services are very similar to the earth's health services/first responders.

Infrastructure Example 2

We've decided to create a water source system similar to earth. We have an underground pipe system transporting water to each household in the residential township, all of the commercial zone, and enough for the distribution center.

Water is the most important resource to humans. Not having the same surplus that we have on earth for the moon was a challenge. Fortunately we have successfully found a water source and a use balance for the city of D'Matherine.

City Services Example 2

In the city, there is a education system and a college building.

We took what most humans ages 5-17 or 18 need: education. There is the normal core along with S.T.E.A.M courses. This way students learn about technology and engineering when they at a young age and hopefully grow up to be engineers for Amazon considering they won’t be able to go back to Earth after being on the moon for a while.

Transportation Example 1

This is our newly innovated flat escalator

There is an underground tube system that can transport people and packages through the domes.

Transportation Example 2

Walking escalators for civilization, carts for first responders(modified according to the type of first responder job)

Our walking escalators are flat conveyor belts with tube-like housing around them so humans can travel through the city at a running pace.

The carts are hydrogen powered and all the same model for each first responder. However,, they are modified according to the type of job it has to do. For EMS (Emergency Medical services)

Living on the Moon (Resource #1) Example 1

We utilized the water from the ice caps on the moon.

The ice caps are used to provide water for all the residents and plants. They are mined out of the moon and then melted to make it drinkable.

Living on the Moon (Resource #1) Example 2

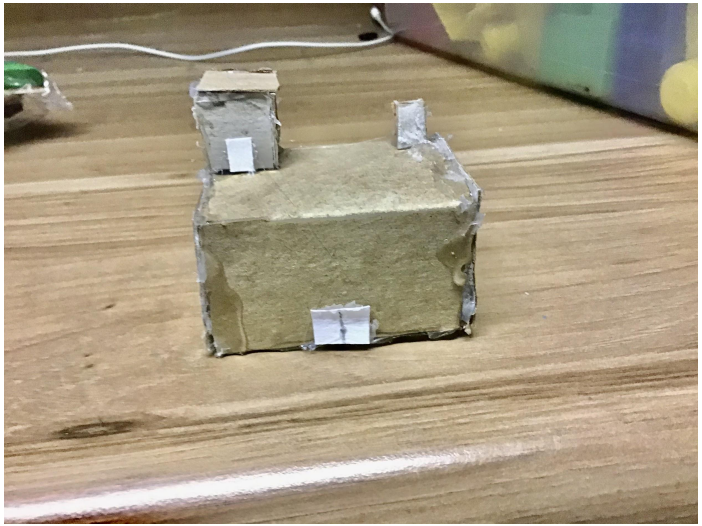
Another reason why the ice caps are a crucial resource on D'Matherine is because we can transport the water from then to the city and use electricity to split the water into hydrogen and oxygen and use the hydrogen as fuel for the first responder carts.

Living on the Moon (Resource #2) Example 1

We utilized the humans that are on the moon as a resource.

The humans are an important resource because they have a crucial role in the oxygen system. The carbon dioxide we breathe out gets split into a carbon molecule and two oxygen molecules. When the molecular oxygen is recombined by our oxygen generator we can use it as breathable oxygen.

Living on the Moon (Resource #2) Example 2



Also, since this city has its own democracy, education system, job system, and first responder system, this is another big role that humans take. Almost every service in this city is ran by humans and that is what makes humans a crucial resource for D'Matherine.

Section II

BUILD IT: QUALITY, SCALE, AND MATERIALS

Innovative Material & Use Example 1

Almost our whole city scale was made out of cardboard.. We did this to show what the effect of a partnership made by NASA and Amazon has turned into. Our cardboard buildings and models symbolize the infamous Amazon package, since Amazon is known for their now intergalactic online delivering business.

Innovative Material & Use Example 2

We have used glass jars and glass bowls to represent our greenhouse system, which a huge dome over the city to prevent oxygen leakage and to keep humans safe from inhumane temperatures

Innovative Material & Use Example 3

And lastly, we have used paper rolls/paper towel rolls in our scale to represent the flat escalator tube transportation system which connects to each different zone of the city.

Example of Scale

D'Matherine scale = 1"=30.5'

This structure is the distribution center.

The size of the base scale is 6 inches by 6 inches by 1 inch, but the top extension is 1 inch by 1 inch by 1 inch.

The distribution center is 33,489 cubic feet.

City hall

Length: 1 ¾ in. Width: 1 in. Height: 2 ¼ in.Top
Length: 3 in. Width: 2 ¼ in. Height: 1 in.bottom

Length: 53 ft. Width: 30.5 ft. Height: 38 ft. Top
Length: 91 ft. Width: 69 ft. Height: 30.5 ft. Bottom

Moving Part

- Insert a link to a video of your moving part.
- Make sure your video is posted on a publicly available platform for judges to access (such as YouTube).
- Video cannot exceed 1 minute.
- Be sure to mention your city/team name.
- Show the moving part in action.
- In the video, share what role the part plays within your city and how you built it.

URL link to team's moving part video:

moving part

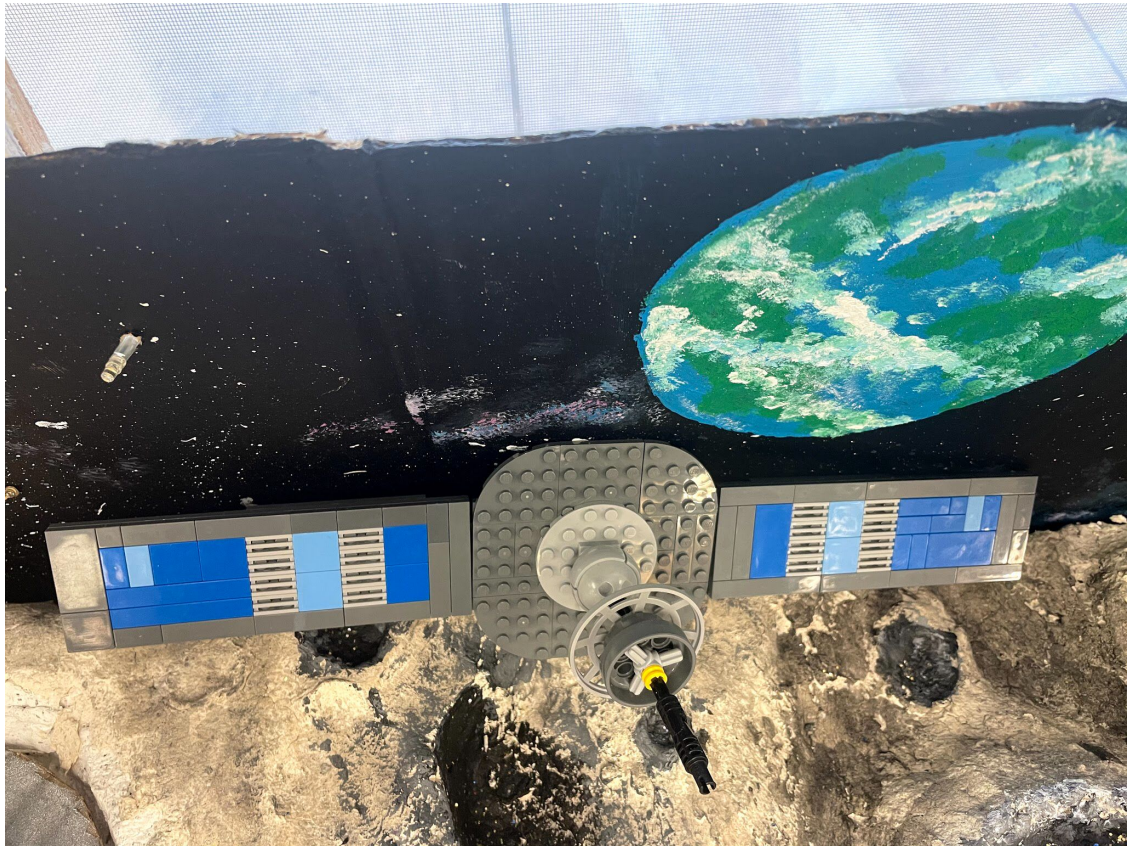
Section III

JUDGE ASSESSMENT OF MODEL

Futuristic Technology Example 1

One example of futuristic technology that we have created on D'Matherine is the inflatable domes that we've innovated for the fire department.. These domes have two sizes, residential size and building size. Whenever there's a fire, instead of the fire fighter using our limited water source to put out the fire, they can put the dome over the house or building. What the dome does is that when the house/building is fully covered by the dome, the inside of the dome starts to deoxidize, which puts out any fire inside of the dome. We've created this technology because we know that fire can't burn without oxygen.

Futuristic Technology Example 2



On D’Matherine, we have utilized 18g mobile networks. Doing this has bumped our transfer rate to 1tb/s. This helps with communicating to satellites across the solar system to signal Earth about incoming packages