2020-2021 City Model Slideshow

School/Organization: Educator Name: **Mr. Harry F. Crossgrove**

Future City Team Name: **Arisite**

Delete all PURPLE text before submitting the slideshow for judging. Keep text that is black.Drexel Hill Middle School

Deliverable Details

- This slideshow is your chance to present your model. Whether your team created a single model or multiple segments, here is where you show off the future city you designed to the judges.
- Choose photos of the various segment(s) that best show the requested content.
- Do not change the size of text boxes in this template. All written text must fit within the boxes and *cannot* be smaller than size 14 in Calibri (or equivalent) font.
- When finished, save the slideshow as a PDF and upload to the Online Portal at FutureCity.org.

Section I

CITY DESIGN

Commercial Zone

Our commercial zone is the center of the economy, and it is the main way that money circulates. In the commercial zone there are many stores and billboards throughout. And the goal of these things are to get people to spend money so that there is always a constant flow of money throughout the town through both taxes and sales.

Infrastructure Example 1 Amina

Recycling Center

Disposal of pollution and trash is complicated on the Moon. Citizens are responsible for securing trash and keeping Arisite beautiful and clean. The chemical balance of the air and water is very precise. Waste engineers are highly paid and receive the genuine satisfaction of knowing they keep Arisite spotless and healthy. Trash that can not be discarded is repurposed into fabrics or building materials.

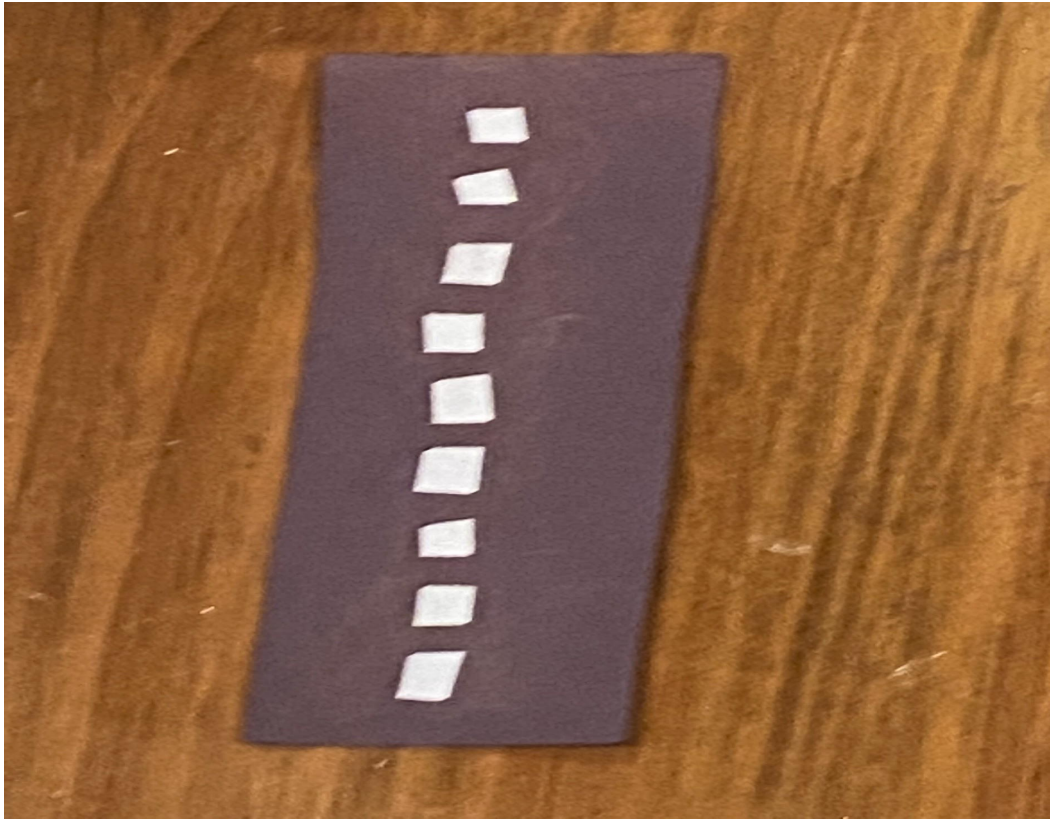
Industrial Zone Greg

Industrial Zone

This is one small area of our industrial zone in our city. It has 2 factories, as well as a generator This specific section of the industrial zone is our Helium 3 Plant. It is where we convert Helium 3 into a power source for our city. We have many factories, throughout the city because we need to have things constantly being created in order for the city to run. That is also why every industrial site has a backup generator for emergencies.The base is made of cardboard and the buildings are made of old solo cups.

The scale is 1 inch = 75 ft.

Infrastructure Example 2

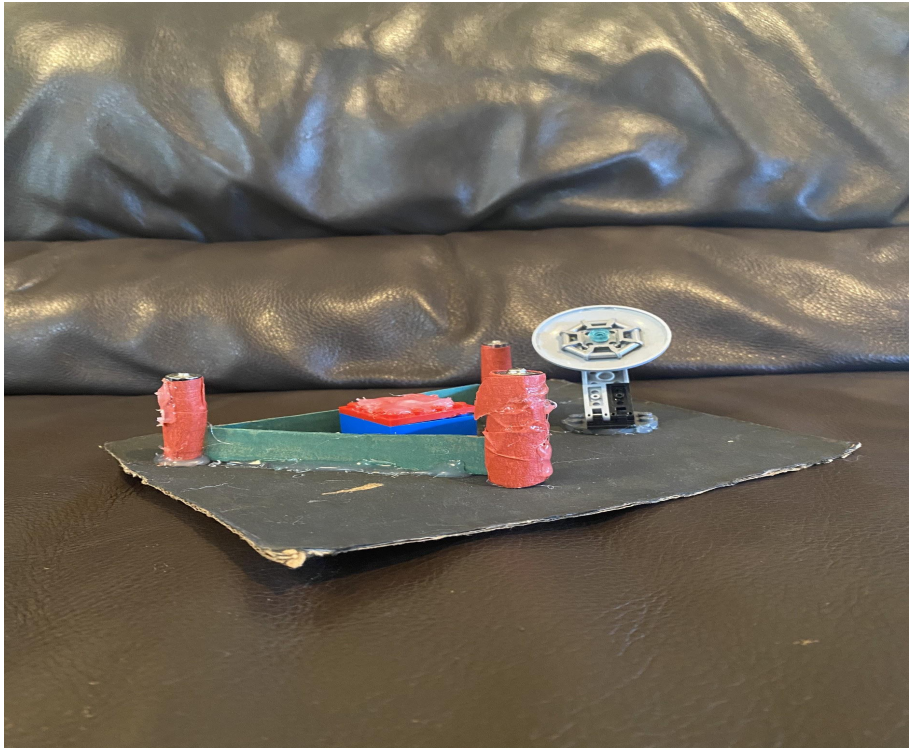


Road

This is a road. Cars can drive on this road to get from place to place. Many roads will be in the city. These are a major transportation source, and are generally needed to get from one place to another.

This road is made out of paper and glue. The scale is 1 inch = 50 ft.

City Services Example 1



Radar Center

This is a radar center that can view incoming objects and rockets. It also helps the things in the city to run smoothly. For example, it helps to run the robotic trash collectors that run through the city. It just helps with general functionality, and the city is able to run because of the radar system. If there is anything that could be a threat to our city the radar system will let everyone in the city know. This is made of old cardboard boxes and batteries. The radar dish is made of Lego and the scale is 1 inch=50 ft.

City Services Example 2

Prison System

This is where criminals go, and it's a police station that is included with a jailing and a check in system. It is made to hold them until they are able to be taken back to Earth. It is in a separate dome section in order to keep everyone safe, and it is connected to the city through the hyperloop.

1 inch = 5 ft.

Transportation Example 1

Lunar Trade Port

This is a Lunar Port. It's for emergencies as well as monthly trade. It is a way to trade with other Lunar Cities, as well as to get out of the city in the case of an emergency. The Trade Port is a major source of income in the city. And, we are able to create a stable economy in, and for our city. This is made of 2 types of egg cartons, a bottlecap, toothpicks, and the top of a coffee container. The scale of this is 1 inch is 75 feet, with the highest point on the model being 2.75 inches, or 206.5 feet tall. That point is one of the radar towers, which needs to be high up in the air in order to detect incoming ships or spatial objects around the Port.

Transportation Example 2

Hyperloop

This is a hyperloop that runs through our city. It helps with efficiency, which makes it easier for people to get to their desired locations. It is powered with magnets, and it helps people to get where they need to go. This technology overall helps people because it can get them where they need to go very quickly. And, because it goes through all of the spurs in the city, it takes even less time, and instead of having to go around the government section. This is just a major transportation system that we have in the city, and instead of relying very heavily on buggies, or cars that have a very high amount of emission they put into the air, or using electrical cars that use a lot of energy, we can use magnets and the energy they put off to power a very efficient transport system.

Living on the Moon (Resource #1) Example 1

Moon Rock

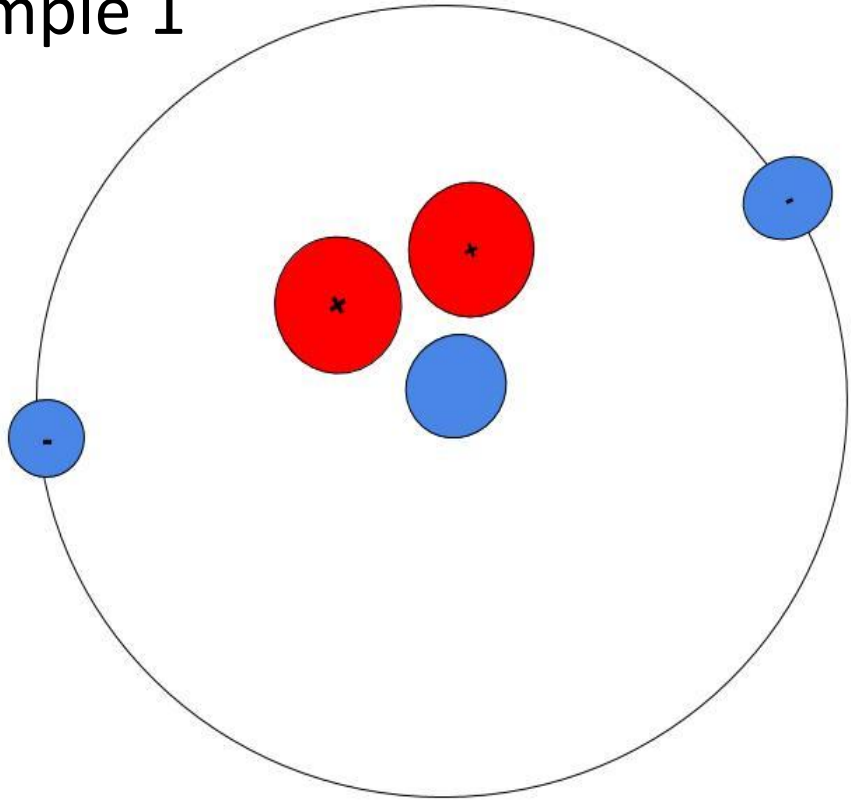
This resource is lunar rock, and lunar regolith. It comes from the surface of the moon. The lunar rock and regolith will be used not only to be melted into metals as a resource for creating buildings as well as taking out the oxygen that is in the regolith for the people to breath. This also helps with creating machinery that is needed for building, and general tasks on the city. Especially because of the great amount of metals located in this rock, we will have a very good resource from which we can take valuable, and very necessary metals for the city.

Living on the Moon (Resource #1) Example 2

Moon Rock

This resource is lunar rock, or regolith. It is a very valuable resource because of the metals, and the oxygen that is contained. There is a lunar mine specifically for mining this very valuable resource.The moon rock is a very necessary resource, because without it, the city wouldn't have metals because major metal transport is difficult, and so the metals in the lunar regolith, and in the moon rock are very helpful, and necessary for the creation of buildings and infrastructure.

Living on the Moon (Resource #2)
Example 1



Helium 3

The resource helium 3 is very abundant on the moon. It can be found all over the surface, although it is pretty scare on Earth. This can be used for many things, but the most valuable way it can be used is as an energy source. Helium 3 has been looked at for many years because of its abundance on the moon, and how that could help the Earth. This energy source would create a safer nuclear energy, because it is not radioactive, and would not produce dangerous waste, such as nuclear radiation can.

Living on the Moon (Resource #2) Example 2

Helium 3 factory

This resource is called helium 3 and it is our city's main power source. Helium 3 is a material that is rare on earth but plentiful on the moon, and when broken and processed in our city’s factores it makes large amounts of energy and will power our entire city until we run out, but that wouldn’t happen for many years. We also have a backup energy source as solar power.

Section II

BUILD IT: QUALITY, SCALE, AND MATERIALS

Innovative Material & Use Example 1

Egg Carton

We used an egg carton to make the space port look realistic. We used the bumps on the bottom of the egg carton as landing pads for the rockets to take off. There was also egg cartons used for extra space at the launch center's separate radar systems. The egg cartons were a very unique material, and because of their very identified shape it was very helpful for creating a very realistic launchpad.

The middle pad is a coffee container lid used for helping the rockets take off and helps track the rockets. We use toothpicks to represent the satellite and antennas.

Innovative Material & Use Example 2

Popsicle Sticks

We used a lot popsicle sticks throughout our model. One example of that use is the popsicle sticks that outline the dump for our city. This dump is a temporary home for the garbage on Arisite until it’s able to be effectively recycled at on of our facilities. There is also the jail/prison which is also made of popsicle sticks, as well as some of the building in our residential section. These help to show the difference in scale with certain buildings, and then clarify, and differentiate the importance of these buildings.

Innovative Material & Use Example 3

Lego

This is a satellite dish from the radar center. It is created from old pieces of legos. These legos give off a very similar look to other satellites, and it shows us incoming objects from space and it also shows us incoming rockets from other cities that are on the moon, this is very helpful because that lets us either see an attack or we can see a rocket coming in and if our space port has an issue, we can just send a radio signal telling them that it is not safe and to turn back.

Example of Scale -

Structure 1

This is our Lunar SpacePort center in our city. It's for trade, as well as getting out of the city in emergencies.

The highest point of the build is a lunar satellite, and it's 2.65 inches tall.

This structure would be about 206.5 feet tall.

Structure 2

This is the Hyperloop for our city. It can be used for getting to work or getting to the lunar spaceport in case of travel, it is about an eighth of an inch tall on the model and it would have a 15 ft radius.

1 inch = 225 ft.

Moving Part

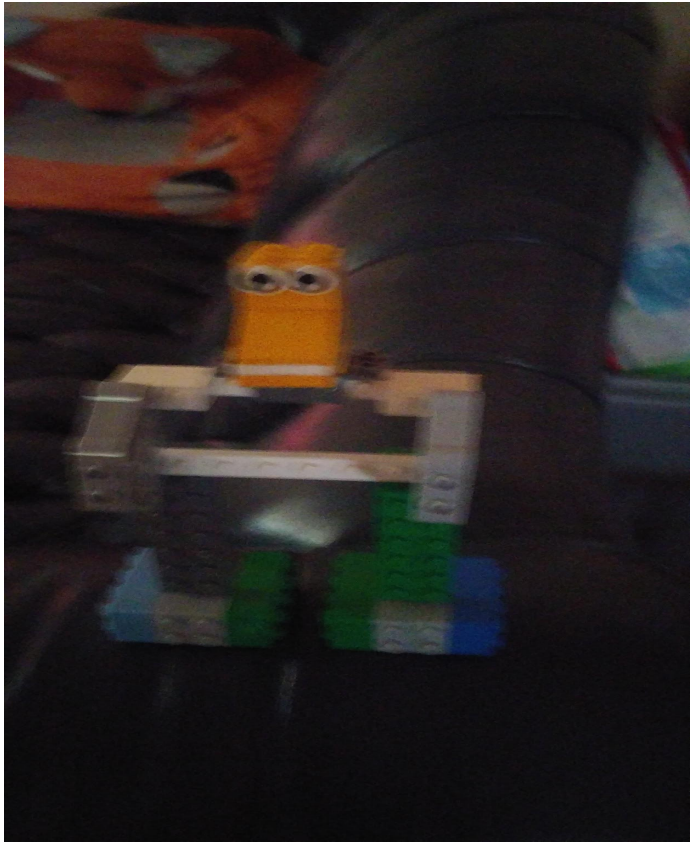
URL link to team's moving part video: https://www.wevideo.com/view/1962391492

Section III

JUDGE ASSESSMENT OF MODEL

Robotic trash collectors

Futuristic Technology Example 1



Robotic trash collectors are one of the primary sources of keeping Arisite clean. Humans make sure that the general controls are working every few hours, and are constantly checking and rechecking the controls of the program-controlled robots to make sure that everything is running smoothly. There is very little chance for risk as everything is constantly being monitored. Humans also have to monitor the robots and their programming, because if anything goes wrong it could be very catastrophic towards the city's ability to function properly. But, it is also very unlikely that the robots could malfunction because they are built with simple technology, that has been refined to make it more modern.

Futuristic Technology Example 2 -

The Hyperloop

The hyperloop is a transportation technology that moves people throughout the city. It is heavily relied on to transport people because it moves at the speed of sound. The hyperloop uses magnetic levitation to work. There is already technology similar to this, but it is futuristic because of our ability to further harness the magnetic levitation, and refine it, making it more fast and efficient, as well as less problematic, and less risk inducing.