



2020-2021 City Model Slideshow

School/Organization: Newark Center for Creative Learning

Educator Name: Jim Dooley

Future City Team Name: TECER 1

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

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

Residential Zone



What is important for the judges to know about your residential zone?:

Our residential zone is where all of our residents live. It is the largest area in our city. Our city is made of concentric rings and the residential zone is the outermost ring.

Commercial Zone



What is important for the judges to know about your commercial zone?:

Our commercial zone is the third ring in. It contains shops, restaurants and our town hall where our elected representatives discuss and vote on topics related to the city.

Industrial Zone



What is important for the judges to know about your industrial zone?:

Our industrial zone is also in our commercial ring. Our warehouses are in the industrial zone.

Infrastructure Example 1



What type(s) of infrastructure are shown here (water, power, utilities, etc.)?:

This is our solar field next to our city. We get power with solar panels.

How are these related to the realities/challenges of living on the Moon?:

Our solar panels are for getting power and since our city is near the peaks of eternal light there is almost always solar light that can help our solar panels give the city power!

Infrastructure Example 2



What type(s) of infrastructure are shown here (water, power, utilities, etc.)?:

This is a model of our maglev trains that transport people in and out of the city.

How are these related to the realities/challenges of living on the Moon?:

The maglev trains also transport people to the titanium mines. The maglev trains are useful on the moon because they are extremely fast, they use very little energy and they don't require very much maintenance.

City Services Example 1



What type(s) of city services are shown here (health, education, etc.)?:

This is the town hall where our elected representatives discuss and vote on topics related to the city.

What do you want the judges to know about your city's operations?:

Our government is a representative democracy where there is a popular vote to elect representatives. Anyone in the city can vote ages 14 and up.

City Services Example 3



What type(s) of city services are shown here (health, education, etc.)?:

This is our hydroponically grown plants that residents can buy from out of the ground.

What do you want the judges to know about your city's operations?:

The plants are grown in the agricultural ring. The agricultural ring is the second ring in. Hydroponics is a way of growing plants in liquid, but it uses less water and resources than traditional plant growing.

Transportation Example 1



What type(s) of transportation systems are shown here?:

This is our maglev train model.

What do you want the judges to know about your transportation system(s)?:

Our maglev trains transport people from our spaceship landing pad to our city and our titanium mines. They are covered in a special paint invented by NASA that protects the trains from moon dust.

Transportation Example 2



What type(s) of transportation systems are shown here?:

Paths for walking or running!

What do you want the judges to know about your transportation system(s)?:

Our city is so small that walking is the smartest transportation. Walking may be tricky on the moon but it is great exercise because people need to exercise twice daily to prevent bone and muscle loss on the moon.

Living on the Moon (Resource #1)

Example 1



Identify the Moon resource shown here:

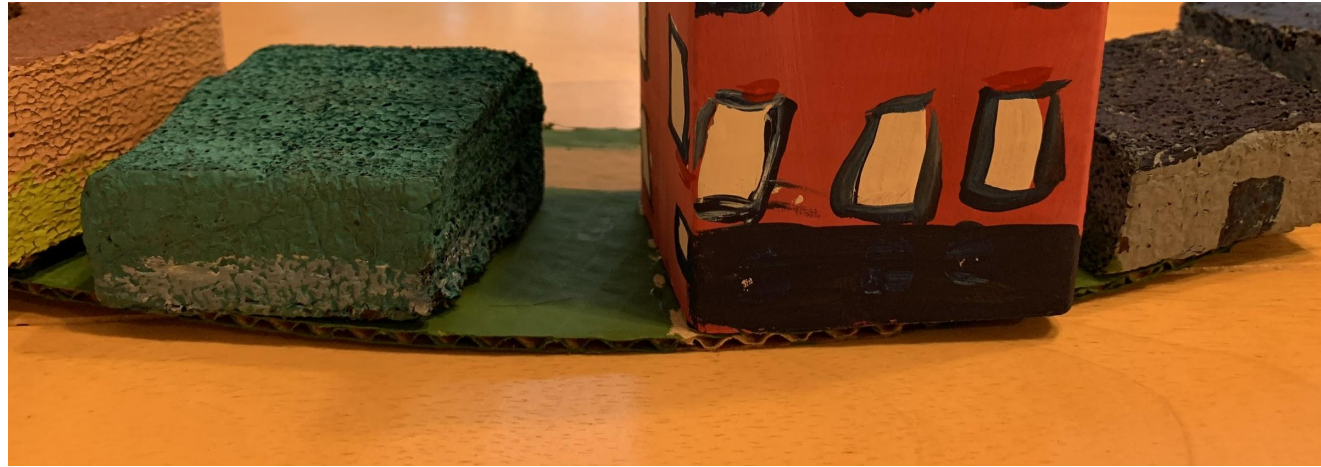
Moon brick petals made of moon dust and all natural resources.

What is important for the judges to know about this resource within your city?:

These moon brick petals protect the city from radiation and extreme temperatures.

Living on the Moon (Resource #1)

Example 2



What is important for the judges to know about this element of your model?:

Some of our buildings are also made of moon bricks because it is a natural resource that is easy to get on the moon.

Living on the Moon (Resource #2)

Example 1



Identify the Moon resource shown here:

Titanium. Maglev trains are made with titanium.

What is important for the judges to know about this resource within your city?:

Magnets and maglevs are made with titanium which is found on the moon. TECER 1 mines the titanium to get it.

Living on the Moon (Resource #2)

Example 2



What is important for the judges to know about this element of your model?:

Our dome's moon brick petals are reinforced with rebar which can be made with titanium.

Section II

BUILD IT: QUALITY, SCALE, AND MATERIALS

Innovative Material & Use Example 1



Choose one recycled or reused item and describe how you used it creatively in your model:

One creatively used recycled material is tinfoil, to make a dome. Molded from a bowl to make it round shaped.

Innovative Material & Use Example 2



Choose another recycled or reused item and describe how you used it creatively in your model:

Paper was painted and ruffled to make plants!

Innovative Material & Use Example 3



Choose another recycled or reused item and describe how you used it creatively in your model:

Toothpicks. Toothpicks were used to make a geodesic dome shape and hot glued together.

Example of Scale



1



Scale used in model (e.g., 1"= 10', or 1"=22'):

$$1'' = 25'$$

Structure 1

What type of structure is this?:

This is a six story building

What size is the structure on the model?:

The building is 3"x2"x2"

What size would this structure be in real life?:

2 This building would be 75' tall (15000 sq ft).

Structure 2

What type of structure is this?:

One story building.

What size is the structure on the model?:

$$\frac{1}{2}'' \times 2'' \times 2''$$

What size would this structure be in real life?:

12.5 feet tall. 2500 square feet.

Moving Part

<https://youtu.be/7so7EbpYCKA>

TECER 1's moving Maglev

The logo for TECER 1, featuring the text "TECER 1" in a bold, yellow, sans-serif font against a solid black background.

Section III

JUDGE ASSESSMENT OF MODEL

Futuristic Technology Example 1



What is important for the judges to know about this example of technology?:

This is our maglev train. Maglev trains are futuristic because they can float with magnetic force and are super energy efficient. They only experience air resistance so they can go really fast using less power.

Futuristic Technology Example 2



What is important for the judges to know about this example of technology?:

Hydroponics are a way to grow plants in liquid. Hydroponically grown plants use 20% less water, 80% less space and requires much less work than traditional plant growing. Plants grown with hydroponics contain 30-50% more A, B, C and E vitamins.