CITY X PROJECT
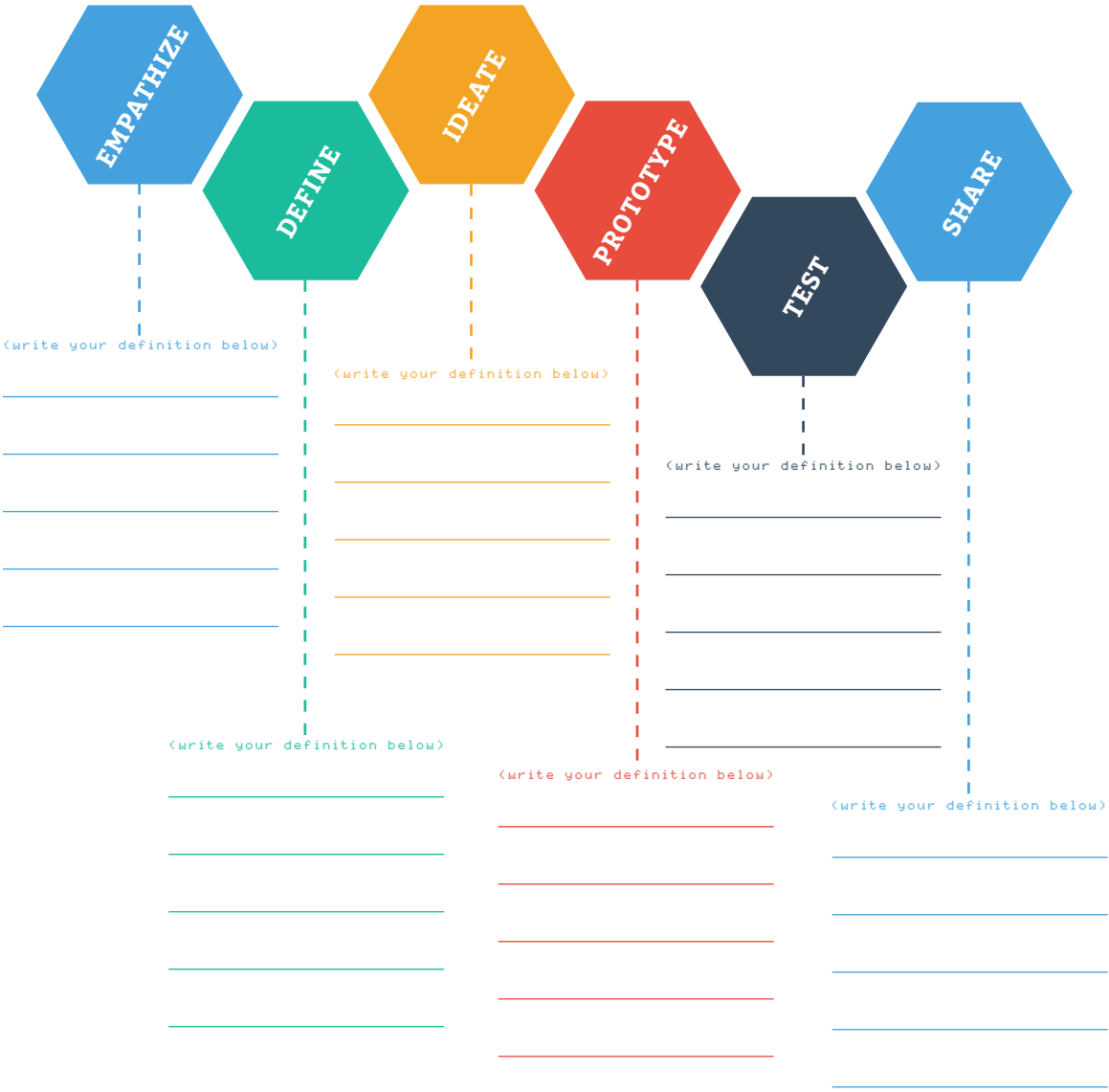
The Design Process

How Ideas Become Reality

To design the best inventions possible, you'll use something called The Design Process. This process will help you understand a challenge, think of solutions, and then create a final product that is effective and ready to be shared with the world! This is the same process used by real designers, inventors, and engineers around the world!

EMPATHIZE

DEFINE

IDEATE

PROTOTYPE

TEST

SHARE

(write your definition below)

(write your definition below)

(write your definition below)

(write your definition below)

(write your definition below)

(write your definition below)

```
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  <initializing_com_pad
    /1...
    /2...
    /3...
    status="initialized">
  <content_type="video_stream" alt="text">
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  <alt>
    <!-- CONNECTION SUCCESS -->
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      <from: city_x-mayor>
      <to: all available designers>
      <status: URGENT>
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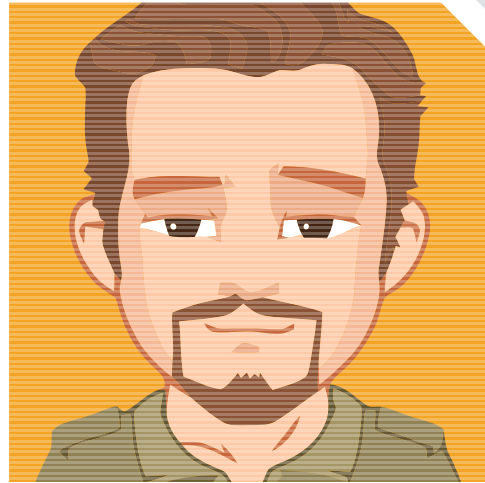
Hello Citizens of Earth,

Our journey from the planet couldn't have gone any better. Though we had a few minor problems, we successfully landed on our new homeworld as of late last week. Besides the extra moon, some of our citizens have even mentioned how much it reminds them of Earth.

Unfortunately, now that we are here we realize just how unprepared we were for this great change. While our people have started the settlement process, we are becoming aware that we simply don't have the time to start adjusting to this new life all on our own.

We are turning to the people of Earth to help us design our first city, City X. Our citizens have begun identifying their problems and we shall make their transmissions available to all the citizens of Earth.
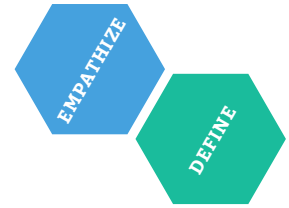
Please, take the time to get to know them so you can help them all on our new and sometimes dangerous planet.

Our future and the future of mankind is in your hands. Thank you and good luck!

Sincerely,
The Mayor

```
        </message>
      </alt>
    </close transmission>
```

What is the problem?

_____ is feeling

happy   sad   frustrated   hopeful   confused

hurt   scared   curious   calm   angry   tired

discouraged   lonely   surprised   tense

(circle your citizen's feelings above)

and needs me to design a solution to a social problem about _____ .

transportation   environment   communication

food   health   energy   education   safety
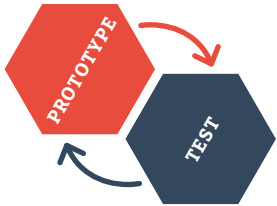
(circle your citizen's social issue above)

Ideate

Brainstorming Guidelines

- *Don't judge.*
- *Go for quantity.*
- *Build on the ideas of others.*
- *Encourage wild ideas.*

City X Guidelines

- *No ideas from adults.*
- *No robots.*
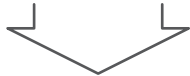- *No inventions that already exist.*

Iteration

Feedback: ✓ Good Things | ? Questions | △ Things to Change
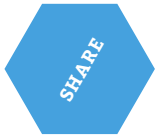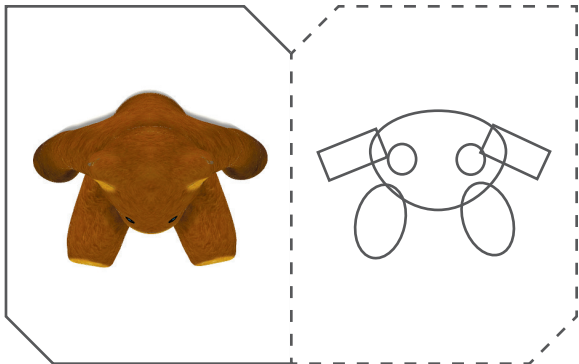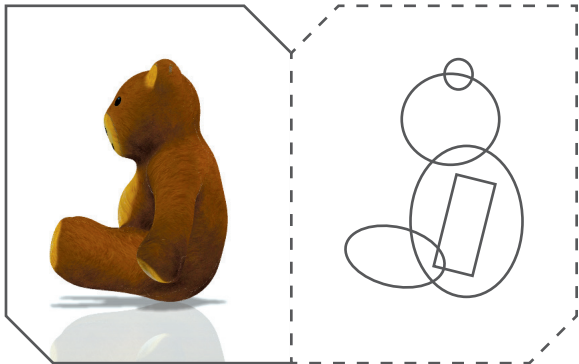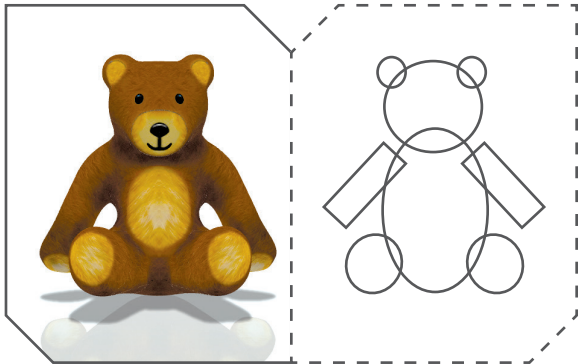
v1.0

v2.0
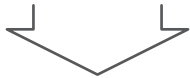
v3.0

(write the name of your prototype above)

(describe your invention above)

Blueprint

Sketch the front, side, and top views of your prototype below.

FRONT

SIDE

TOP

```
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<content_type="video_stream" alt="text">
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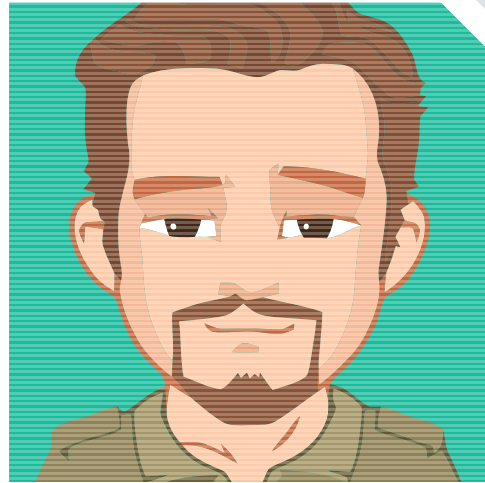
Dear Designer,

We received your invention and can't wait to begin printing and using them here in City X. Thank you so much for your help!

You did such a good job, and we hope you'll continue on the path to becoming a talented inventor. You can keep playing, making and designing with the following free tools at home.

Thanks again,
The Mayor

```
      </message>
    </alt>
  </close transmission>
```

You did it! Now keep learning with these resources.

Tinkercad.com
3D modeling using basic shapes

Cubify.com
Create jewelry and toys to print on the Cube 3D printer

Leopoly.com
Sculpt a model using virtual clay

123Dapp.com
123D Design:
Continue modeling on your iPads or online

123D Make:
Make 3D models out of cardboard and paper

123D Catch:
Create 3D models of real objects using camera or smartphone

Shapeways.com
Explore and download 3D models of almost anything you can think of, created by other great inventors and designers

CityXProject.com
Follow us online so you can see the other inventions that have been made by designers like you from all around the world!