Activity

MAKE A prototype

land art generator initiative powered by art!

**DESCRIPTION**

Students form their design team for the LAGI 2015–16 Youth Design Prize. Together the team sketches their first collaborative design concept, then builds a prototype of their design with models placed on top of the design site plan. Photos of this prototype can function as your LAGI Youth Prize submission!

**GOALS**

1. Adapt 2D sketches into 3D models
2. Invent new ways of harnessing clean energy for electricity
3. Employ understanding of scale in a design context
4. Demonstrate craft and attention to detail

**TIME TO COMPLETE ACTIVITY**

45–60 minutes

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**STEP-BY-STEP INSTRUCTIONS**

**Step 1**

By now you will have read the *Youth Design Brief* and understand the context and the design problem. In the previous activity in the Toolkit, *Sketching in Context*, you will have generated ideas based on your understanding of renewable energy and design. At the end of the *Sketching in Context* activity, groups of 3–5 were formed and you shared your ideas within your group. This group might now be your official LAGI design team.

As a group, think about what you would like to design together. Are there some ideas in your group that can be combined? Read through the design brief as a group and talk about what it is asking. How would you work together in your group to design a solution that is the very best it can be? What story will you tell with your artwork?

**Step 2**

Using the *Design Site Background* or *Design Site Perspective* drawings, take 15–20 minutes to arrive at a group sketch. Remember the *Sketching in Context* activity. Start with a bunch of quick sketches and then spend more time on the later sketches. Think through how your design would appear on each of the drawings (Plan, Elevation, and Perspective).
This group sketch is your first group design concept. 
**Now you will work together to test your idea.**

**Step 3**

Review the prototype examples on this page and the following pages. Notice that each artist team chose different materials for their models. Each time you model your idea in three dimensions, it will allow you and your design team to experiment and reflect on how the idea will actually work in the world. In every design process there is discovery along the way—sometimes it doesn’t work the way you thought it would. For what reason?

You’ll see on the next page that **Blossomings** team uses the simplicity of folded paper to demonstrated their design! The most beautiful designs are sometimes those that discover the simplest solution to a problem or question. Often the simplicity of the finished form conceals a complex process that led to its creation.
Step 4
On top of the **Design Site Background Plan** drawing (printed at full scale on 24” x 36” or A1 size paper) each group works together to build a model of your idea in three dimensions. Use clay, straws, sticks, pipe cleaners, wire, toothpicks, folded and twisted paper, or anything you can get your hands on for sculpting materials. Make sure to use caution with glue guns, scissors, or other tools.

How are you modeling your renewable energy technologies? Are you making a turbine? If so, what is in the path of the blades when they spin? Are you using solar panels? Are they straight or curved? Do they face towards the sunshine at noon, or in the morning or evening?

Antonio Maccà and Flavio Masi’s prototype model above of **Solar ECO System** and their computer rendering below for their LAGI 2010 proposal. The prototype explores the concept of the abstraction of the solar system and relative scale. The final artwork uses photovoltaic panels that have been custom fabricated into shapes fitted into patterned spheres.

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**FUN IDEA!**

At the end of your prototype activity, take five minutes to make a short video recording of your model. Send it to us in an email and we’ll put it on the LAGI website.

lagi@landartgenerator.org
Above is Inki Hong, Solim Choi, and Walter Sueldo (Architecture i.S) prototype model of Blossomings. It’s made out of paper! Below are their computer renderings for their LAGI 2012 proposal. The final artwork (images below) is a modular unit that uses a folding geometry to expose solar panels to the sun during the day, and closes at night to become a vertical axis wind turbine.