



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

use your engineering skills to build a tower out of gumdrops.



Supplies Required:

Gumdrops
Toothpicks

Video

Take a "tour" of famous monuments around the world: <https://tinyurl.com/y7szgxvp>

Overview

What are some of the monuments that you saw in the video? What do you think the engineers thought about when building each one? If you could build a monument, what would it look like? Why would you build it? Where would it be located? Using the materials you have been given, create a monument.



Instructions

1. Problem: What do we want to solve? Look at the materials you have available. Building gumdrop structures can be whatever you want them to be whether they look more like abstract sculptures, a dome, the Leaning Tower Of Pizza or simple shapes.
2. Solutions: What are some ways to solve the problem? What makes a strong structure?
3. Model: Build your design! Construct your monument. Does it have a roof? Is it sturdy enough to stand on its own?
4. Test: Does your model work? Test it out, can it stand on its own?
5. Reflect & Redesign: Was your model successful? Does it need to be redesigned? If it does not stand strong, what can you do to reinforce it and make it stronger?

Additional Resources

1. What is an engineer? <https://tinyurl.com/g99y2z>
2. Take a virtual field trip to Washington DC to see our monuments: <https://tinyurl.com/p76ps5m>

Share It Out

Share on social media: Take a photo of your monument and share it on social media. Use the hashtags:

#GumdropMonument
#ProjectExploration
#StemAtHome

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634

www.projectexploration.org