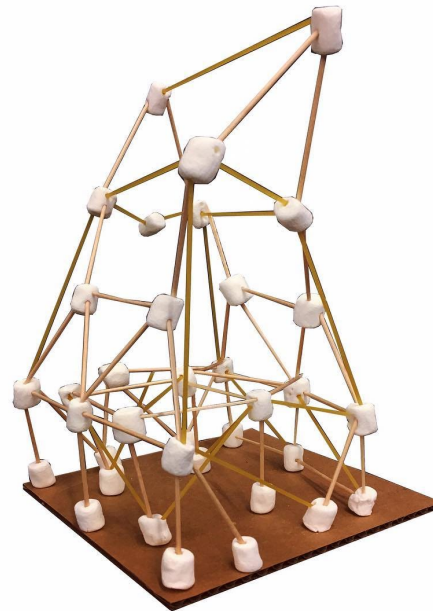


Skyscraper Structures!

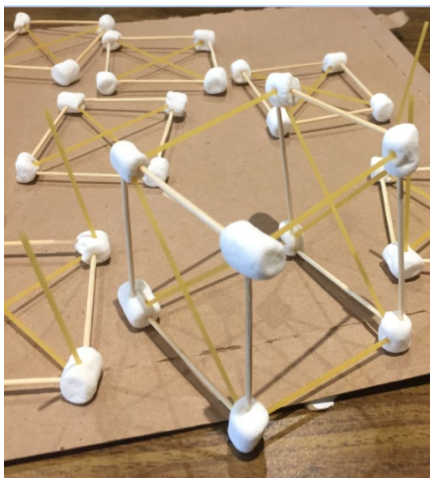
Skyscrapers are incredible structures! Discover the forces at work by building your own structural frame using toothpicks, marshmallows, and spaghetti. Most skyscraper designs use triangles because they are the strongest shape and can resist the forces of *compression* (pushing) and *tension* (pulling). Watch this [video](#) for some clues about how triangles can help your structure to be both tall and strong.



Materials

Round toothpicks ▪ Dry marshmallows ▪ Uncooked spaghetti

Instructions



- Step 1** Allow your marshmallows to dry out for 1-2 days before you begin. To make sure they are not mushy, spread them onto a flat surface such as a tray, plate, or cardboard box.
- Step 2** Create your skyscraper's base by connecting the toothpicks and marshmallows. Measure and break spaghetti into smaller pieces to add diagonals and other longer pieces as needed.
- Step 3** Make sure the base is strong before you continue to build on top of it. Add additional levels to your structural frame and be sure to use triangles to add stability!
- Step 4** Share a photograph of your creation on Instagram! Tag [@centerforarchk12](#) and use [#architectureathome](#).