

GEOMETRIC SKYSCRAPERS

In this lesson, you'll learn about structural engineering!

Materials

- Mini Marshmallows
- Round Toothpicks

Instructions

1. Before beginning, assemble a triangle, square, and polyhedron to use as examples
2. Have children make 2D triangles and squares with marshmallows and toothpicks, then build those into 3D structures
3. Continue to build structures as tall as you can!

Observations

What shapes are we building?

Can you still see the triangles and squares as we create our structures?

Which shape is the strongest when building your skyscraper?

Parental Note

Triangles create more stability in the structure and should be used more when adding height to your structures.

When building your skyscrapers, you're making design decisions like artists and making stability decisions like structural engineers.

STEAM Principles

Engineering - structural design concepts

Art - Design decisions

Math - 2D & 3D shapes/Geometry

Video Lesson

