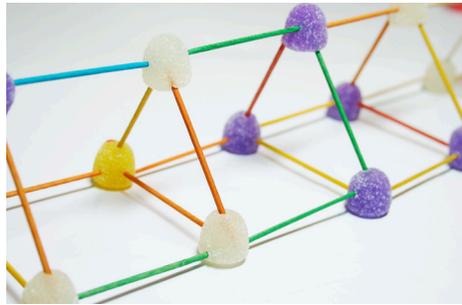


INSPIRED BY LITERATURE: Toothpick Bridge Construction



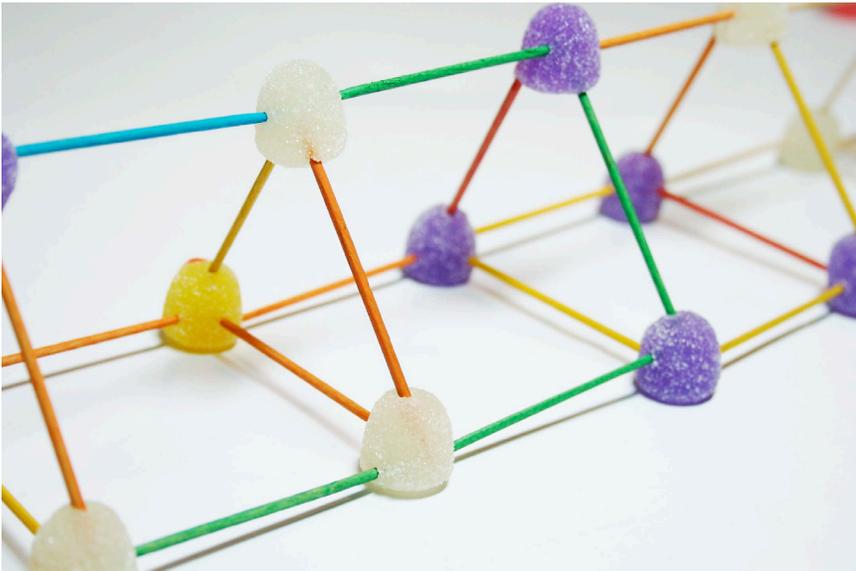
Like a lot of kids her age, my daughter loves to build. Our living room floor is often turned into an obstacle course by baskets upon baskets of wooden blocks used to make castles, horse stables, houses and roads. On the occasion that I actually convince my girl to clean up the blocks long enough for me to vacuum or mop, I inevitably find them set up again shortly thereafter. Actually, she is building a castle complete with drawbridge and moat as I write this.

This fondness for construction has led us to reading a number of books about how things are built, such as Gail Gibbons' *How a House is Built*. These books, which give an inside view of how the things that seem like they were always there actually came to be, have proven very, very popular at our house. Likewise, books that show important or interesting man-made structures around the world have been well received. We particularly like *Bridges are to Cross* by Philemon Sturges with illustrations by Giles Laroche.

Bridges are to Cross is a survey of big and beautiful bridges from around the world, complete with a sparse but poetic narrative about the ways that human beings have interacted with and used the bridges in their environments over the centuries. As an additional bonus for the curious reader, each page also shares facts about the individual bridge that it pictures, including some basic information about the construction and engineering of bridges.

So, it should come as no surprise that *Bridges are to Cross* was a first choice for inspirational viewing when the decision was made that a bridge needed to be built at our house on a recent weekend afternoon. Granted, we used toothpicks and gumdrops, not steel cable and concrete, but the results were satisfying nonetheless. This project is incredibly simple, but still provides a great starting point for explorations into how things are built as well as the basic principles of engineering and physics. I highly suggest that you give it a try.

MAKING TOOTHPICK BRIDGES



MATERIALS:

- toothpicks
- gumdrops or marshmallows
- imagination

I've been caught! There aren't really instructions for this project. In fact, building these bridges is all about experimenting with the way that things fit together (or don't) and how to make changes to a structure to help it be sturdier and longer lasting. That being said, here are a few hints:

- Gumdrops work better than marshmallows which work better than jellybeans.
- A bridge is sturdier if it has a strong base. Good success was had at our house using square bases connected to one another with shared gumdrops.
- Generally speaking, the orange gumdrops do not taste good.



HAVE FUN!