



at Fairsted

As the site of the nation's first full-scale, professional landscape architecture office, we have many examples of creative uses of Science, Technology, Engineering, Arts, and Math. We would love you to try out some thing inspired by the happenings of the Olmsted office!

## What did the Olmsteds do?

When planning a design, models were frequently used by the Olmsted firm. In fact, there was an entire space dedicated to building models- the barn behind the main building at the Olmsted firm. What is a model? A model is a miniature three-dimensional representation of a

larger object. Why were models used? Models help a landscape architect to make sure that the design is good and that their client likes the design. It is much easier to make changes to a design before it is built than after!

## What can you do?

### Supplies needed:

- Popsicle Sticks
- Balsa wood sticks cut into 3 different sizes
- Hot glue gun
- Hot glue sticks

If you do not have balsa wood sticks, try using all popsicle sticks instead.

### Directions:

1. Take 4 popsicles and lay them flat with the long edges touching. Ask an adult for help and carefully glue together with the hot glue gun.
2. Take 2 large balsa woods pieces and glue each one to the side of the popsicle sticks.
3. Take 3 of the small balsa wood pieces and glue them on the corners of each large

wood piece at an angle.

4. Take 2 medium balsa wood pieces and glue them on top.
5. Take 8 small balsa wood pieces and glue them in between the top and bottom of the bridge to form 3 triangles.
6. Finally, glue 3 more small balsa wood pieces in between the sides of the bridges in line at the peak of the triangles.

There are many variations that you can try! What designs for a bridge can you think of? Test the design of your bridge by seeing what objects you can stack on top of it. The trusses help the bridge to distribute weight evenly and safely. This particular truss bridge design allowed us to stack a heavy textbook on top of it without breaking.

