

Dear parents,

On the following pages are all the details for the structure unit, including the toothpick bridge. This is an incredible undertaking for every student and they need parental support.

Please sign and return the slip below.

Structures Unit Introduction

This unit requires the construction of a toothpick bridge. Use of time is critical and parents may want to assist in time management. The unit teaches concepts of physical structures, writing, research, and the scientific method, all of which are a part of the National Science Standards.

The components of this unit include:

- Writing “**Structure Journals**” (daily records of new bridge knowledge).
- Constructing small practice structures, done at school but may be practiced at home.
- Completing a **research paper** on bridges.
- Drawing a plan for the bridge (**architectural drawing**).
- **Completing the toothpick bridge**. Many class periods are given at school and much time is needed at home.
- Completing a **poster** about the bridge.

The following schedule may be helpful. Please let me know ASAP if there are concerns with this project, and I will be glad to provide assistance.

Toothpick Bridge Dates

(**Bold face dates** are due dates. Normal type are recommended scheduling dates)

Start thinking about designs and keep a good daily journal	_____
Research Paper	_____
Get your Architectural Drawing done, show teacher, and start layers	_____
Architectural Drawing	_____
Determine how long it takes to make one side-view layer (usually about an hour) and multiply by the number of layers you are making. Schedule your time to complete a MINIMUM of 10 layers. 40 layers has been done.	
All layers complete.	_____
Begin attaching layers. ¹	_____
Attaching layers takes longer than you might think	
Completed Bridge (aesthetics graded today and “Photo Shoot”)	_____
Bridge Display	_____
Bridge Busting Days	_____

¹ This step is essential. A bridge with 40 wobbly layers incorrectly attached will not hold as much as one with 10 layers locked in place. There are not many toothpicks to glue, but this is meticulous, and sometimes frustrating, work if it happens the night before it is due!

I have received the Toothpick Bridge due dates and introduction sheet.

Student signature

Date

Parent signature

Date