

Sample Efficiency Scores

Example #1

Bridge Weight: 23g

Weight Carried: 10.07 kg (includes bucket and all testing devices, maximum load 20 kg.

Efficiency Score. This score equals 0.10 times the weight carried, divided by the bridge weight.

(0.10 X 10070 g (weight carried)) / 23 g (bridge weight) = 43.78

Example #2

Bridge Weight: 29 g

Weight Carried: 11.13 kg

Efficiency Score: 0.10 X 11130 g / 29 g = 38.38

Example #3

Bridge weight: 34 g

Weight Carried: 14.11 kg

Efficiency Score: 0.10 X 14110 g / 34 g = 41.50

Sample Final Scores

Category	School A	School B	School C	School D	School E
Written Report	8.6	9.5	10	7.6	8.2
Oral Presentation	7.5	9.3	9.9	8.7	8.3
Design Drawing	8.5	9.3	10	9.6	8.7
Model Efficiency	32.84	29.07	28.00	17.58	27.03
Final Score	57.44	57.17	57.90	43.48	52.23
Ranking	2	3	1	5	4

It's possible to win without a bridge that holds the most weight!

Order of Events at the Competition

- First, the middle schools will do their oral presentations and then the high schools will do their oral presentations.
- After the presentations, the middle school bridges will be tested followed by the high school bridges.
- All of the winners will be announced after all bridges have been tested and the judges have tallied the scores.
- Start at 9:30 a.m. and typically finish around 12:00 p.m.

Provided Materials



100 +/- Sticks of 1/8" x 1/8" x 36"



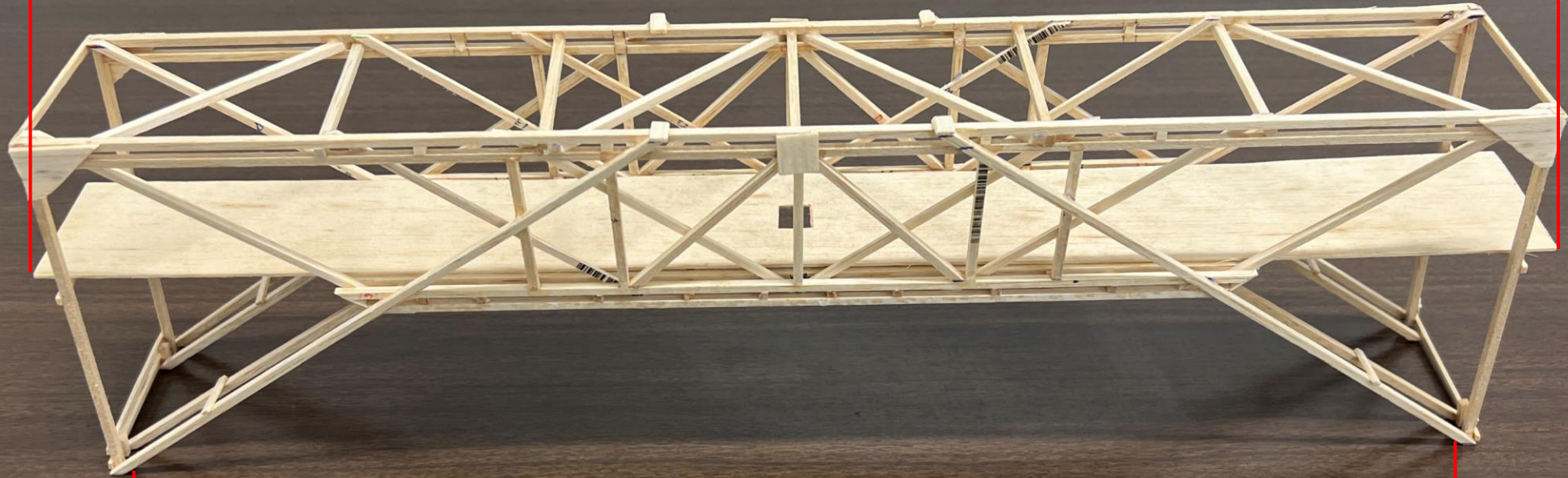
4 Sheets – 1/16" x 3" x 36"



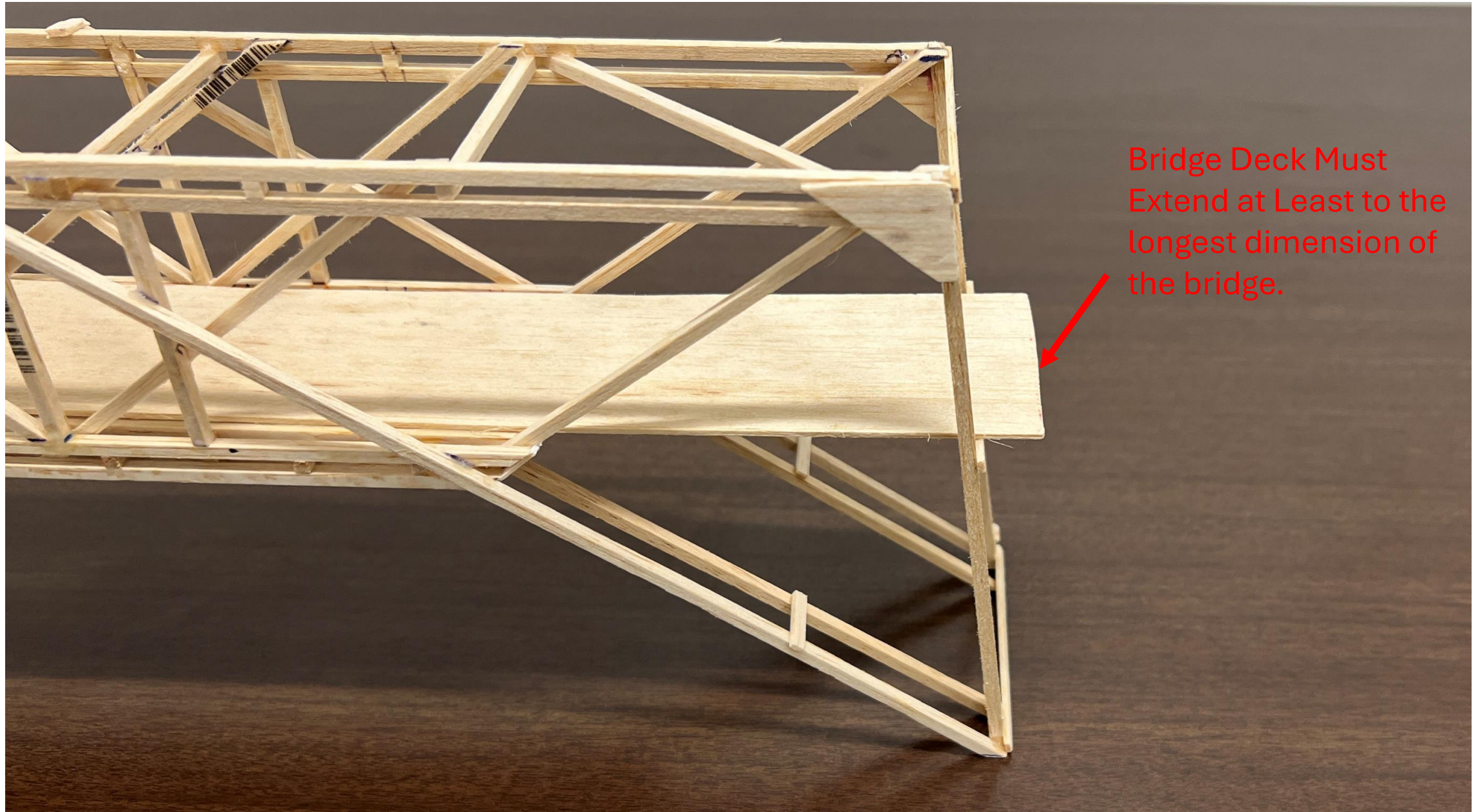
2 – 4 oz Containers
Balsa Wood Glue

**** Schools may purchase additional materials from other sources if they choose. Materials must meet specification requirements.*

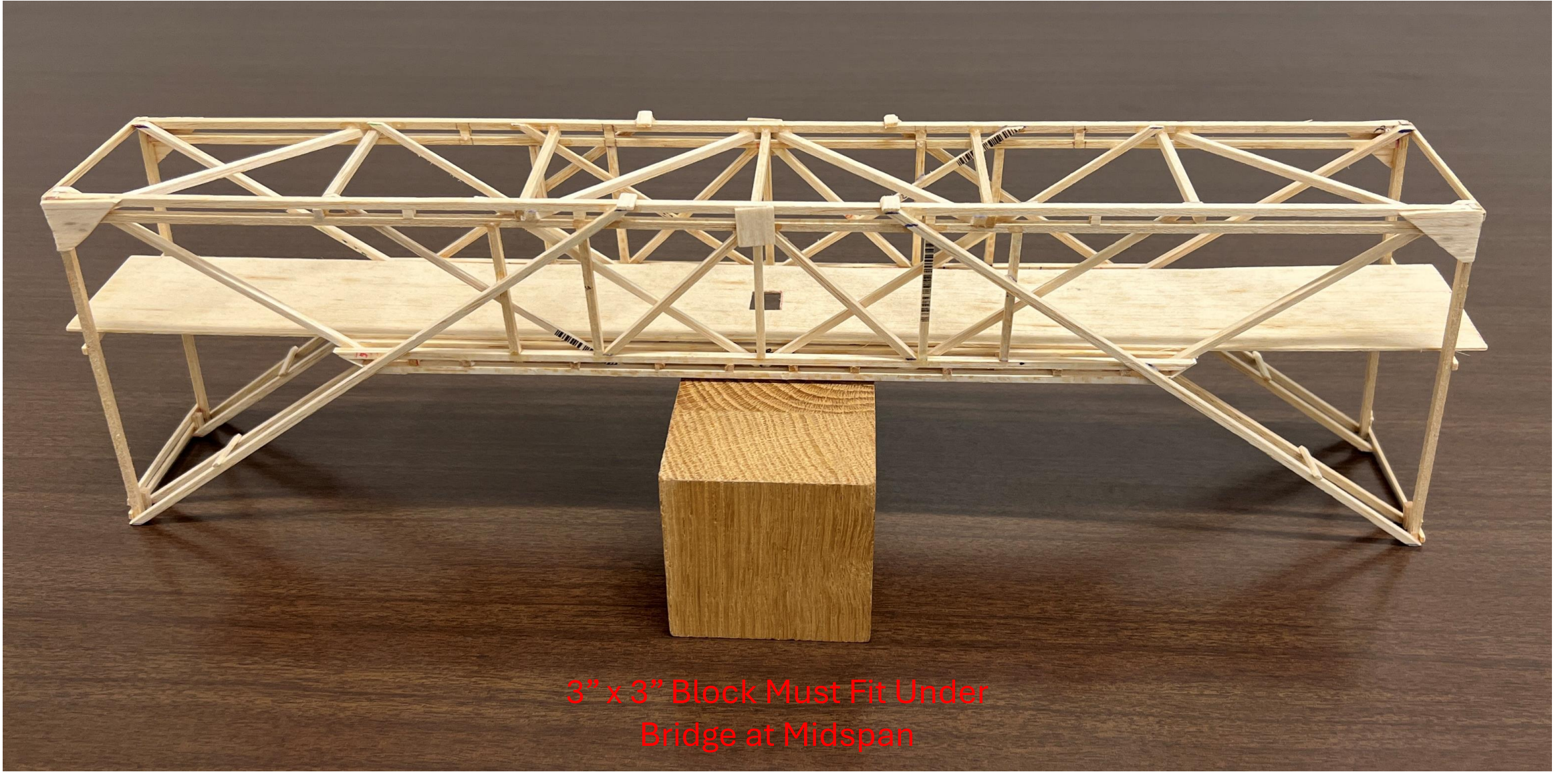
Max Bridge Length = 22"



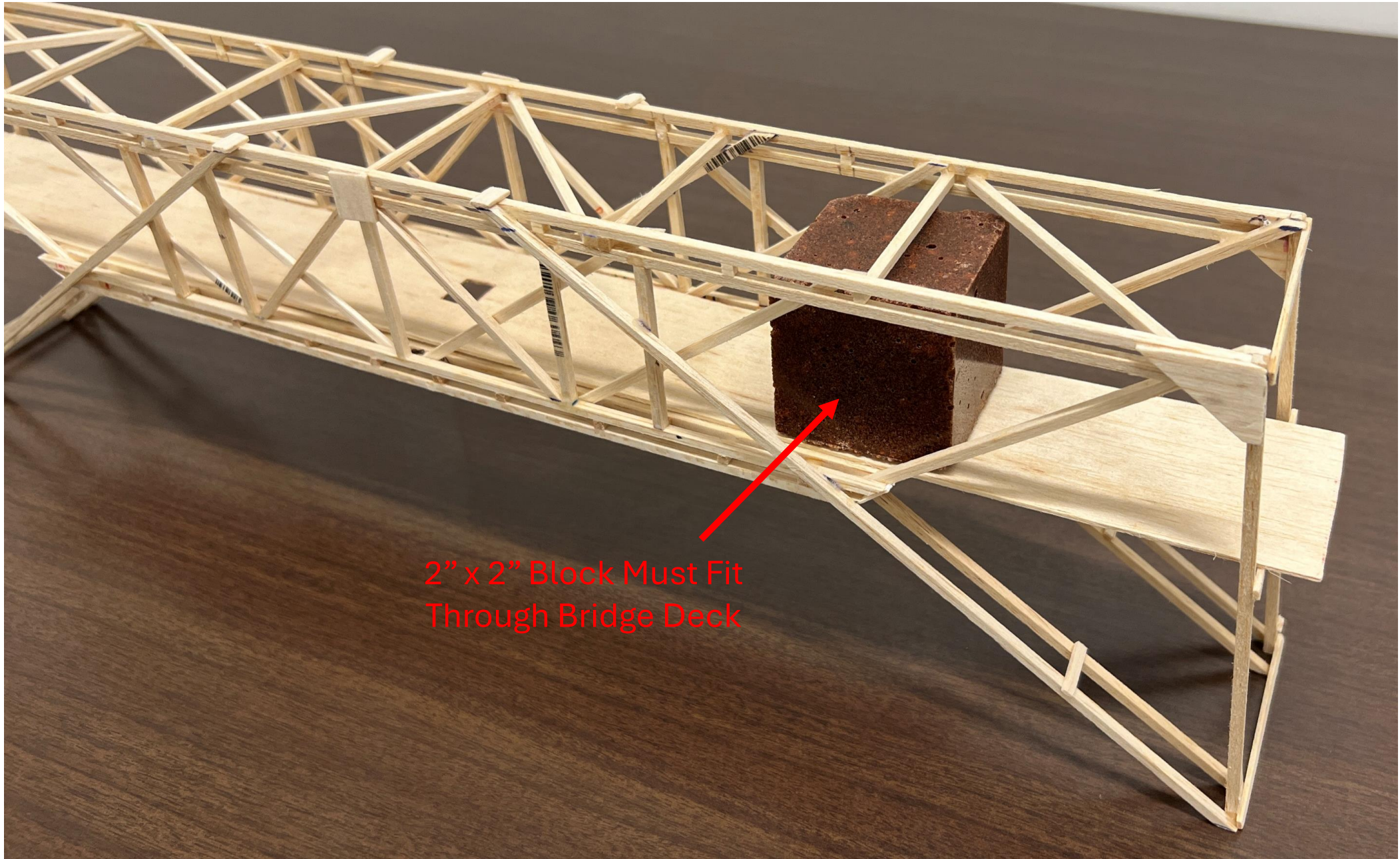
Minimum Clear Span = 18"



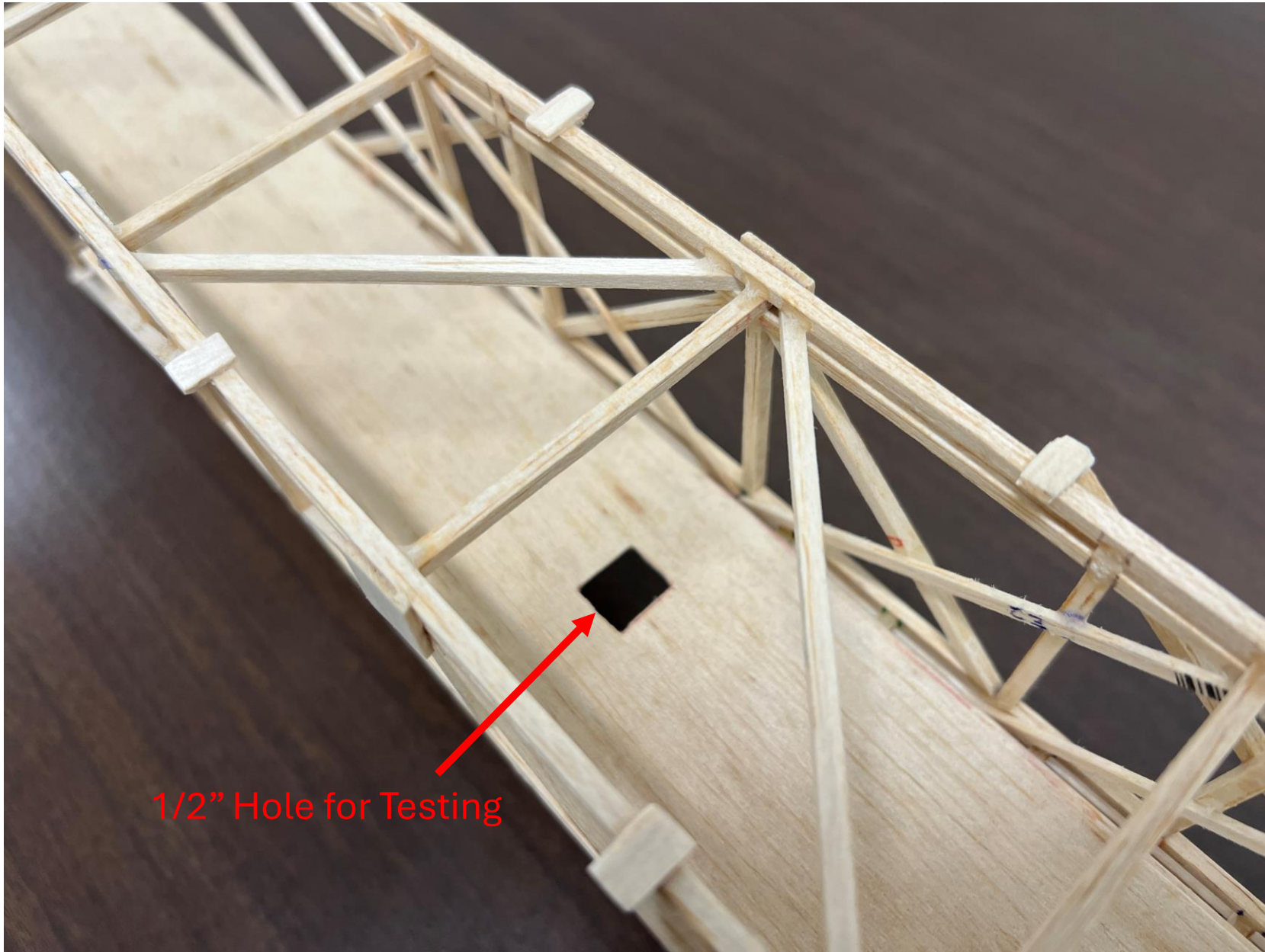
Bridge Deck Must
Extend at Least to the
longest dimension of
the bridge.

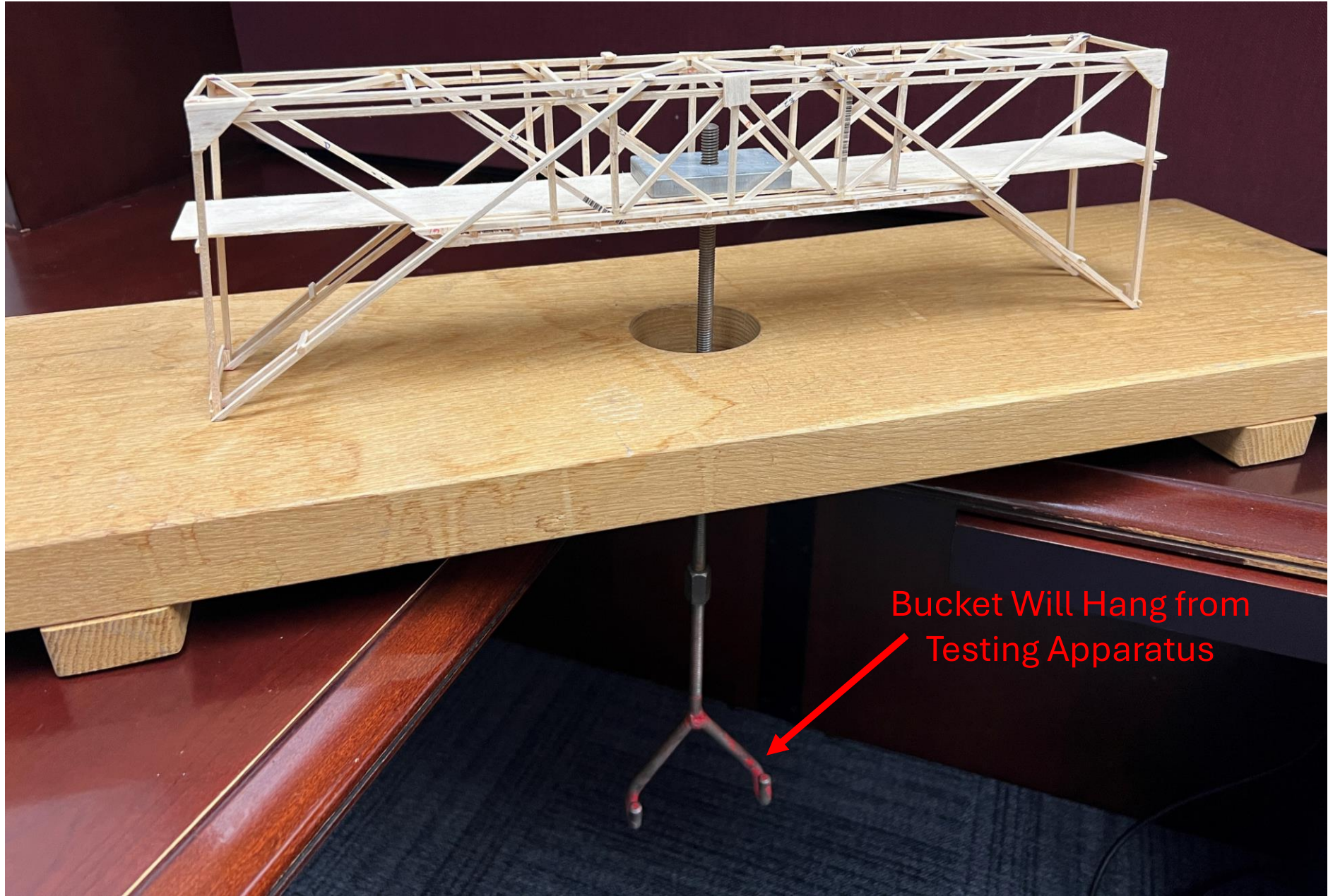


3" x 3" Block Must Fit Under
Bridge at Midspan



2" x 2" Block Must Fit
Through Bridge Deck





Bucket Will Hang from
Testing Apparatus



Oral Presentation

Teams must give an oral presentation per the competition guidelines and content is the most important consideration in judging. However....

This year, there will also be a Most Creative Award for each grade!

Make the bridge the main character! Some ideas include a skit, dialogue, music, or a theme to express the characteristics of your bridge.

The creativity won't influence your score, but it may win your team a prize!

