

## 2015 Bridge Scoresheet B/C

School: \_\_\_\_\_ V JV1 JV2 JV3 JV4

Students \_\_\_\_\_

**Construction Parameters (mark any violations):*****NEVER HANDLE THE STUDENT'S BRIDGE. Make them place it on the scale, etc., themselves.***

\*\*starred lines must be checked after bridge is placed on platform

	<b><i>Weigh the bridge first, enter mass in grams to nearest 0.01g in scoring formula</i></b>	
3.a.	All construction completed before check in	
3.b.	Bridge is single structure capable of sitting on two test supports	
3.c.	Bridge spans opening 35.0 cm (B Div) or 45.0 cm (C Div)	
3.e.	Outside width of bridge at least 5.0 cm at any height <i>in silhouette- see NC clarification</i>	
**3.e.	Bridge does not extend below test supports prior to testing	
**3.f.	Bridge is capable of supporting loading block at center of span	
3.g,h,i	All parts are wood /adhesive, (no plywood, paper, composites, price tags, tape, etc)	
3.j.	Teams able to answer ?s regarding design, construction, etc., if not DQ (see Building Policy for construction events)	

**Competition Parameters (mark any violations):**

\*\*starred lines must be checked after bridge is placed on platform

2.b.	Team properly wore eye protection (warn once, then stop loading and place in 4 <sup>th</sup> tier)	
5.a.	No alterations, substitutions, or repairs made after check-in	
5.a.	No outside assistance, materials, or communication	
**5.e,f,g	Teams must place bridge and loading block/ bucket themselves	
**5.h.	No adjustments are made after loading of sand begins	
**5.i.	No direct contact of bucket by teams, contact only made with stabilizing sticks	
**5.n.	(NC Clarification) Teams did not reach into bucket or attempt to guide flow of sand (warn once, then stop loading and place in 4 <sup>th</sup> tier)	

Failure is defined as the inability of the Bridge to carry any additional load or any part of the load is supported by anything other than the Bridge. Loading must stop immediately when a failure occurs or when time (8 minutes) expires. The Event Supervisor must remove any sand and wood fragments added after failure.

$$\text{Efficiency} = \frac{\text{Load held in grams (15000 max)}}{\text{Mass of bridge in grams to nearest 0.01g}} = \text{Final Score}$$

**Check proper tier placement**

\_\_\_\_\_ TIER 1: No violations

\_\_\_\_\_ TIER 2: Bridges with violations under competition

\_\_\_\_\_ TIER 3: Bridges with violations under construction (may also have competition violations)

\_\_\_\_\_ TIER 4: Bridges that are unable to be tested, eye protection violations, reached into bucket

*High score wins. Tiebreaker= lightest bridge wins***FINAL RANK:** \_\_\_\_\_**Comments (explain DQ or PS here):**