

Towers

Description	Teams design and build the most efficient tower.
Time Limit	10 minutes to test
Team Size	2 students
Details	 Each team may only enter one tower. The tower must support a loading block at a minimum of 50 cm above the test base. The tower must span the square opening in the test base. A chain or string must be able to pass through the center of the tower. The loading block will be attached to a chain which will have a bucket at the bottom, below the test base. Teams will add sand to the bucket to see how much weight their tower can support. The tower may not be braced against or lean on any object or surface. The tower must be a single structure with no separate or detachable pieces. The tower must be constructed of wood and bonded together with glue. (any commercially available glue is allowed) Wood may be laminated by the teams, but may not be commercially laminated. Also, particle board, wood composites, bamboo and paper are not allowed.
Competition Scoring	 Towers will be scored and ranked according to the mass of the load it can hold without failing. Scores will be based on ranking within the tiers below. Tier 1: Towers meeting all construction parameters (54 -60 points) Tier 2: Towers not meeting construction parameters (49-53 points) Tier 3: Towers unable to be tested. (48 or fewer points)
Notebook Requirements	Towers Design Notebook: 20 Points
Timeline	Planning: Monday, May 2 nd Building: Tuesday, May 3 rd – Tuesday, May 10 th Testing: Wednesday, May 11 th



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