

Design, Construction and Fiscal Management Rubric

Collaboration (step 1)	Tower qualities (step 2)	Fiscal consideration (step 3)
Team communicates effectively, solves problems, discusses options and possibilities, addresses different opinions articulated by peers, and resolves differences through discussion.	Tower strength is measured using incremental weights, wind, and rain testing. Through the teacher's testing in front of the classroom, tower strength is determined. A tower that holds the maximum weight dry, does not move when blown with a hair dryer at various angels, and holds the maximum weight wet is rated an A with regard to the tower quality. An A+ rating is achieved if a company includes a railing and a ladder with its tower. If there were no collaboration problems (i.e., superior rating), then there are no deductions from the A or A+ tower quality rating. (Acceptable rating on collaboration drops tower quality to B+ or B). Towers that receive A or A+ ratings move on to Step 3 and are assessed based on the fiscal considerations rubric section if only one company in the classroom receives the A or A+ rating. Usually, however, multiple groups (companies) receive an A or better rating.	Least expensive and safest (based on Step 2) tower is rated superior overall and the company is strongly encouraged to submit a bid for the new football stadium being planned. The A or A+ rating is maintained.
Acceptable collaboration Team communicates and solve some problems, discusses options and possibilities, and addresses different opinions articulated by peers, but does not fully resolve differences through discussion.	Tower quality testing fails one test. For example, it does not hold maximum weight dry (needs to hold at least half of incremental weights). Grade drops to a B+ in tower quality if collaboration is superior, drops to a B rating if collaboration is acceptable, and drops to a B- rating if collaboration is unacceptable	Towers that do not go over bid budget maintain current A and A+ grade (usually only A and A+ towers are considered in the fiscal considerations rubric) and are considered acceptable towers, but possibly too expensive for future bid considerations.
Team communicates but does not solve problems to accomplish the goals of the project-one or two students' opinions are included and others' opinions and ideas are excluded.	Tower quality testing that fails two tests automatically drops to a B rating if collaboration is superior, drops to a B- rating if collaboration is acceptable, and drops to a C+ rating if collaboration is unacceptable.	Companies that go over on bids drop in rating by a full letter (A or A+ towers are dropped to B or B+)