

Standing Together – Tower Design Project

Team Members:

The Design Challenge:

Your team must design and build the tallest possible free-standing tower using only the materials provided. Your tower should demonstrate both structural integrity and visual appeal. The tower must support a weight on top for 30 seconds without collapsing, while incorporating intentional aesthetic elements that enhance its design. You can not use tools (scissors, bin, tape roll, etc.) within your structure. You can not use the internet.

Must be completed by the end of this class session. Testing will occur during the next class session. You will put your tower in a secure storage area after class today.

Constraints: What are the primary design constraints? (hint: look at the test rubric)

Materials Provided: Look through your bin and list all materials & resources provided

Objectives: Choose 3-4 objectives that your team will focus on. (ex: height you hope to reach, stability measures, aesthetic elements, innovative features, quality construction)

Objective	Description

Build notes:

pieces paper used: _____

Materials you did NOT use: _____

Challenges/Obstacles: _____

Other notes: _____

When you are finished: Label tower with number or names, put your tower in the storage area

Testing Rubric: Testing will occur during our next class session

Aesthetic & Design elements will be scored by you. Height & Stability are performance based.

						Points
Constraints (1 point each)	Freestanding	Uses supplied materials	Completed in time	No tools in structure	No use of internet	
Aesthetic Elements (2 points each)	Creative theme or pattern	Effective use of color	Design cohesion			
Design Elements (2 points each)	Efficient use of materials	Clean construction	Effective joints and connections	Innovative Features		
Height Achievement (10 pts max)	100+ cm (10 pts)	80-99 cm (8 pts)	60-79 m (6 pts)	40 – 59 cm (4 pts)	20 – 39 cm (2 pts)	
Stability Test (5 pts max)	30s; no wobble (5 pts)	30s; minor wobble (4pts)	15-29 sec (3pts)	5-14 sec (2pts)	<5sec (1 pt)	
TOTAL						