

Least Massive Tower

SKILLS AND ENGINEERING CONCEPTS DEVELOPED.

Involves designing and constructing a free standing tower from any available materials. Involves creative design, analysis of structural concepts, construction skills and concepts of stability.

OBJECTIVE

The objective of this project is to build the lightest possible 36 inch high tower from any available materials to support an Instructor supplied weight of 454 grams. The school record is 11.5 grams, the tower was designed by Susan Santos.

PROJECT DESCRIPTION

The challenge of this project is to design the tower to make optimum use of any and all materials used in the design.

CONSTRUCTION

Each student will select the materials to be used in the towers construction. Any material may be used and any method or material can be used for fastening the selected materials together.

TESTING

- The height of each tower must be a minimum of 36 inches measured from the floor prior to testing.
- The towers weight will be recorded prior to testing.
- Each tower tested must be freestanding for at least 30 seconds.