

Project: Building a Liquid Storage Tower

Aim:

Building a tower, using available materials, that carries 6 liquid cylinders.

Available Materials

- 100 sheets – size A4
- Sticky tapes
- 6 cylinders (capacity for each cylinder is 200-250 ml)

Rules and instructions

- The tower should be established on the floor or on a table. Its height should not exceed 6 feet (177 cm).
- Each team should build one tower
- Other materials should not be used
- The tower should stand alone without support from the wall or a table
- Cylinders that include liquids should be loaded and no other alternatives should be used.
- The cylinders should be placed horizontally and they should be able to stand alone without support

Important notes

- Foot= 31.5 cm
- Inch= 2.5 cm

Procedures for implementation:

Planning phase:

- Planning phase is 15 minutes
- This phase is for designing and initial trial.
- The tower should be 6 inches (15.24) away from the ground

Implementation phase:

- Duration: 35 minutes
- This duration is for completing your installation
- You must finish within the time limit. Work continued after the stated time is up will not be taken into consideration

Work evaluation

How my work will be evaluated?

- Every minute saved of the given time is calculated as one point, so let the chair know when you finish.
- Every inch of the tower height forms one point
- Every inch of the tower height that exceeds 40 inches equals 2 points
- Every cylinder on the tower forms 10 points
- If the distance between the cylinder and the ground is between 1 and 2 feet, 10 points will be added
- If the distance between the cylinder and the ground is between 2 and 4 feet, 20 points will be added.
- If the distance between the cylinder and the ground is between 4 and 6 feet, 30 points will be added.

How points will be deducted?

- 1 point will be deducted for each sheet used
- 3 points will be deducted for each unused cylinder