

Paper Towers

LEVEL: Middle School

DESIGN TYPE: Im promptu

DESIGN TEAM COMPOSITION: 1 – 2 students per design team

DESIGN CHALLENGE:

Construct a free-standing tower of maximum height using a single sheet of paper.

MATERIALS:

The following impromptu materials are provided by Colorado MESA:

- 1 Sheet of paper (8.5 x 11 in)
- Scissors
- 3 ft of clear scotch tape.
- Ruler

CHALLENGE RULES:

1. The towers will be built from floor level, not on tables.
2. Each team must complete the construction of its tower within 45 minutes. Time will start upon receipt of the materials.
3. The sheet of paper may be cut into pieces and reassembled as desired. Parts may be rolled, folded, or slit. The paper may not be soaked, painted, or otherwise treated to add rigidity.
4. Tape is to be used to fasten parts of the tower together. It may not be used to attach the tower to the floor or any other object. Excess tape may *not* be used to extend the height of the tower.
5. A tower shall be declared free-standing if it remains self-supporting for more than 10 seconds (This time limit will be determined by the judge and his/her measurement.).
6. The team must inform the judge several minutes prior to the completion of their tower to allow proper time for measurement.
7. Height is determined by measuring the perpendicular distance from the highest point of the tower to the floor (Towers must be still-standing when measured).
8. Measured towers are not to be destroyed beyond recognition or removed prior to the completion of the competition.
9. The highest tower will be declared the winner with the rest of the competitors ranked accordingly.

10. If a team decides to build its tower higher after being officially measured, only one additional height will be measured.

SCORING:

Towers will be judged on, height. The tallest, free standing tower will take 1st place.

Awards will be given for 1st, 2nd and 3rd place design teams.