

Windy City

Challenge: Your task is to BUILD a freestanding tower that is strong enough to withstand wind power. Time: You will have 4 minutes to build a freestanding tower, 1 minute to finish it, and 15 seconds to test its strength against wind power.

Set-up: On a table are materials for building your tower. There is a taped square on the floor where you will build the tower. There is also a fan that will blow air toward the tower.

Part 1 (4 minutes): For the purposes of this Challenge, a FREESTANDING TOWER is a structure that stands by itself using the provided materials without being supported by other structures. Build your tower for both height and strength inside the taped square. You may not tape the structure to the floor. If your tower measures at least six inches by the end of Part 1, you will earn 10 points.

Part 2 (1 minute): You may continue to build during Part 2. At the end of Part 2, or earlier if you tell the Appraisers you are “Finished” or say “Time,” The Appraisers will measure the height of your structure for score before and after the fan is turned on. After the first measurement the Appraisers will turn on the fan for 15 seconds.

Materials: • 50 playing cards (if you have round ones this would be an advanced challenge)• 1 mailing label

Scoring: Your team will receive

- A. 10 points for building a tower by the end of Part 1 that stands at least 6 inches tall
- B. 10 points for building a tower that doesn't lose any of its cards after 15 sec. of wind power
- C. 2 points (40 points max) for every inch of tower height after 15 seconds of wind power
- D. Up to 20 points for creative use of materials
- E. Up to 20 points for teamwork.

Developed by Students for a Creative Iowa, www.cre8iowa.org.

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