Construction and Competition Rules

Description
Competitors build the largest possible flying kite, using straws.

Event preparation: Prepare entry prior to the competition
Grade level: Grades 4-6
Team size: 2-4 students per team
Maximum number of entries: Unlimited

Materials
M.1 Disposable plastic drinking straws with a minimum 7-inch length
M.2 Any kind of string, yarn, line, rope, etc.
M.3 Any kind of tape or adhesive
M.4 Any sheet material: paper, plastic film, cloth, etc.
M.5 A handle for the kite pilot

Construction Rules
C.1 Only materials described in M.1-5 may be used to build a kite.
C.2 After a completed kite is turned in prior to the event, no further work may be performed on it.
C.3 Each individual tetrahedron must have six straws that are internally tied together, and two sides covered by sheet material.
C.4 The individual tetrahedrons may only be tied together at their corners.
C.5 There is no limit to the number of tetrahedrons that can be added, or any restriction on the arrangement of tetrahedrons other than specified in C.3.
C.6 No “tails” are permitted.

Competition Rules
R.1 The judges weigh each kite, including its bridle. Note: A kite bridle is the arrangement of any strings placed between the kite and its flying line; used to hold the kite at a certain angle to the flying line to improve how the kite flies.
R.2 Each kite may have only one pilot who receives one attempt to fly, with time based on the competition schedule. Launching may be from the ground or with an assistant.
R.3 Flying is defined as the kite increasing in altitude, ascending to at least above the outstretched arm of the pilot, either due to wind or the pilot running.
R.4 For flying kites, judges count the number of non-damaged tetrahedrons. Damage includes ripped sheets and broken straws.

Scoring and Awards
S.1 Awards are given to flying kites based on the greatest number of non-damaged tetrahedrons.
S.2 In the case of a tie, the lighter kite wins.