

BALLOON VEHICLE (PRECISION) EVALUATION FORM

Entrant's Name:

Entrant's School:

Entrant's Teacher:

Level I or II (circle)

RULES AND REGULATIONS CHECKLIST

Check items/requirements met:

- _____ 1.Vehicle can be constructed from any "non-energy " storing materials (provided by the student). Energy storing devices such as rubber bands, mousetraps, springs, etc. are not allowed.
- _____ 2.Vehicles will be powered by a 12" diameter balloon (provided by coordinator) and checked with a 12" paper ring to limit inflation to exactly 12" for all entrants.
- _____ 3.Vehicle will travel on an open track and must provide its own guidance system.
- _____ 4.Vehicle must have a minimum of two wheels and remain in contact with the floor 80% of the distance.
- _____ 5.Distance will be measured from the front axle at starting point to final position of the front axle. (Includes sled vehicle)
- _____ 6.Minor alterations will be allowed between attempts.
- _____ 7.Vehicle must be started (triggered) at the starting line. It must be started by balloon power only (no pushing).
- _____ 8.Documentation must be typed or produced electronically. Drawings and sketches can be done by hand.
- _____ 9.Documentation of the problem solving process used in developing the balloon vehicle must be provided to the coordinator.

JUDGE SCORING

- _____ 10.Definition of Problem - 5 points
- _____ 11.Information and Data - 10 points
- _____ 12.Goal Statements - 5 points
- _____ 13.Written and Sketched Solutions - 5 points
- _____ 14.Written information and Sketches of Chosen Solution - 10 points
- _____ 15.Evaluation statements - 5 points
- _____ 16.Construction And Design - 10 points
- _____ 17.Precision Ranking - 1st, 50 pts.; 2nd, 45 pts.; 3rd, 40 pts.; 4th, 35 pts.; 5th, 30 pts.; etc.

_____ **ANY RULES AND REGULATION CHECKLIST VIOLATION (-20 POINTS)**

Travel precision will be measured in a travel distance of 25 feet.

Distance will be measured from front axle starting point to final position of the front axle.

- _____ Precision distance, 1st run
- _____ Precision distance, 2nd run
- _____ Precision distance, 3rd run
- _____ Best Precision distance
- _____ **TOTAL SCORE (PRECISION RANKING + VEHICLE CONSTRUCTION)**

_____ **ENTRANT RANKING**