



Balsawood Glider

Level: (I-MS Or II-HS) Team of 1 - maximum 2 Students - 3 Teams per school

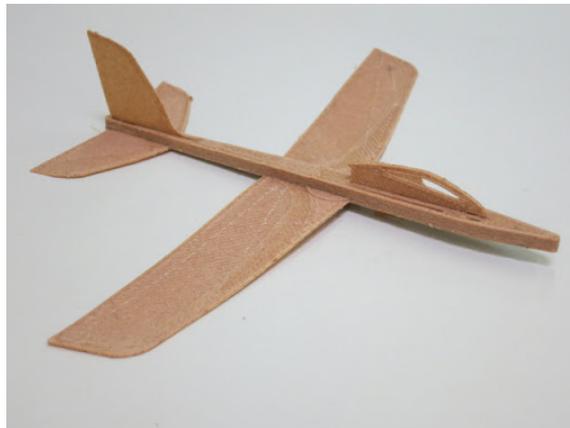
MATERIALS: The following are the ONLY materials that may be used to build the glider.

Balsawood • Glue, any type • Paper or Card stock • Modeling Clay • Paper clips may be used as needed. Decorations, or Decals are allowed but not required, Finish coatings may be used.

RULES: Students will design and build a glider made of balsawood, which will be launched indoors by hand or using a hand-held catapult provided by the student.

The goal of the contest is to keep the glider aloft for the longest period of time.

- 1.) Glider must be designed, constructed, launched and repaired by contestants.
- 2.) The glider must be able to fit in a 16" X 24" rectangle, there is no height restriction
- 3.) Any glider that incorporates additional materials not mentioned above will be disqualified.
- 4.) The contestant's name(s), school, and center should be clearly visible on the glider
- 5.) Failure to correctly identify the glider as noted will result in a 10% deduction from the final score as calculated in item 8 of 'Judging
- 6.) The glider should be competition-ready when turned in for inspection at the Contest.
- 7.) No modifications to the glider are allowed after the glider is submitted to the judges for inspection. .
- 8.) The contestant releases the glider after being given the "OK" from the official timer.
- 10.) Timing starts as soon as the glider is released and stops when the glider hits the ground or comes to rest against any obstruction.
- 11.) The glider can be launched in any direction, starting from the prescribed launching area.
- 12.) Each glider is given three (3) launches.
- 13.) The winning glider is determined by the following formula: longest flight time + second longest flight time.
- 14.) Repairs are allowed between flights. However, no changes may be made to the basic design of the glider once the competition is under way. Repairs must be made by the contestants.
- 15.) Ready-made kits are allowed but a 5 point penalty for kit gliders.





Balsawood Glider Scoring Rubric

Level: (check one) _____ I-MS or _____ II-HS Entry #: _____

Team name: _____ Student Names: _____ / _____

Teacher: _____ School: _____

JUDGING:

1.) Once an entry has been registered and checked in it may not be altered or repaired to meet technical inspection.

2.) No part(s) of the glider may be removed or added after the specification check has occurred.

3.) No tools or materials will be supplied at MESA Day.

4.) Each team will be allowed three non-consecutive launches.

Each glider should be ready for competition when called.

The glider should be launched within 30 seconds of being called or contestants will forfeit that launch.

The judge will determine the flight times. The top two flight time will determined the entry score.

5.) The judges will determine where the launching site should be. They will ensure that there is sufficient space available that the gliders can circle and fly downwind without hitting obstructions.

Spectators should not be allowed within the flight area at any time during the competition.

6.) In the event of a tie, the glider with the longer single flight time will be the winner.

7.) Times will be recorded to the nearest tenth of a second.

8.) Overall scoring is determined from this formula:

longest flight time in seconds + second longest flight time in seconds = score

AWARDS: CHECKLIST:

Awards will be given for: Level I (middle school) Level II (high school)

A. Glider meet construction guidelines.

B. Gliders are properly labeled with name, school and Team name.

C. Glider decorations, decals, or surface finish is done in good taste.

1st Flight time : _____

2nd Flight time : _____

3rd Flight time : _____