



Australian International Model Solar Challenge

Appendix for Boat Competitions

About: The model solar boat races are aimed at all levels of students. There are two categories, Junior and Advanced.

Aim: To encourage exploration of engineering and solar energy through design and construction of working models powered only by the sun. They must travel 10 metres along water in the shortest possible time. They will be guided by a thin line suspended above the water.

Spirit of the Competition: We ask students, teachers and parents to enter into the “Spirit of the Competition”, that is, that all work is by students, including repairs and adjustments, particularly on race days. We hope students will learn new skills while being involved in fair and fun racing. The event provides for a wide range of designs with plenty of learning and innovation. We are encouraging ideas but not dollars.

Student’s Work: Design and constructions are to be carried out by the students with input from teachers and/or parents only when required for safety and education. It is expected that parents and teachers will stand back and allow students to do the work on their boats both during construction and on the race weekend (that is, spirit of the competition). Teams may be interviewed to determine their level of understanding and the way in which they reached their design and construction process.

Event structure: Two or three boats will race against each other. There will be round robin races in the morning, no boats are eliminated. Eliminations are in the afternoon, with winners moving on to determine an overall winner

Documentation: Research and engineering projects should be documented. Each team must document the development of their work by creating a poster. The best entries will receive prizes.

Content: Posters should cover the following topics:

- The Team - introduce yourselves and your roles. Clearly identify the organisation, boat names and team members
- How is solar energy used in todays world?
- What is your team slogan?
- How the boat was designed ?
- Any special materials or techniques used
- What testing you did and what improvements did you make?
- Document experiments and/or calculations and the design decisions made.
- Engineering fundamentals that make the team’s boat stand out from the rest.
- Graphs, photos, and design drawings will be marked favourably.
- Do not use content that is subject to copyright (reference where you sourced your information and try to use your own words), preferably create your own content entirely

Poster Guide: An A2 size poster to be presented prior to scrutineering, documenting the design and development of your boat. Laminating or covering with Contact is recommended, but not mandatory.

Marking Criteria: The poster will be marked out of 30 points as per the following guidelines:

Headings readable from 5 metres	2	Summary of test results	5	Presentation = photos, diagrams, drawings etc.	5
Writing legible from 2 metres	2	Construction details	5	References, acknowledgements	2
What has been learnt	6	Greenhouse relevance	3		

Media Release: Each student who features in a poster must include a media release consent form signed by a parent or guardian. The posters may be used by the Committee for promotional or educational purposes or on our website. If parents or guardians are not willing to consent, the team must submit media without including visuals of that member. This will not impact marking as there are many creative ways you can include your team without needing to use their image. Parents and teachers should review and approve all submissions prior to them being submitted to the Committee. The media release consent form will be available on the website.