



Water Rocket Challenge Rules & Regulations

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Objective

Design and launch a water-propelled rocket made from plastic bottles. Rockets will be judged on distance, accuracy, stability, and creativity.

Rocket Design Requirements

- The rocket must be made **primarily from plastic bottles** (e.g., PET bottles).
- **Only water and air pressure** may be used as propellants.
- No other propulsion methods (chemical, electric, combustion, etc.) are allowed. Mechanical ideas are allowed.
- The rocket may include **fins and a nose cone** for stability.
- Parachute is necessary.
- **Maximum rocket length:** 1.5 meters.
- **Hazardous or unsafe materials are strictly prohibited.**

Team Size :- Maximum 2 nos

- Grade 4 to Grade 7 - Category 1
- Grade 8 to Grade 12 - Category 2

Launch Area & Setup

- The launch area will be designated on the event day
- Teams must bring any accessories, launch setup (if required), for their own rockets
- Rockets will be checked to ensure their design meet all safety and guidelines.

Performance Categories

1. Air Time Category

- Rockets are scored based on **air time** traveled from the launch pad to first contact with the ground.
- Each team gets **one attempt**.
- After launch, the rocket must deploy its parachute and descend safely. The rocket must land within the designated launch field boundaries. Any rocket that lands outside the competition ground will be disqualified.

2. Design & Creativity

- Creativity in structure, stability, and presentation will also be evaluated.

Scoring Criteria

Criteria	Weightage
Design and Innovation	10%
Launch Performance (Air-time)	30%
Rocket Stability and Accuracy	10%

Disqualification Conditions

- Launching before the official signal.
- Using any materials or methods not approved (e.g., chemical fuels, electronics).
- Unsafe behavior at any time during the event.
- Failure to meet size, safety, or registration guidelines.

Event Flow

- Teams will have **one launch attempts**.
- A brief **explanation (2—5 mins)** if required (based on time management, referee will decide) before launching to explain:
 - Design choices
 - Launch mechanism
 - Safety considerations
 - Expected performance