

emirates  
**aviation**  
university



# EAU WATER ROCKET CHALLENGE 2022

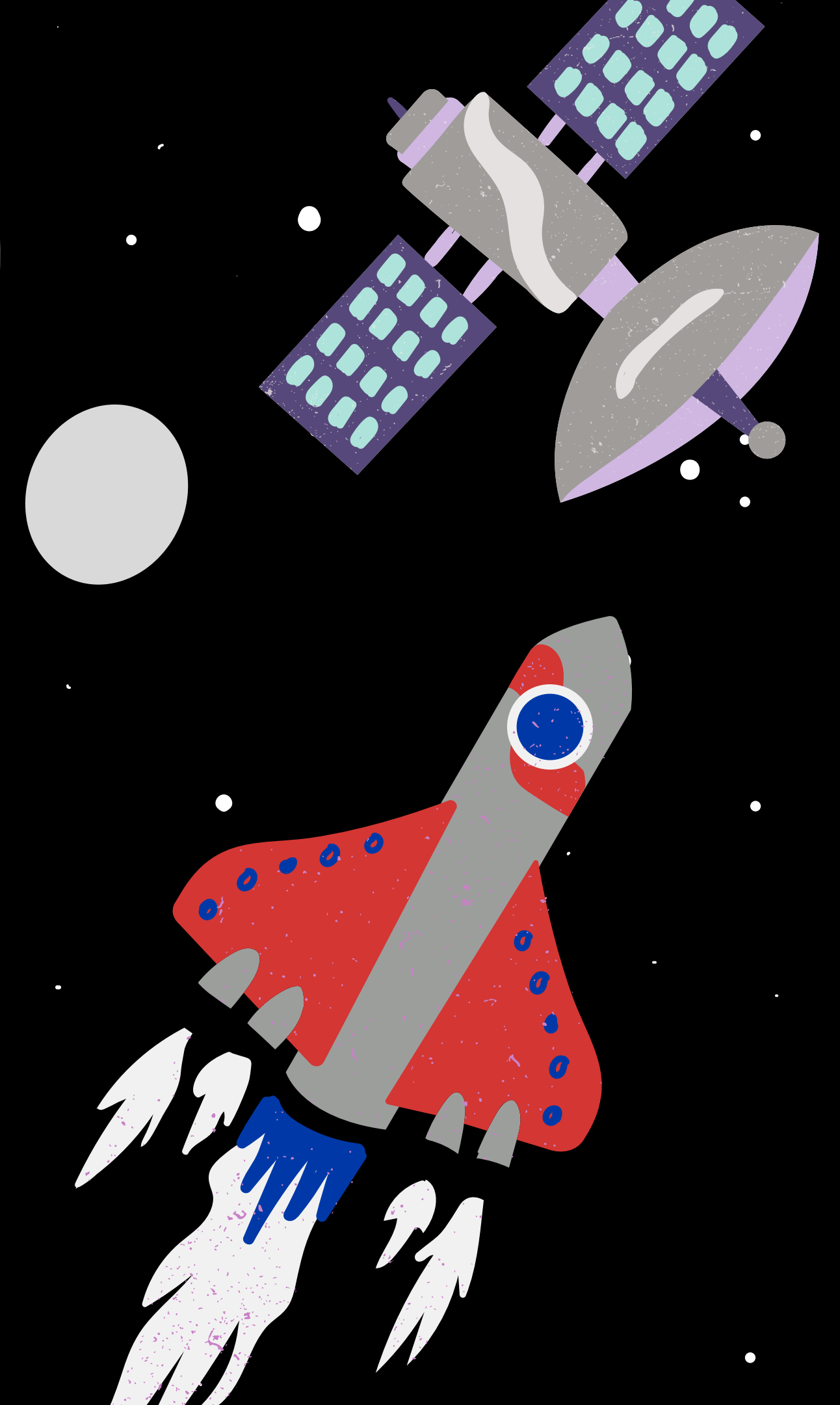


SPONSORED BY  **BOEING**



# ABOUT THE CHALLENGE

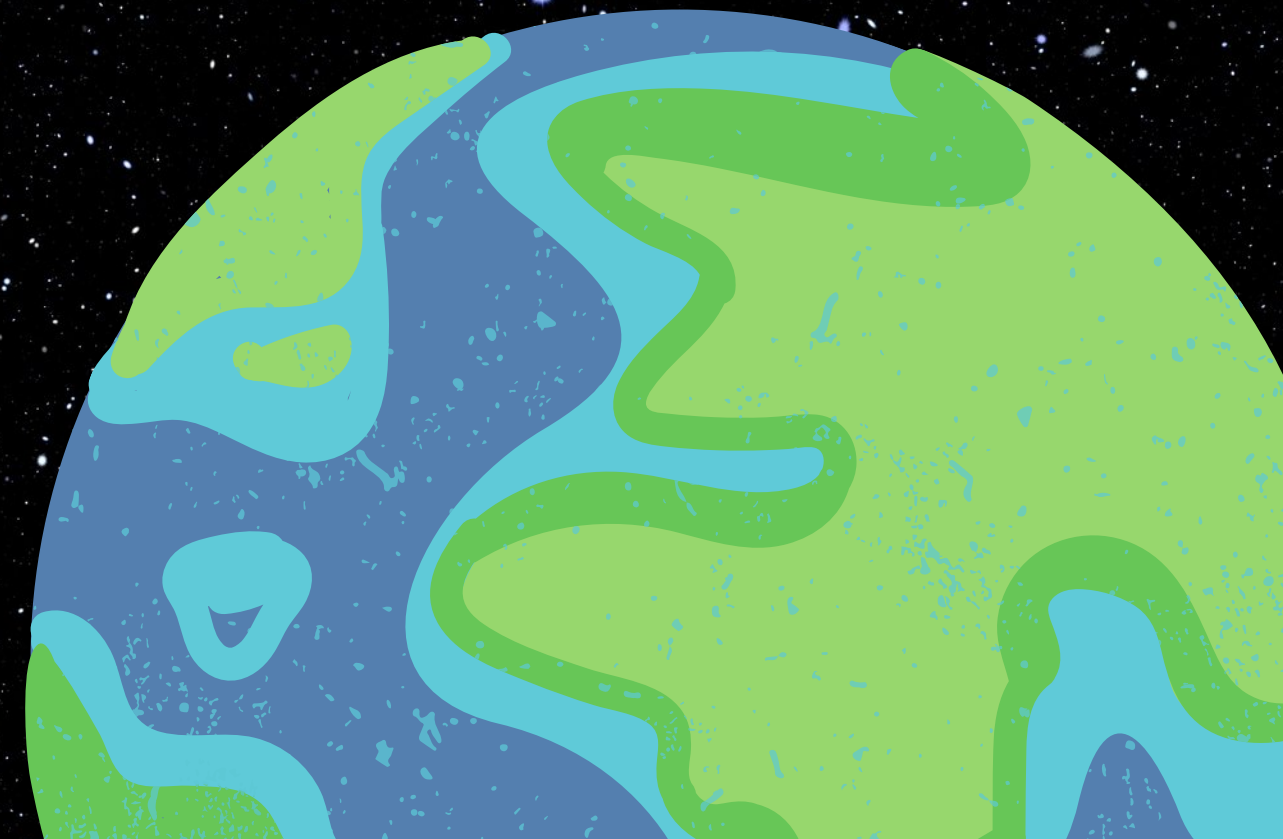
- Teams of maximum Four students will design and construct a water rocket at Emirates Aviation University workshop.
- The winning rocket will be the one that has the best result out of two attempts at achieving the greatest distance from a launch angle set by the organiser.



A stylized illustration of a bright orange sun with a scalloped edge and a yellow crescent moon, set against a dark blue background with white speckles representing stars.

# WHAT WILL BE GIVEN TO YOU?

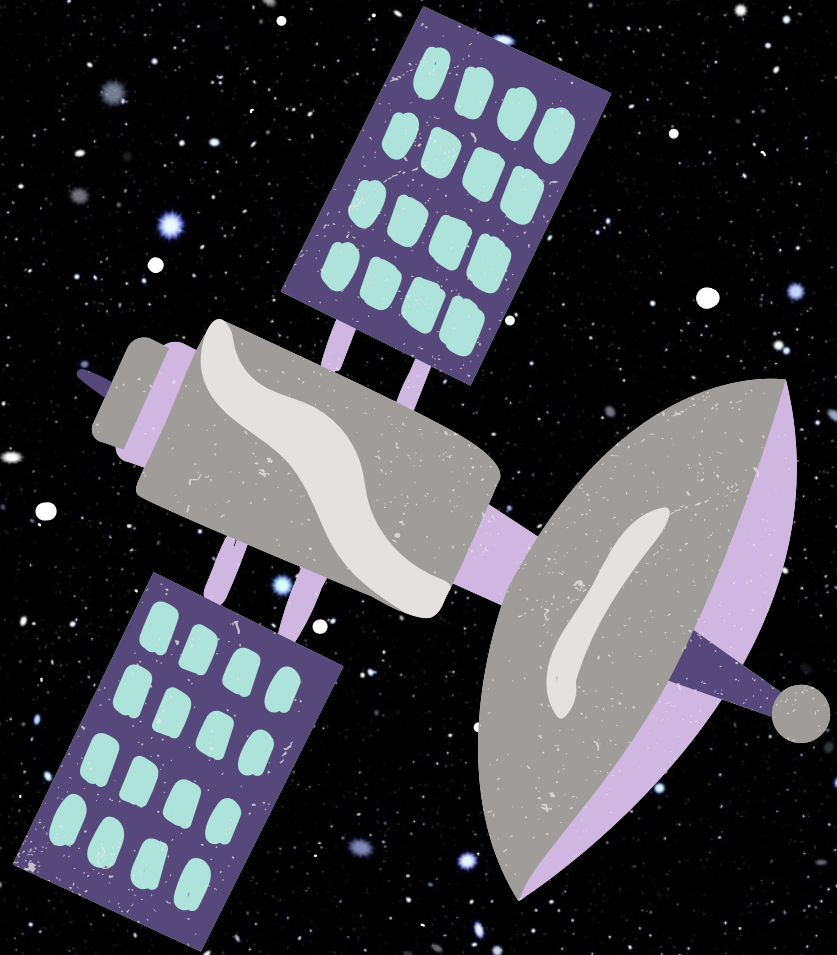
- All rockets to be made using 2 litres Plastic Bottle.
- Bottle Rocket Launcher (can launch a bottle covering range up to 200 feet).
- Foot pump (50 Psi releases pressure).
- Clay block.
- Electrical wiring Tape.
- Binder, Grocery Bags, Plastic Folder Sheets.
- Scissors, Cutter, Rulers and more.





# EAU WATER ROCKET RULES

Please Read All Rules Carefully



• Teams must contain 3-4 participants.



• Two hours will be allocated to each team to build their rockets.



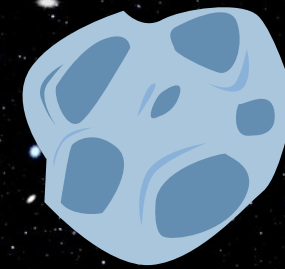
• Materials will be provided to each team to build their rockets.



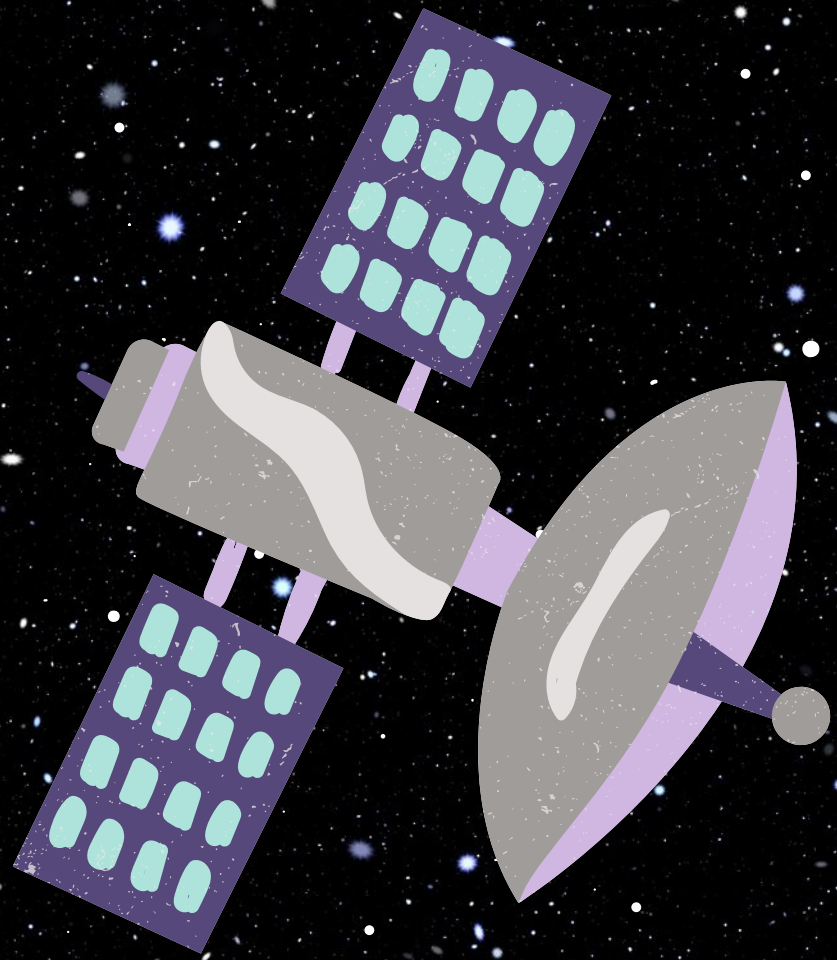
• Maximum pressure allowed for take-off is 50 PSI, so make sure your rockets are strong enough.



• Each team will have two chances to launch their rockets.







•Fins or other attachments must not extend past the neck of the bottle.

•No chemicals may be added to the water used.

•Only water and air pressure propulsion is allowed.

•The plastic bottle must not be cut, bent, or altered in any manner.

•Teams are encouraged to design creative nose cones and fins for their rockets.

•At the time of launch, the teams may adjust the volume of water and air pressure within the maximum limit which will be notified by the organizer.

•The launch angle is set at 45 degrees.







# POINTING SYSTEM

**Aerodynamic Design & Appearance**

30 Points

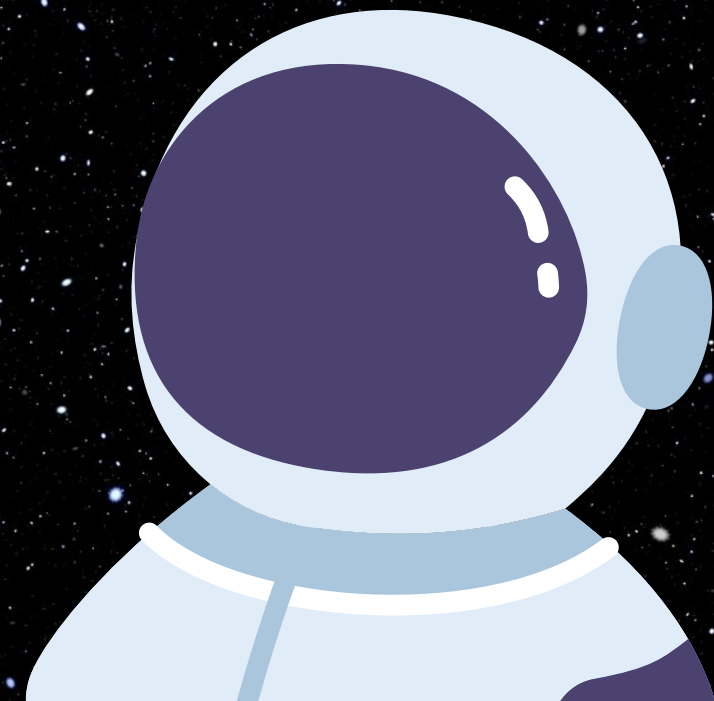
**Longest Distance Reached in 2 Attempts**

70 Points



# AWARDS AND PRICES

A tablet will be awarded to each member of the winning team!





# REGISTRATION

- Deadline for registration is 13:00 on 26th December 2021.
- Spaces are limited to a maximum of 100 Participants. Applicants will be accepted on a “first come-first serve” basis.
- Competition is limited to students in Grades 11 & 12.
- Maximum of 2 teams can register per school.



# REGISTRATION

- Competition will be on 22nd January 2022 at 08:30 am.

To register please complete the separate registration form and send it to **[waterrocket@eau.ac.ae](mailto:waterrocket@eau.ac.ae)**