CAM Academy Annual Rocket Design Challenge Rules

<u>Challenge:</u> Design a rocket that flies the farthest distance given the material and equipment constraints listed below!

Allowed Materials:

- Paper (Any weight/thickness)
- Tape (Cellophane, Masking, Duct, Scotch)
- Paperclips

Launch Criteria:

- Must fit smoothly on the ½ inch launch tube
- Must be able to withstand launch force
- Must be made out of only the materials stated above

Launch Conditions:

- Students will choose the launch angle.
- All rockets will launch in the same direction
- All rockets will be launched on a launcher charged to approximately 40 PSI.
- There will be **1** launch opportunity at the actual competition. Testing can occur during class. (Rockets usually only get 1 attempt!)
 - Depending on the number of teams registered, we may have time to do a second round of launches for those who request it.

Scoring:

- 1 foot of distance = 1 point, rounded to the nearest foot. Furthest distance wins.
- Prizes will be awarded to the Primary, Middle, High, and Overall winner

Disqualifications:

- If a Rapid Unplanned Disassembly (RUD) occurs during flight or launch, the rocket is disqualified. Damage during impact is expected.
- If a rocket is constructed with any non-approved materials, the rocket cannot be registered for the competition.

Team Rules

- Teams are allowed Maximum of 3 per team.
 - 1 rocket per team
 - 1 launch per team
 - Students cannot join multiple teams
 - Parents cannot help students

Timeline:

- Launches will occur during the all-school field day during May 30th. We will have a team check-in table where students will bring their rocket for inspection.
- Registration: Each teacher will submit a Registration list.
 2025 Rocket Challenge Registration Slip
- Launches will be first come, first serve.
- Science teachers may check out a launch apparatus and air compressor from the office to test rockets.