



Adventures Through Open Minds Science™  
(A.T.O.M. Science Club)

Dear Parents and Guardians,

Announcing A.T.O.M. Science Club's 2024 Summer Camp....."**Yes, It Is Rocket Science!**" I am thrilled to offer this **two-month Hands-On** Exciting Journey Into Physics, Chemistry, Engineering, And Space!

**This year's STEM Summer Camp will explore the physics, chemistry, engineering, and math** behind our amazing universe through the **study of rocket science** and what exists on and beyond our planet Earth. This information is based on a special summer program I developed several years ago after completing a rocketry workshop for educators at NASA Ames Research Center.

**Campers will build their own rocket that will use a solid fuel engine.** This is the oldest type of rocket engine, but is still playing an essential role in space missions today as well as in the future! We'll look at how, in the past, a solid fueled rocket sent NASA's 2013 LADEE mission to the Moon and, in the future (2025), solid fuel boosters will be critical components in the upcoming gigantic SLS rocket that will launch the Artemis astronauts when NASA returns to the Moon.

**Campers will have a chance to converse with a NASA space scientist** as they study the fundamentals of rocketry, build their own rockets, and learn about the exciting upcoming NASA launches. This will reinforce their understanding of how their rocketry adventures directly relate to NASA missions.

**Rockets are the solution to getting off Earth to go into space.** They allow us to embark on adventures and missions that orbit around the Earth or venture out across the Solar System and beyond. Campers will learn the origin and evolution of rockets and gain new excitement for NASA's very busy upcoming schedule of space launches this year.

- Launches of astronauts to the International Space Station (ISS)
- Launches of multiple robotic landers to the lunar surface by NASA's commercial partners
- The delivery of the robotic Lunar Trailblazer probe into orbit around the Moon
- The sending of the twin EscaPADE orbiting spacecraft to Mars
- The launch of NASA's Europa Clipper probe on its ambitious voyage to explore Jupiter's moon Europa and its vast ocean of liquid water

**The exciting conclusion to the rocket-building** will be an opportunity for campers to launch their rockets together! These rockets are not toys. They can be used again! Each camper will end camp with a final launch, but they can take their rocket home and hopefully have lots of fun launching it in the future! **Campers in this year's program will gain an understanding of the science of rockets**, including the key **physics** concepts of mass, energy, and force, and how these come together through Newton's Laws. They will be introduced to **chemistry** in the form of understanding rocket fuel and the spectacular exothermic reactions that result in rockets shooting into the sky, propelled by the brilliant release of chemical energy. They will gain a hands-on understanding of **engineering** as they each build their own real rocket, enable the safe return of their rocket through implementing a recovery system, and design and test their own system to protect a delicate quail egg payload through the launch, flight, and recovery stages of their rocket's journey.

Please see the attached PDF which contains all the details you need about this exciting 2024 summer camp program:

- Invitation To Build and Launch Real Rockets
- Elementary School Students (7-10yr)
- Middle & High School Students (11 - 18yr)
- Camp Calendar
- Topics Covered Each Week
- Three Bonus Weeks - (FREE & Optional)
- Summer Camp Kickoff Weekend
- Launch Day (In-Person) Saturday, Aug. 24 or Saturday, Sept. 28
- Family Field Trips - (FREE & Optional Real Life Adventures)
- Technical Requirements
- Materials List
- Tuition
- Vacations: Good News for Families Planning Vacations
- Registration Open Now!

For the thrill of a lifetime, please join A.T.O.M. Science Club's STEM-based summer camp adventure. Sign up below for the program that fits your child the best. I am eagerly looking forward to taking this 3-month exploration of what it feels like to be a Rocket Scientist!

**Click these links to register:**

- [Elementary - 3 Days a Week Program](#)
- [Middle/High - 3 Days a Week Program](#)
- [Elementary - 2 Days a Week Program](#)
- [Middle/High - 2 Days a Week Program](#)

If you have any additional questions after reading this email or the attached PDF, please do not hesitate to call Madame Atom at (650) 271-2035.

Enthusiastically,

Leslie Herleikson

aka Madame Atom

Founder, Director, and Educator of **Adventures Through Open Minds Science Club**

aka **A.T.O.M. Science Club**

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