



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

Dear Parents,

I'm excited to announce A.T.O.M. Science Club's 2025 STEM-based summer camp!

This summer, A.T.O.M. Science Club will take a journey like no other into the past to explore the origin and evolution of life. Participating in this thrilling hands-on adventure will help campers understand from a scientific perspective how we became who we are today. Our theme, Exploring the Amazing Rise of Human Life on Earth, will unfold over eleven weeks, divided into multiple sections, each devoted to a different area of science: astronomy, geology, biology/paleontology, and physical anthropology.

We start at the beginning of the action-packed story of how early Earth began as a lava ball and eventually became a welcoming home where life could flourish. Campers will learn how the building blocks of life were formed in stars that blew up long before our Sun formed, and discover how these critical elements and compounds were (and continue to be) delivered to Earth via meteorites. We will learn how various amazing and gradual geological processes transformed the toxic chemistry of Earth's early atmosphere and oceans so it became a perfect place for life to form and continue to exist today.

To make this journey a hands-on reality, campers will use their own microscopes to observe and analyze both meteorites and living microbes and animals.

**This year's STEM summer camp will explore how the scientific disciplines of astronomy, planetary science, geology, physics, chemistry, biology, and physical anthropology all come together to help us understand the ways in which stars, planets, and all life on Earth (including us) are interrelated.**

Here are all the exciting adventures we have planned.

## **In-person evening field trip: Visit an astronomical observatory.**

- Campers will examine how stars and planets form. I am especially excited to offer an opportunity to visit an astronomical observatory where we will use high-tech telescopes to experience first-hand views of stellar nurseries – nebulae where new stars are being born. We will also watch as dying stars blast processed material back into space – material that will serve as the building blocks for planets and for life.

**In-person field trip: Working with a NASA scientist, campers view a variety of real meteorites under their microscopes (and take home one of the meteorites!) as well as learning to use online NASA tools.**

- Campers will conduct first-hand examinations of the building blocks they witnessed being produced by stars, discovering how this processed star dust comes together in different forms. In doing this, we will transition from telescopic exploration to microscopic examination. Working with a NASA space scientist, campers will examine rock samples from outer space, seeing how meteorites, rocks from the Moon, and rocks from Mars can tell us stories of how the planets formed. They will take home with them a new understanding of the stories told by rocks from space, and will also take home their very own meteorite that they can study and enjoy for years to come. Campers will also learn to use real NASA analysis tools to study real NASA data coming to us from spacecraft across the Solar System to compare various primitive asteroids, a more evolved planetesimal (a rock-type object formed in the early solar system from collisions with other objects), and full-fledged planetary bodies.

**Journey through life's historical timeline: We'll begin with our single-celled ancestors and progress to present-day people.**

- Continuing their journey along this fascinating storyline and through diverse scientific disciplines, campers will next delve into evolutionary biology and paleontology. They will study the conditions on the early Earth. They will examine how these conditions relate to characteristics of all life and its evolution and discuss the current hypotheses of how life might have started on early, habitable Earth. Together, we will examine the fossil record and understand the fascinating lessons it teaches us.

**Hands-on use of their own microscope to observe, up close, live, single-celled organisms as well as multicellular organisms known as tardigrades or “water bears!”**

- Continuing their biological studies, campers will put their microscopes to use again, this time to study both single-celled and multicellular organisms. Campers will bring both physics and chemistry into play as they discover the necessary conditions to support the microscopic communities that they will grow and study.

**Turning to the fascinating discipline of physical anthropology, campers will trace the rise of primates following the demise of the dinosaurs.**

- We will trace our own evolution from quadrupeds to bipeds with opposable thumbs who migrated and inhabited the entire planet, using fire and cooking to develop our extraordinary brains, which today have invented technologies that enable us to leave our home planet and potentially inhabit other worlds in our Solar System.

**Through this scientific grand tour, campers will gain exciting introductions to many different fields of science, gain insights into how these fields interrelate, and find an understanding of their special place on Earth and in the Universe.**

Please see the attached PDF, which contains all the details you need about this exciting 2025 summer camp program:

- Invitation To Explore Earth's Geological and Biological History
- Elementary School Students (6-10yr)
- Middle & High School Students (11 - 18yr)
- Camp Calendar
- Topics Covered Each Week
- Three Bonus Weeks - (FREE & Optional)
- 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 real 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](#)

I want summer camp to be a fun and enriching experience for your child. I am very aware that some children do better learning with older or younger children. Therefore, correctly placing your child is important to me. If you feel your child would do better with the other age group, please contact me.

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

Enthusiastically,  
Leslie Herleikson  
aka Madame Atom  
Founder, Director, and Educator of **A**dventures **T**hrough **O**pen **M**inds **S**cience Club  
aka **A.T.O.M.** **S**cience Club  
San Mateo, California 94403  
(650) 271-2035  
[director.atomscienceclub@gmail.com](mailto:director.atomscienceclub@gmail.com)