

1st-6th graders.

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## WHEN IT COMES TO LEARNING

We believe in a spark. That small, fiery particle that ignites us and sends us on a path of self discovery. Young-and-old, when we are fueled by our passions, we move tirelessly in our pursuit of knowledge and experience.

### **LOOK AROUND**

The opportunity to learn is everywhere--scattered throughout this unfathomably large universe.

## YOU MAY BE LITTLE

You may often feel small, but know that even the smallest gear, when engaged, can turn the mightiest wheel. Engage your mind, and engage with those around you. Pursue your passion, and over time, with tireless persistence, cultivate the talent that will allow you to engage your world.







## WHY CAMP PURSUIT?

We embrace the freedom of choice, allowing campers to choose high-interest STEAM courses that most align with their passions and curiosities.

We focus on key character traits through positive messages and curated experiences which nurture mind-body connection in a hands-on, mixed-age environment.

## THE CATALOG

Campers choose their four favorite courses from a interdisciplinary, high-interest STEAM curriculum--courses that align with their passions and curiosity.

### **ABOUT NUMINDS**

Founded in 2013 by two public school teachers, NuMinds Enrichment believes that learning should be fueled by student passion, driven by an intrinsic curiosity, and that individual learners develop asynchronously.

## WANT TO KNOW MORE?

See our <u>FAQs section</u>, <u>send us an email</u>, or engage with us on <u>social media</u>.





## **AESTHETIC ASTRONOMY**

The night sky has inspired stories, poems, and art for centuries. From the ancient myths to the beauty of black holes, campers will be filled with wonder and awe at the beauty of the topic, as our team facilitates their individual learning journey into deep space.

In this course, campers will explore the science of our cosmos, focusing on astronomical concepts, such as astrobiology, astrophysics, and the new implications of gravitational waves. Trying to grasp the infinite is such a mind-melding exercise, that campers will learn to express their wonder and appreciation through the creation of their own original, star-inspired art, myths, poetry and writings.

### ENDANGERED ART

Elephants, and tigers, and gorillas, oh my! Some of our most loved animals on the planet are also endangered. Get to know some of the animals on the endangered species list by examining their unique characteristics and habitat needs through a variety of art activities in a range of media.

Campers will become more familiar with some of their favorite animals and discover some new ones they may not have heard of before. In this course, we'll explore the beauty and art of these animals while raising awareness of the need for their conservation.





### **MATHACADABRA: MAGIC OF MATH**

Throughout history, great minds have been fascinated with mathematical puzzles, paradoxes and wonderments for the sheer joy of it. In this course, you'll kindle (or re-kindle) that spark of curiosity and passion for Math beyond the "drudgery" of formalized step-by-step curriculum. You'll jump throughout history and around the globe, from Ben Franklin's magic squares (USA) to Blaise Pascal's Triangle (France) to Ramanujan's algebra puzzles (India) to Lo Shu puzzles (China), and much more.

You'll also put the "magic" in the Math, literally, as you learn, practice and perform Math-based magic tricks.

## **CODES & CIPHERS**

Since humans began communicating, there has always been an urge to keep certain information underground: intended for certain eyes only and unreadable to all others. In this course, you'll study, crack (decipher) and create (encipher) messages in a variety of cipher systems and historical contexts.

Although you'll time-hop throughout history and make stops with Julius Caesar, Ben Franklin and Abe Lincoln, among many others, you'll end with an exploration of how cryptography--the study of codes and ciphers--has kept up with, and even created, the modern digital age.





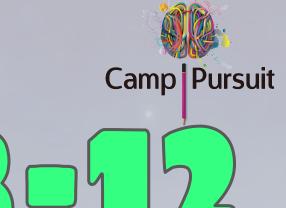
## **LEGGO' MY LEGO**

"Play well." That is what the words "leg godt" mean in Danish, and indeed we've been playing with LEGO for over 80 years since their origination in Denmark in 1932! Imagine this: an interdisciplinary exploration of LEGO that takes us through the history (it's still a family company), science (what breakthrough in plastics gave the founder the idea for "bricks"?), technology (from wheels to robots), and possibilities for creative expression that this two-time "toy of the century" provides.

## FUTURE CITY, 3000

We've taken the construction challenges, the meta aspects of optimal city planning, and the exploration of renewable long-term energy sources and then mixed all that with new structural engineering challenges plus weaved in advanced agricultural methods, preservation of cultural identity through art, archeological uncovering of cryptic messages, and much more to bring this year's campers Future City, Version 3000.





## **EVERYDAY CHEMIST**

week of

Food. Art. Paper. Friendships. What's the one thing they all have in common: chemistry. From the air we breathe to the disodium inosinate that makes your Pringles salty, chemistry surrounds us every day.

This introductory course to chemistry will provide a new lens for how we see our world while getting our hands messy making chemical reactions of our own. Together, we will prove that Chemistry is for everyone, everyday!

## ROCK N' ROLL ROCKETRY

It's science! It's math! It's history...and quite literally, it's a BLAST! In our rock'n rocketry course, campers will explore some of the basic principles of Newton's Laws of Motion and the aerodynamics of flight as they construct and fly their own model rockets.

We'll discuss the critical issues of safety, collaboration, and design as we work to tackle the rocket challenge--culminating in a spectacular Friday launch party!





## GODZILLA'S VILLA: AN ENGINEERING CHALLENGE

week of

Godzilla has been around for 60 years, and in every movie he (or she) attacks and eats and burns and... enough already! It is time to embrace the race of giant lizards and get cracking on co-inhabiting.

In this course, you will explore the factual habitats of lizards, the fiction of famous monsters, and blend the two to create a city worthy of welcoming our not-so-ferocious friend.

## ROCK: A HISTORY OF INVENTION

From the chiseled spear to the steam engine and into a future of photovoltaic glass, "iRock" looks at the way humanity's necessities have led to invention. In this course, you'll cover the eras of invention, focusing on the march of human progress. You'll study notable inventors, and the effect their inventions had on the world.

Included in the course are methods for spurring inventive thinking and hands-on project builds. Finally, you'll finish by inferencing and speculating about the future of inventions.





## THE RED PLANET: TO MARS

The red wanderer, Mars, has been beckoning humans to come visit since 1659 when Christian Huygens first noticed the landscape of mountain passes and vast wastelands covering its surface. Now, after the success of the Mars Rovers and the upcoming human missions, Mars is once again back in the spotlight and the forefront of our imaginations!

In this course, we'll explore Mars through nearly every discipline to answer questions like, what is the evidence for past/current life on Mars? How do rovers land in the thin atmosphere? How will humans get to Mars via the Mars One mission? Plus, we'll express the place of Mars in our cultural and personal imaginations through the Arts.

### SINCE SLICED BREAD

Did you know the earliest loaves of sliced bread came with instructions? "Step One: Open package." Seriously, I'm not kidding.

But why would something so simple ever need instructions ... because it shook up 30,000 years of bread making and eating! It just goes to show that the greatest inventions disrupt the way we think. It also proves just how resilient an inventor must be to see their idea accepted and adopted.

In this course, we explore everything from creative thinking to prototyping and patent law.





## **BUSTIN' MYTHS**

In the hit series Mythbusters, hosts Adam and Jamie have shown just how amazing science experiments can be when they are connected to real-world passions and curiosity.

In this course, we'll put long-standing scientific facts and everyday myths to the test, and we'll do it with the same fervor and intensity we've come to love from those mad scientists at Mythbusters! Hands-on fun, with a few explosions!

## MUMMIES, MYTHS, AND MOSAICS

How did an ancient society, nestled by the Nile, grow to become a world leader and the envy of its surrounding countries? In this course, we'll study the government, art, architecture, religion and science of the Ancient Egyptian culture—including a look at some of the myths surrounding their fascinating origins.

Create your own artifacts as you explore the explosion of creativity, wealth, and power that made Ancient Egypt the envy of the world. You'll soon see how the mysterious ways to the Ancient Egyptians compare to our own lives today.





## 3i CHALLENGE

Paper begets cardboard that we fold into boxes--add lenses and a phone, then explore the Space Station. The cycle of invention, innovation, and improvement continues to launch humanity to the next level, and this course provides campers with the tools to create, rethink, and reimagine the world in front of them.

## **CHEF JUNIOR**

Inspired by the young culinary prodigies on shows like Chopped Junior and Kids' Baking Champion, NuMinds is creating their own version for this year's summer camp. Novice chefs will learn easy-to-make recipes while more advanced gastronomes will be challenged to balance the palet. All dishes are guaranteed to be spiced with Science.

**DISCLAIMER**: When you sign up for this course, please inform us immediately if your camper has any food allergies.





### **GUITAR MATH MONSTER**

This course is for those who love music, math, science and Pokémon! A sensory exploration of the math in music and the music of math. From fractions, to Fibonacci, to sound waves, sonar, diabolical tri-tones and Pokémon hit points, you'll explore songwriting with the birds and paint the frequency of the earth with colorful corn starch.

This course is for musicians, music-lovers, and anyone of all ages with a song in their heart just waiting to beat out its rhythm on repurposed instruments!

## CODING\_CHALLENGE.EXE

From entry level Scratch Jr. to advanced Python tuples--we bring the "how" and you solve for "why." Camp Pursuit is bringing coding, and this year your level of skill is put to the challenge. You will need every finger flying to slap that code down and beat the clock. All levels of coders are welcome.





## **STOP MOTION MOVIE MAKING**

From Gumby to Kubo and the Two Strings, stop motion is the illusion of making everyday objects come to life. This course begins with the fascinating history of stop-motion--from thaumatrope to kinetoscope, and quickly dives into today's more advanced techniques.

This hands-on course will test both persistence and "persistence of vision" as you create amazing stop motion movie magic.

### STEAM TEAM SAVES THE WORLD

The IBM supercomputer Watson has been watching the weather, and all the algorithms read: "Danger Ahead!" Rising oceans, earthquakes, heat waves, and lightning strikes--to name just a few. We'll need the power of the STEAM team to save the world.

In this challenge-based course, campers will apply everything from geography to alternate power sources in order to harness the force of mother nature. Our impact on the Earth will be emphasized in order to inspire humanity's only hope!





## SPACE PROPERTY: BUILD TO DESIGN

All citizens of the Earth are counting on you to design and construct extraterrestrial living accommodations for human space colonization. From the study of how to form habitable planets, to the detailed complexity of the round-trip Aldrin cycler, this course is for aeronautical engineers of all ages interested in what outer space colonization could and will look like.

Campers will pursue their passions in this interactive, hands-on building challenge. More advanced topics include civilization stability, principles of city planning, and implied future technologies.

### LIVING IN A DOWNSIZED WORLD

From the stone age to the age of experience, humans have changed and adapted based on their surroundings. But what about the tiny race of beings known as Minifigs?

In this course, we'll study geology, technology, culture (and more) in order to make inferences and build the hidden world of the minifig.





## **GRAVITY FALLS @ 9.8**

"What goes up must come down." But is it gravity that keeps us on the ground or is it the warping of spacetime...is it neither? Clocks that are on satellites in Earth's orbit are running faster than the ones you and I look at every day. But how can that be!?

In this "heady" course, we'll explore and experiment with the effect of gravity. Students of science will enjoy the competing arguments and thought experiments found in quantum mechanics.

## PROGRAMMING SCRATCH & PYTHON

Many believe coding and programming skills are the "ABCs" of the 21st century. Without mastery of this new core competency, students are at a disadvantage moving into a working world permeated by technology. In this course, you'll begin to tackle "Scratch," a program developed at the MIT Media Lab. Students who are ready will move on to the programming language "Python," touted by professionals as an excellent entry point into the world of coding.

As we move beyond basic commands and gain confidence and fluency, the desire to create and innovate will naturally drive students to build new skills and knowledge in an organic "project based learning" situation. In the process, we'll lay a foundation of vocabulary and programming literacy that will enable students to push on to more complicated projects after this course.





Inspired by the antics of the proverbial mad scientist with blown-back hair, we are bubbling beakers and cooking chemical concoctions!

Learn fascinating histories of the periodic table and understand the molecular reasons for reactions...all while making crazy explosions!

## SUPERHERO SURVIVAL CAMP

The most active Camp Pursuit class yet! Get ready to measure your speed, endurance, flexibility, and others superhero biometrics. As you learn about the way the body works, you'll also stimulate the mind--visualizing the superhero you're destined to become. Create workouts and focused practices that build the skills necessary to realize your superhuman potential.





## A FORT: NIGHT & DAY

Forts rule! From tattered boxes covered with fitted sheets to couch cushions, we love the raw creativity that goes into making our own space. Even better, stocking it with escape room scenarios and defending it with Rube Goldberg traps. In this course, we'll apply simple principles of engineering, craft elaborate backstories, wire pressure plate alarms, and so much more. It's a much better way to spend time with your squad than just hiding in the bushes.

# Mystery Creatures: Adventures in Cryptozoology

Do you ever wonder what lies deep in the glacial lakes of Scotland? Are you convinced that there's truth behind the legend of Sasquatch? Explore the science and purported evidence behind the field of cryptozoology through a week-long adventure into the deep.

Our young scientists will learn about various categories of cryptids and develop an understanding of all different forms, while evaluating the credibility of available evidence. Explore the myth; reveal the mystery.

**DISCLAIMERS**: This course takes a scientific look at the evidence behind mysterious creatures. Some creatures may be frightening for younger students.





## MULTIDIMENSIONAL HIDE & SEEK

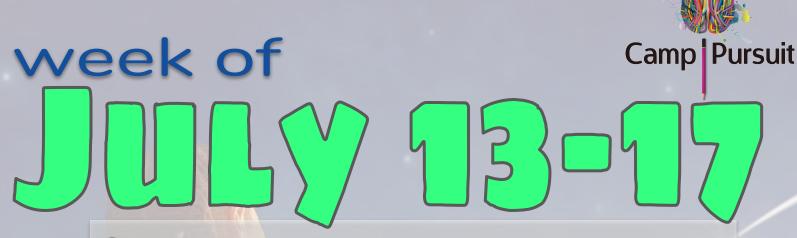
While the astrophysicists debate singularity and string theory, let's play in the theoretical and traverse the multiverse. What happens when we shift reality a few degrees to the right? Limited by our ability to see in 3D, are we actually surrounded by one-dimensional beings hiding in "plane" sight?

Stretch your quantitative muscles in this quantum game of hide-and-seek.

### PP DEVELOPMENT CHALLENGE

Using the open platform from MIT, coders of all skill levels will utilize App Inventor to visualize and make their own apps. With Scratch, newcomers to the world of coding will make responsive programs while the more advanced coder will enjoy the challenge of game development. All of the apps can be run on any web-enabled computer and even installed on Android devices.





# SCI-FI PHYSICS: SPACE KNOWS NO BOUNDS

How much force would it take to levitate a boulder? What are the theoretical mechanics behind a lightsaber that can cut through metal? If you dream of "jumping to lightspeed" or using gravity assists to slingshot back to Mars, then join us as we think through and attempt to recreate some of the coolest physics of Science Fiction.

### **NATURE'S FAVORITE DESIGN**

There's something about the mystical Fibonacci sequence that fascinates us. It permeates every area of our life from the music on the radio to the clouds swirling overhead. Now it's time to take a lesson from Nature herself and create our own works of art.

Campers will study how math, science, and nature are beautifully intertwined and learn from the great classical artisans and artists. Not only will campers explore the famous Fibonacci through videos, picture books, and problem-solving, but they will actually get to construct and/or create based on their passions and interests.





## ROLLER COASTER RACES

Study roller coasters and take virtual reality rides. Design the experience and understand the physics--how fast can your riders corkscrew before the g-force causes blackout?

Calculate the centripetal force necessary to keep your passengers in, but their stomachs lurching in squeamish, thrill-seeking delight. Build CAD or cardboard models, maximize magnets, steel, wood, and the right materials to build the greatest ride the world has yet to see.

## HAPPY TREES

"Talent is just a pursued interest. Anybody can do what I do." - Bob Ross. With a quote like that, is it any wonder why the Camp Pursuit team admires the late painter, Bob Ross? In this course, we'll study his techniques and stylings both as a painter and as a legendary TV icon.

"All you need to paint is a few tools, a little instruction, and a vision in your mind ... Let's build a happy little cloud; let's build some happy little trees."





## SO MANY FLAVORS OF π!

The pyramids align to magnetic north, with stones so tight you can't get a sheet of paper between them. Roman aqueducts carry water for miles, slowly sloping from lake to valve. A ball rolling across tightly wound string led to the trajectory of cannonballs that made city walls obsolete.

Wait, wha...!? How did humans solve these mathematical quandaries? We'll tell you: Pi. Delicious pi. Come sample some flavors and perfect your own mathematical recipes.

### **ISLE OF THE LOST BOTS**

Just a castaway, a robot lost at sea. An island of scrap metal and spare parts--the making of a makerspace. The seeds of civilization require buildings, bridges, communication towers, and entertainment centers. Only those who master "tinker and create" will survive and thrive on the Isle of the Lost Bots.





# TESLA'S ALTERNATE CIRCUITRY: OUR WORLD REIMAGINED

In the War of the Currents, Edison and Tesla battled over direct and alternating electricity. Edison won that war, but 133 years later, we are realizing the full potential and possibility of A/C power. Imagine how the world could be different if WiFi had existed in 1885?

Join us as we learn the principles of electricity, circuitry and superconducting while fabricating an alternate reality. It's Steampunk for our wireless age.

### **NEWTON'S LAWS OF NERF**

Ready? "Every object at rest..." Aim. "...tends to stay at rest..." Fire! "...unless acted on by a flying NERF gun dart." It's not exactly the Principia Mathematica, but we're sure if Newton were alive, he would enjoy the lessons embedded within awesome NERF guns. Get ready to set your trajectory to compensate for the curvature of the Earth as we science these toys beyond the ballistics.

**DISCLAIMER**: Students will be shooting NERF toy guns as part of controlled experiments and labs. There is a zero-tolerance policy for aiming and/or shooting at other campers.





## **FUTURE CITY, 3000**

We've taken the construction challenges, the meta aspects of optimal city planning, and the exploration of renewable long-term energy sources and then mixed all that with new structural engineering challenges plus weaved in advanced agricultural methods, preservation of cultural identity through art, archeological uncovering of cryptic messages, and much more to bring this year's campers Future City, Version 3000.

## DEEP WORLDS: MARINE BIOLOGY

The largest animal on planet Earth bellows across five hundred miles. It's call covers elusive pyrosomes, glass squids, bottlenose dolphins and underwater crop circles of love-struck pufferfish. According to the scientists at NOAA, we have explored less than 5% of our ocean. The purpose of this course is to explore the expanses of the deep by learning and applying the scientific principles of marine biology.



### **MATHEMATICAL ARTS**

Both mathematicians and artists are problem-solvers who improvise and view the world in new and innovative ways. In this course, the right brain will meet the left as we create optical illusions, fractals, original tessellations, Penrose tiles, and parabolic line drawings (to name a few).

Join us as we explore the beautiful fusion of math and art.

## CHEMISTRY OF WIZARDRY

Being a muggle is so overrated! Using household products, campers will learn and perform experiments that are so cool, you'd think they were magic. More than mystical explosions, this course encourages higher-level thinking as campers use quantitative and nonverbal reasoning to understand the physical and chemical properties which surround us. Get in touch with your magical side, and continue to spell-bind your friends and family for years to come as all of these experiments are able to be done at home (under adult supervision).

**DISCLAIMERS**: While all experiments involve safe household products, caution and safety is essential in any chemistry lab.





## **BRAIN-BAFFLING OPTICAL ILLUSIONS**

40% of the human brain is devoted to seeing and processing visual material; however, optical illusions make us second-guess this powerful sense—causing us to see what isn't there. Students will learn the science behind the illusions and create their own brain-baffling visuals in this hands-on course.

Through elements of research, art, and artistic products, students will explore the integration between optical illusions and brain science. Advanced topics include neurology and specialized art media.

## SPY CAMP

Your Mission: decrypt @ at <a href="https://www.xarg.org/tools/caesar-cipher/">https://www.xarg.org/tools/caesar-cipher/</a> (Key: The square root of 49).

Uhgw, Lir Dbwl, D.V. Ngwxkvhoxk, Etu Ktml...hgx mabgz maxr tee atox bg vhffhg: max vhhexlm ztwzxml hg max ietgxm! By rhn vktvdxw mabl vhwx, chbg nl yhk Lir 3000. Maxkx pbee ux ztwzxml, vhwxl, tgw (hy vhnklx!) max lxvkxm ebyx hy t lir.





## WRITE A WAY

This is a creative writing course for those who love a challenge. We'll explore writing techniques, discuss them in an encouraging workshop environment (sharing is optional), and gather feedback. With each challenge, you must write a way to get your character safely to the next iteration of the storyline.

### **ABORIGINAL ART**

The primal power of aboriginal art connects with our inner essence as human beings. Is it a window to our more primitive selves or a glimpse at a possible parallel existence? In this course, campers will do some time-traveling in order to explore the methods and creations of aboriginal artists. Campers will creating their own 3-D artifacts along the way.





## THE MATH AND MYSTERY OF 432

In 1905 Einstein argued that absolute rest is impossible. Space and time is always in flux, but we try our best to count and make sense of it--whether by Yugas, rotations of the zodiacs, and even our own heartbeats. In this course, campers will explore the math behind 432 and play with the unsolved mystery that will take us from Mesopotamia to Reddit.

## My LITTLE PHONY

At NuMinds, we love the blend of science and funky folklore--like oscillating bridges, ancient pottery messages, and the classic Coke & Mentos belly explosion. Our new summer course, My Little Phony, gives us the chance to track down and scientifically test some of the funniest (and often messiest) myths around.





#### WHO IS CAMP PURSUIT FOR?

Any kid who is fueled by curiosity, loves to learn, and is hungry for knowledge and engagement. Most camps are 1st-6th grade, but locations may vary. Please confirm a camp's age range on its information page.

#### IS FINANCIAL ASSISTANCE AVAILABLE?

We partner with the non-profit organization, Education Unbound, to support high-potential students in financial need. Education Unbound, as well as other generous sponsors, pledge a certain number of scholarships for each week of Camp Pursuit. Scholarships are awarded via an online application process. Please contact us at <a href="mailto:numindsadmin@numien.com">numindsadmin@numien.com</a> for details.

### WHAT IS THE CANCELLATION POLICY?

\$50 from the registration cost is non-refundable. Cancellation notice must be submitted via email to NuMindsAdmin@numien.com. Refund will be issued in the same manner payment was made. 100% of tuition paid (this does not include the \$50 Registration Fee) will be refunded if written notice is received no later than four weeks prior to session start date.

Cancellations received within four or less weeks of session start date forfeit full tuition. We reserve the right to cancel a session date if participation numbers are not adequate. You may select an alternative session date, or you may request a full refund of tuition paid. Cancellations of sessions will occur a minimum of four weeks prior to the session.

**BACK TO THE CATALOG** 

More FAQs





### DO YOU ACCEPT VOLUNTEERS?

We love our volunteers, and they help our camp run so smoothly. We accept volunteers between the ages of 14-17. A volunteer application and sign-up form will be released in late March. When the volunteer application becomes available, a link will be posted on our website, our social media, and also sent to friends via our email newsletter.

### WHAT TYPE OF CURRICULUM DO YOU USE?

We use our proprietary curriculum model to create unique, STEAM courses that allow for project-based, interdisciplinary study. All of our courses include options for choice and accelerated materials. Every class is taught by a passionate Inspirator who has been trained to work with a wide variety of students in mixed-aged classroom models.

#### **HELPFUL LINKS**

Send us a question on our contact form.

Check out our partner non-profit, Education Unbound

Put life into perspective with Carl Sagan's "Pale Blue Dot"

**BACK TO THE CATALOG** 

Questions?
Please send us a message, we're here to help!









"Every living being is an engine geared to the wheelwork of the universe."
-Nikola Tesla

CampPursuit.com
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