

Afternoon Challenge Course Selections

PLEASE REFER TO THE COURSE SELECTION CHARTS FOR CLASS TIMES BY GRADE LEVEL

1) 3D STUDIO ART

Session 2

Dive into the exciting world of three-dimensional art in this project-oriented class integrating science and art to explore 3D modeling. From sculpting clay to constructing with recycled and mixed materials, students will learn techniques to bring their artistic visions to life.

2) ADOBE ANIMATION

Session 1 & 2

Bring your creativity to life with the power of animation! In this exciting class, campers will enter the world of Adobe Animate, learning how to design, animate, and tell stories through motion graphics. Perfect for budding animators, storytellers, or digital artists, this class combines technical skills with creative expression. Campers will have a strong foundation in animation and a portfolio-ready project to showcase their skills!

Adobe Animation Fee: \$50

3) AQUA CHAMPS

Session 1 & 2

Campers will learn to swim and have an introduction to the world of sports in this combination class. Swimming instruction will occur on Mondays, Wednesdays and Fridays in the Iona athletic center indoor pool. On the alternate days, campers will participate in sports activities designed to enhance and develop motor skills, coordination and sportsmanship through active play and instruction. Campers must provide a swimsuit, towel, goggles and Ziploc bag for wet items on swim days.

4) ARDUINO APPLICATIONS

Session 1 & 2

Ever wondered how robots think or what makes a smartphone so smart? Uncover the secrets of technology's brains with our Arduino Applications course. Dive into the realm of microcontrollers, the heartbeat of modern computing. Using the versatile Arduino platform, you will explore the fundamentals of electrical engineering and programming. Get hands-on experience as you bring your imagination to life, creating a variety of projects with a basic starter kit. This is your chance to become a tech innovator and decode the language of microcontrollers!

Arduino Kit Fee: \$75

5) AWESOME ILLUSIONS & PUZZLES

Session 1

More than meets the eye! In this awesome workshop, inspired by New York City's Museum of Illusions, campers will explore how neuroscience explains optical illusions. Campers will explore the secrets of mind-bending illusions, tricky puzzles, and cool optical effects and will create their own deceptive and misleading brain images like impossible waterfalls, visual paradoxes, mind-bending patterns, mirror illusions and create trick photography to provide a boost of brainpower and ignite your logic skills!

6) A BAKER'S DOZEN - INTENSIVE

Session 2

Pack your ingredients and let's embark on an international baking tour! In this class, young bakers will learn to bake treats from around the world including alfajores, sponge cake, biscotti, soufflés, cream puffs, and tres leches cake. These classic desserts will be delicious beyond measure!

- **A Baker's Dozen Fee: \$200**

**** This class is a double period intensive elective**

7) BASKETBALL

Session 1 & 2

Campers will learn the FUNdamentals of basketball. Through drills and instruction campers will have a great time practicing dribbling, shooting, jumping and game play that emphasizes teamwork and sportsmanship.

8) BLACK AND WHITE DRAWING

Session 1

You must think out of the box to create extraordinary artwork with the absence of color. Using pencils, Sharpies and paper, you will learn how to draw graphic designs of animals, trees and faces. You will be amazed at the movement and dimension using only simple lines, contrast, and shadows in your drawings!

9) BLING IT ON

Session 1 & 2

This imaginative class centers around the design and creation of beaded jewelry. Color, pattern and individual style using beads, jewels, shells and feathers will set your designs apart! Bracelets, earrings, necklaces, pins, jeweled masks and anything you design is sure to shine!

10) BOARDGAME BUILDERS

Session 1

Bring your creativity and love of games to life as we learn the process of designing and creating your very own board games. We will start by analyzing games you already know, then create a theme, title, setting and goal for your gameboard. We will think through rules, objectives, and game mechanics as we plan a layout that is both functional and visually appealing. Campers will combine creativity, strategy, and problem-solving to build a game they can play and share with friends.

11) BOLD POP DANCE

Session 1 & 2

This vibrant dance class blends the energy, freestyling, storytelling and power of hip hop and breaking, with jazz technique, while embracing the creativity of the dancers. Students will develop musicality, choreographic skills, strength, teamwork and confidence both onstage and off. A signature of all BOLD Arts programs is that each camper's individual strengths and personality shine through the work we create together. All students will have the opportunity to perform at the conclusion of the session.
Taught by BOLD Arts.

12) BONJOUR – CONVERSATIONAL FRENCH

Session 2

"Oui, s'il vous plait!" Our discussions will be based on the individual French language proficiency and interests of the students. We will build upon grammar and pronunciation through various conversation themes. The interactive format using a wide variety of mediums will raise the camper's level of confidence in speaking the language.

13) CAINE'S ARCADE

Session 1

Inspired by the documentary film *Caine's Arcade* this class will be amazing, creative and fun. We will use cardboard and a variety of found and recycled objects to create our own carnival games style arcade. Campers will develop an understanding of the physics and engineering behind their creations.

14) CANSAT SATELLITE ENGINEERING

Session 1

Step into the exciting world of aerospace with CanSat Satellite Engineering! In this interactive course, students will learn the fundamentals of satellite design, build their own CanSat (a miniaturized satellite the size of a soda can), and experience the thrill of a simulated launch. Soldering components and diving into basic coding, campers will explore the science of satellite engineering. We will be using sensors to collect data - including temperature, altitude, and learning to analyze data like an aerospace engineer. This course is perfect for curious minds interested in space exploration that enjoy building, experimenting, and problem-solving.

- **CANSAT Satellite Fee: \$400**

**** This class is a double period intensive elective**

15) CHESS CHALLENGE

Session 1 & 2

Chess is a tremendously popular activity at Challenge Camp! Come to play individual and team games against opponents of all ages and abilities. Develop your own chess strategy and tactics through supervised play.

16) CHOCOLATE WORKS ACADEMY

Session 1 & 2

Indulge in the delightful world of chocolate making in in this hands-on, fun-filled course takes young learners on a delicious journey from bean to bar, teaching them the basics of chocolate making. Campers will get to mix, mold, and decorate their own chocolate creations, learning about different types of chocolate and the art of tempering. This experience is perfect for the aspiring bakers and chefs who love attention to detail and have the patience to precisely manage the production from melting wafers, dipping, decorating and packaging. It's a sweet blend of culinary skills and creativity, leaving them with both new knowledge and tasty treats to share with family and friends.

- **Chocolate Fee: Session 1 - \$75, Session 2 - \$60**

**** NOT RECOMMENDED FOR CAMPERS WITH FOOD ALLERGIES ****

17) CLAY CREATIONS

Session 1 & 2

Get your hands messy and your creativity flowing in this fun and interactive clay sculpting class. Campers will learn foundational techniques like rolling, pinching, coiling, and slab building to sculpt animals, pots, and imaginative characters. We will experiment with textures and tools to bring detail to our work, then paint and glaze the finished creations.

18) CODE CENTRAL: PYTHON

Session 1 & 2

Embark on a coding journey with Code Central: Python! Perfect for beginners and budding technologists, this course unravels the basics of Python, an object-oriented programming language. Discover the joy of programming with Python's simple syntax and easy learning curve. Explore variables, loops, decision statements, and other fundamental programming concepts that serve as building blocks for future languages. No prerequisites required—just bring your eagerness to learn. Unlock the potential of coding at the heart of Code Central: Python!

19) CODE CENTRAL: JAVASCRIPT ANIMATION & DESIGN**Session 1 & 2**

Learn coding basics while having fun creating animation, games and sketch art. We will be using a version of JavaScript known as p5.js. JavaScript is the most widely used computer programming language and the backbone to most web pages. p5.js makes coding fun and easy for artists, designers and beginners. In less than 15 lines, you will be able to create an arrow shooting across the screen or a waterfall of balloons of different sizes and colors bouncing around the screen (and needing to be popped!) p5.js is great for visual learners. Learn how to create variables, loops and algorithms.

20) CODE CENTRAL: SCRATCH JR**Session 1 & 2**

Young campers will be introduced to coding basics using the Scratch Jr. software. Scratch Jr. is a visual programming language that enables students to create games and animated projects. Using visual code blocks, Scratch Jr. guides you through programming concepts – such as loops, conditional logic, sequencing, and algorithmic thinking. Campers will unleash their creativity, innovation, and curiosity as they develop coding skills.

21) CONFIDENT CHEFS**Session 1**

Designed to give campers confidence in the kitchen. Come and have some fun rolling sushi, making dumplings, learning the art of Mexican street tacos and more. Treat friends and family to interesting decadent desserts such as mochi madness, cheesecake cupcakes, chocolate chip cookies, pop tarts to name a few. Campers will learn to prepare ingredients, organize their work space and use tools of the trade. Our confident chefs will learn how to properly season meals while developing their critical palate. Bon appetit!

- **Confident Chefs Fee: \$120**

22) CREATING WITH CANVA**Session 1 & 2**

Unleash your creativity and learn the art of design using Canva, a user-friendly graphic design tool. Campers will explore how to create stunning visuals for school projects, social media, and personal use. We will master the basics of Canva, including templates, text tools, and design elements as we create posters, presentations, flyers, and graphics. Campers will delve into key design principles like layout, color, and typography. This class is perfect for aspiring designers, creative thinkers, or anyone who loves to express themselves visually as we turn ideas into an eye-catching design portfolio of projects!

23) CURIOUS CHEF**Session 2**

Campers will learn the basics of cooking and healthy eating. Cooking is math, science and an art. Chefs will learn kitchen organization, following directions, measuring, and preparing ingredients to complete a recipe from start to finish. Experience making simple foods from scratch and create the foundation to be good chefs and more informed eaters.

- **Curious Chef Fee: \$100**

24) DIGITAL COMICS**Session 1 & 2**

Digital graphic comics and stories are extremely popular with campers of all ages! In this engaging digital storytelling class, we will read, write and illustrate our own comics and designs. Beginning artists are more than welcome as there is themed art from you to choose from, incredible animation and loads of templates to start story building with! If you have an idea, you can quickly create visually dazzling content for your story. Create and animate your characters, word balloons, sound effects and bring your original stories to life on screen!

25) DRONE LIGHT SHOWS

Session 2

Soar into the future with Drone Light Shows! In this exciting and educational program, kids will learn the basics of coding and design as they create their very own dazzling drone light shows using Litebee Star drones. Campers will master drone safety, programming, and teamwork while transforming their imaginative ideas into stunning visual performances. Whether it's crafting colorful patterns or telling stories with light, this class combines STEM learning with artistic expression for an unforgettable experience.

- **Drone Light Show Fee: \$150**

26) DRONE SOCCER

Session 1 & 2

Drone Soccer is a fast-growing ESport. It is a thrilling indoor team sport played with radio-controlled quadcopters in protective exoskeletons designed for collisions. Teams of up to five players face off in a netted arena where they ram and block the opposing team to prevent them from scoring. But before pilots can compete, they must first learn to build, program, fly, and repair high-performance drones. Learning these engineering skills can lead to exciting careers in technology and aviation. To learn more about this emerging sport, visit <https://www.dronesoccer.us/>.

- **Drone Soccer Fee: \$150**

27) DRUM ROLL

Session 1

Feel the beat as you drum to your heart's content. Enjoy a hands-on and unique experience studying rhythm and percussion in many forms. We will discuss the history of percussion and explore rhythms from around the world. Lessons will include hand drums, drum circles and more! Learn about a variety of percussion instruments such as congas, shakers, cow bells, and tambourines while performing with a professional musician.

28) DUNGEONS & DRAGONS

Session 1 & 2

If you can imagine and think of lands and magical creatures, then you can play Dungeons and Dragons. Think of yourself as a character in a book. Imagine magical places and items – many surprises lie ahead. For campers with significant D&D experience, this year we have created a separate Advanced section.

29) EDISON ROBOTICS

Session 1

Enter the world of robotics and coding with Edison Robotics. The Edison robot is a powerful, engaging tool for teaching children computational thinking and computer programming in a hands-on way. Campers can immerse themselves in a variety of STEM and engineering projects as they learn to design and invent. Using the EdBlocks and EdScratch software, these programmable robots will open up the world of coding and bring computer science to life. Students will take home their kit to continue exploring with Edison.

- **Edison Robot Fee: \$75**

30) ESPORTS ARENA

Session 1 & 2

Esports and casual competitive electronic gaming is a billion-dollar industry, and high schools and colleges are responding to the growth of this field by creating programs that can lead to career pathways. Esports provides a sense of community, children learn to create and follow strategies, work cooperatively with teammates and can foster digital citizenship skills and good sportsmanship. Join us in the arena as we delve into a variety of age-appropriate Esports titles and genres including Rocket League, Fortnite, Among Us, League of Legends, Starcraft and more!

- **Esports Fee: \$75**

31) FASHION ILLUSTRATION

Session 2

Calling all fashion designers! Campers will be introduced to beginner fashion illustration techniques. Students will learn basic skills of the trade, such as drawing a fashion croquis (or illustration) and learning to illustrate movement. All designers will create a fashion mood board to display their creations. Join the fun and live out your passion for fashion!

32) FENCING

Session 1 & 2

En garde! Learn the exciting Olympic sport of fencing! Parry, cut, and lunge, as you improve strength, coordination, focus, balance and more. Fencing is a high-speed, exhilarating sport that relies on quick wits and cunning, and engages the entire body along with the mind... most importantly, it's FUN!

- **Fencing Fee: \$100**

33) FUTURE LEADERS

Session 1 & 2

Empower your camper to shine as a confident leader, skilled team player, and well-rounded individual. Participants will learn essential preparing them for success in school, relationships, and life. Each session is packed with fun, hands-on experiences like role-playing, creative teamwork exercises, and personal growth reflections. Through these engaging activities and group challenges, campers will learn to work collaboratively, resolve conflicts, and build trust. Our Future Leaders will be inspired, equipped to communicate effectively and lead with confidence.

34) GUITAR JAM

Session 1 & 2

For campers with guitar experience to expand to the fundamentals of guitar performance. Campers will learn to play elementary chords, melody and proper hand techniques. Each class is a fun environment where we study and play popular songs. Music theory will be introduced to emphasize guitar technique and performance. Bring your own guitar, or we have several that students can use during class.

35) IMAGINATION STATION

Session 1 & 2

Enter the Imagination Station, where creativity and curiosity come to life! Campers will dive into a STEAM world of colorful art, and exciting projects that inspire wonder. From designing art masterpieces to experimenting with colors in science, or making gooey slime, each session inspires creativity. Campers will engage in fun, interactive activities that build problem-solving skills and teamwork. Join us in the Imagination Station, where fun meets learning!

36) INTRODUCTION TO GUITAR

Session 1 & 2

In this beginner-friendly course, young musicians will learn the basics of guitar playing, including chord progressions, strumming patterns, and simple melodies. From holding the guitar properly to playing their first song, this class introduces children to the joy of music. Playing guitar also helps in developing fine motor skills, enhancing concentration, and fostering a lifelong love for musical expression. If you do not own a guitar, we have several that students can use during class.

37) IT'S A SMALL WORLD

Session 1

Through music and songs, we will discover many countries and their musical culture: Korea, France, Ireland, Africa and the United States. You will build a likembe, also called kalimba and make your own "one of a kind" instrument out of recycled materials.

38) K'NEXplorations

Session 1 & 2

Dive into a world of creativity and engineering and become master builders using K'nex. This hands-on class encourages children to think outside the box as they construct everything from towering skyscrapers to intricate vehicles, learning about basic engineering and architectural principles along the way. Campers work both individually and in teams, fostering problem-solving skills and collaboration. This is an ideal environment for young builders to unleash their imagination, develop fine motor skills, and gain confidence in their ability to create amazing structures.

39) LEGO MINDSTORMS

Session 1 & 2

Bring the fascinating world of robotic technology alive with Lego Mindstorms EV3 Robots! This robotics course teaches the students the principles of assembling and operating an interactive Lego Robot. Mathematical standards will be addressed as well as hands on building of mechanical and electrical systems in robotics. Accurate measurement, geometric relationships, problem solving and reasoning skills will be stressed for success. Students will bring science to life utilizing many possible Lego designs in addition to their own creations.

40) LEGO SPIKE PRIME

Session 1 & 2

The innovative Spike Prime system integrates Engineering, Robotics and Computer Science and promotes critical thinking through playful learning. Using LEGO bricks, the programmable multi-port Hub, and a coding language based on Scratch will help you build confidence, teamwork and solve complex problems with real world relevance. In units like "Competition Ready" you will build and program robots for competitions. Join the "Invention Squad" and focus on the engineering design process to create limitless possibilities. SPIKE Prime will help campers develop the essential 21st century skills needed to become the innovative minds of tomorrow.

41) LEGO WEDO ROBOTICS

Session 1 & 2

Introduce robotics and computer programming with the award-winning Lego WeDo! This is a hands-on, challenging and fun way to learn about robots! This class will expose students to engineering, logical thinking, computer programming and team working skills. Campers will build a variety of robots with Lego's and program their models to complete challenges, enhancing creativity and problem-solving abilities.

42) LOL IMPROV

Session 1

In this improv comedy class, we will help build self-confidence and self-awareness by exploring our creative sides. Campers will need to be quick on their feet utilizing critical thinking, public speaking, listening, and selective attention skills...and best of all, we will laugh a lot! Join us as we write, edit and perform hilarious skits, silly songs, stories, dances and learn the thrilling art of improv. Campers will have the opportunity to perform unforgettable short action-packed comedy shows.

43) MAGIC: THE GATHERING

Session 1 & 2

Back by popular demand! A game battle in which you and your opponent represent powerful sorcerers attempting to drive each other from the lands of Dominia. Your deck holds your tools: creatures, land, spells and artifacts.

44) MINDFUL ART

Session 1 & 2

Campers will create works of art that encourage and facilitate a relaxed, peaceful state of mind. In a friendly, creative, judgment free zone students will be encouraged to tap into and connect with their mind, body, and soul that they will express through visual arts. Campers will experience working in many mediums including colored pencil, paint, collage, and more. They will explore making mandalas, gratitude jars, dream catchers, dream paintings and beyond.

45) MINI CHEFS

Session 1

Mini Chefs will introduce campers to kitchen awareness. Whisk up some fun making macaroni and cheese bites, breakfast bars, Rice Krispie creations, and learning how to bake and decorate cookies and more. In this hands-on course campers are introduced to the basics of cooking in a safe and nurturing environment. We will learn fundamental skills such as measuring, mixing, preparing ingredients and following recipes.

- **Mini Chefs Fee: \$120**

46) MINI MAKERSPACE

Session 2

Dive into the world of STEAM and design your own amazing creations. Become an inventor, engineer, and artist where YOU get to choose what you want to build, create, and explore! Our Mini Makerspace is a place where your imagination and creativity come to life. Building robots, designing fantastical buildings, creating working games, or experimenting with art and simple machines - the choice is yours! Every project is an opportunity to experiment, solve problems, and have fun.

- **Mini Makerspace Fee: \$40**

47) MINI NINJAS

Session 1

In this active class designed for younger campers, they will have fun exploring movement through creative elements. Utilizing props and obstacle courses, all will be physically challenged in a multitude of ways, helping them gain body awareness and coordination. Campers will explore a range of movements including dynamic jumping, leaping and running as well as more controlled balance and stretching.

48) MODEL MAGIC MONSTERS

Session 1

Say goodbye to monsters under the bed and hello to your own one-of-a-kind Monster masterpieces! Young artists will use Crayola Model Magic and their imaginations to design and sculpt fun colorful monsters. Through guided instruction, campers will explore basic sculpting techniques, learn about shapes and textures, and bring their ideas to life with vibrant colors and playful details.

49) MONEY MATTERS

Session 1

Navigate the world of money management in this personal finance class. Campers will learn the fundamentals of personal finance, including budgeting, saving, and the basics of banking and investment. Through interactive activities and real-life scenarios, we will gain an understanding of how to manage money wisely, the importance of financial planning, and the value of smart spending and saving habits. This class is a vital step towards financial literacy, equipping children with the skills to make informed financial decisions in the future.

50) NINJA WARRIOR

Session 1

In this active class, campers will have fun exploring movement through creative elements. Utilizing props and obstacle courses, all will be physically challenged in a multitude of ways, helping them gain body awareness and coordination. We will explore a range of movements including dynamic jumping, leaping and running as well as controlled balance and stretching. Speed and endurance will be improved as well as elements of engagement and focus as we build body confidence and have fun.

51) PAINTING ROCKS!

Session 2

Rock painting is a wonderful way to decorate indoor or outdoor spaces. After selecting and priming your rocks, you'll turn them into animals, foods, images, or even characters like Minions and emojis! The possibilities to enhance nature's wonders are endless. Bring happiness to your home or garden with your one-of-a-kind hand-painted rock collection.

52) PEACE YOGA

Session 1 & 2

Peace Yoga is designed to help participants develop self-confidence, self-respect, and self-awareness. This age-appropriate class is geared towards the physical and emotional wellbeing of participants. Campers will learn various yoga poses as well as breathing and mindfulness techniques. We will work together in partner and group poses and incorporate games, music, and other fun props. No previous yoga experience is necessary – if you can breathe, you can do yoga! Proper exercise clothing required: loose pants, T-shirt and towel or yoga mat.

53) PICKLEBALL

Session 1 & 2

This fast-growing sport combines the elements of badminton, tennis and ping pong. Played on a court with paddles and wiffle balls, pickleball is simpler than tennis and fun to play with your friends.

54) PINBALL WIZARD

Session 1 & 2

Construct your own PinBox Pinball machine with two interchangeable playboards that you will design. For makers, creative thinkers and game designers, the PinBox 3000 is a tabletop cardboard pinball kit that artfully integrates mechanical engineering, physics, sculpture, product design and performance! Light up your play board and be ready to "Tilt the Future!"

- **Pinball Kit Fee: \$50**

55) PIXICADE GAME MAKER

Session 1

Have you ever wanted to create your own video game? Do you like to doodle or draw? In this class you will learn how to make your very own video games using Pixicade! All you need to do is draw, then watch your doodles magically come to life as playable games. Campers will learn to use the exciting new Pixicade App and its editing and Power-Up features! This exciting class will teach campers game mechanics and concepts through STEAM and literacy exploration and mini drawing lessons. At the end of the session campers will have a collection of games they created from the stories, characters, goals, worlds, hazards and game challenges developed in class.

- **Pixicade Kit Fee: \$30**

56) POKEMON TCG

Session 1 & 2

Pokemon TCG is an exciting and longtime favorite card game of strategy and skill where campers collect, train, and battle the cute Pokemon characters that inhabit their world. Beginning and experienced players will take on the role of a Pokemon Trainer and play another Trainer to knock their opponent's Pokemon out of the battle! Your camp Pokemon deck will be supplied and booster packs await the masters!

- **Pokemon Fee: \$25**

57) POP ART PAINTING

Session 1

Enter the world of Andy Warhol and Roy Lichtenstein in this multimedia painting class. We will use papers, magazines, plastics and more to complete your pop art paintings! Made on canvas, these inspired, bright and modern works of art will allow you to spark your imagination and creativity!

58) POP UP BOOKS

Session 1 & 2

Bring stories to life in this exciting pop-up book-making class. Learn how to turn ideas into vibrant, interactive books filled with eye-popping 3D designs. From drawing and coloring characters to folding and crafting clever paper mechanisms, each camper will have the chance to design a one-of-a-kind masterpiece. This hands-on workshop combines art, storytelling, and a touch of engineering, helping students develop their creativity, fine motor skills, and problem-solving abilities. Let your imagination soar as you create stories that leap off the page.

59) PRINTMAKING

Session 1

Explore the fascinating intersection of art and science in this engaging printmaking class as we combine artistic expression with scientific exploration. We will explore our surroundings to collect leaves, flowers, twigs, and other found objects. Campers will create dimensional prints utilizing various materials and techniques. We will observe how different textures affect their designs and explore the chemistry behind color mixing and ink transfer to make imaginative projects.

60) PSYCHOLOGY 101

Session 2

Discover the fascinating world of mind and behavior! Psychology helps us understand why people think, feel, and act the way they do. Dive into topics like emotions, how we make decisions, what motivates us, and how we can interpret the actions of friends and family. How do our brains work? How can we encourage healthy habits and be kinder and more empathetic to others. Through interactive activities, games, and discussions, you will see that we are all connected, enabling us to build stronger relationships. Get ready to explore Psychology, the science of YOU!

61) RASPBERRY PI

Session 1 & 2

Unlock the potential of the world's smallest, most affordable, and incredibly powerful computer – the Raspberry Pi! Originating from a British endeavor to revolutionize computer education, the Raspberry Pi introduces you to the real essence of computing. From mastering Linux shell commands to diving into basic programming with scripting languages, you'll embark on a journey of digital discovery. We will explore the limitless capabilities of the Raspberry Pi 5, to equip you with the skills to play games, engage in web browsing, and tackle a myriad of projects. Each camper will receive a basic Raspberry Pi starter kit and a project guide, ensuring you leave with the tools and knowledge for endless experimentation. Get ready to unleash the potential of this pint-sized powerhouse!

- **Raspberry Pi Kit Fee: \$150**

62) RECYCLED ART

Session 1

Repurposing materials is a great way to be ecologically conscious. We can recycle empty jars and containers and turn them into wonderful works of art! We will use paper, paint, twine and found objects to decoupage, embellish and beautify empty cans, bottles, drawer dividers, boxes, paper bags and flowerpots.

63) ROBLOX GAME DEVELOPER

Session 1 & 2

Roblox is one of the largest online gaming platforms, with millions of games created by its users. Students will learn to use the Roblox Editor and the Lua coding language to create adventures which can be published to smartphones, tablets, desktops, or consoles. They will explore programming concepts such as loops, arrays, and more on their journey and will learn fundamentals of game making including game mechanics and level design.

64) ROCK BAND

Session 2

Have you always wanted to play in a band? This class is your opportunity to unleash your inner rock star. In this ensemble course musicians will experience all facets of performance from rehearsing to performing songs as a part of a rock band. This course is recommended for campers with musical training and a willingness to bring their own instruments. The culmination of this rock band class will include a performance for fellow campers as a final project.

65) ROCKET UNIVERSITY

Session 1 & 2

Campers will train to be real “rocket scientists” and “aerospace engineers” in this inspired offering. In “Rocket University” you will learn about the history of rockets from ancient Chinese fireworks to modern day spacecraft and military applications while discovering principals of launching, trajectories, thrust, navigation, flight paths, altitudes, orbits, recovery methods, safety and more! Students will receive their individual rocket kits and assemble them while applying what they have learned to their design and construction. You will launch your rockets and record data.

- **Rocketry Fee: Session 1 - \$120, Session 2 - \$100**

66) SOCCER

Session 1 & 2

Soccer is the most popular team sport in the world. Learn the strategies for playing offense and defense and improve your dribbling, passing and shooting skills in this fast paced, action-packed class.

67) SPA SCIENCE

Session 2

Explore the fascinating world of cosmetic chemistry for aspiring formulators, science enthusiasts, and beauty product aficionados. We will create our own formulations, including moisturizers, lip balms, serums, facial masks and more, while mastering the principles of ingredient selection, stability, and safety. We will use scientific testing methods to evaluate over-the-counter products by analyzing product efficiency, such as hydration levels, UV protection, and anti-aging claims. Participants will develop a foundation in cosmetic science, gain practical lab experience, and acquire critical thinking skills for assessing both homemade and commercial beauty products.

- **Spa Science Fee: \$40**

**** Not recommended for campers with allergies or skin sensitivities. ****

68) STAGE DOOR**Session 1 & 2**

Enter the world of theatrical production! Learn the art of costume and set design. Under the guidance of our artistic director, we will research, measure, design and create original costumes for the musical theatre productions of "Willy Wonka" and "Cinderella". Costumes / scenery will be constructed of fabric, paper, foam board, paint and other materials. This imaginative behind the scenes process will bring our production to life and provide an awareness of the importance of stagecraft and design skills to the production. Participants from the theatrical cast are encouraged to join and other non-performers are all welcome!

69) STOCK MARKET ANALYTICS**Session 1**

This is a class for students who want to understand how the stock and bond markets function. Campers will build their own stock portfolio in the Stock Market Game by using qualitative and quantitative analytical approaches. With the qualitative approach, campers will be choosing companies with products they like (ie Nike or Coca Cola) and that they are familiar with. The quantitative approach will involve analyzing data using Excel, and the campers will learn both basic and advanced tools for forecasting and monitoring their portfolios. We will learn which methods perform best and see if we can beat the market at its own game.

70) STOP MOTION LABORATORY**Session 1 & 2**

Whether you love drawing, painting and sculpture or whether you would like to write stories or act out dramatic scenes, you will have fun exploring the possibilities of animation. Spend a little time learning the basics of handling the camera setup and stop-motion app, then let your imagination take off as you bring your drawings to life or create your own 3-D characters with modeling clay. You can also use small toys, or even animate real people in your films. Students will receive a digital copy of their films.

71) STORYBOOK YOGA**Session 2**

Storybook Yoga combines yoga poses and movements with popular children's stories. In our class the priority is fun! We will move our bodies and use our breath to embody the stories we read, with the help of games, music, and other mindful activities to bring books to life. We will also use our vibrant imaginations to create our own poses as we transform into storytellers ourselves.

72) SWIMMING**Session 1 & 2**

Learn to swim and have a splashing good time in the wonderful indoor pool this summer. Swim instruction and free swim time will be held on campus each day in the Iona athletic center! Challenge Camp follows the American Red Cross swim progression. Campers must provide a swimsuit, towel, goggles and Ziploc bag for wet items.

73) TAE KWON DO**Session 1 & 2**

Literally "the art of kicking and punching", Tae kwon do is a martial art that has developed over the course of thousands of years with the earliest records of its practice dating back to 50 B.C. from Korea. It is a highly disciplined art of self-defense, physical prowess, and moral discipline. It is distinguished from other martial arts by its varied and unique powerful kicks.

74) THIS LAND IS YOUR LAND**Session 2**

Discover the beauty of Folk and Native Heritage music by learning songs that explore these meaningful times. Have fun singing and learning the historical nature and cultures that inspired songs like Yankee Doodle, I've Been Working on the Railroad, This Land is Your Land, Oh Susannah and more!

75) TOY INVENTOR'S WORKSHOP

Session 2

Through imagination and creativity, campers will build their own toys using the concepts of simple machines and engineering like motion, force, tension, and balance. You will have great fun building a homemade dart board, inventing a marble maze, creating a corn hole toss game, designing a structure made out of popsicle sticks and more! Our dynamic toy workshop is about experiencing the joy of making something of your own from start to finish.

- **Toy Inventor Fee: \$40**

76) TURBO TRUCKS

Session 2

How would you like to race a remote-control truck on the Challenge Speedway? In this class you will have the opportunity to race a fully ready Traxxas Rustler, known for fun and durability and with more power, smoother control, better grip, and performance that makes it one of the fastest electric trucks available. Race your car on outdoor courses that you design with cones, ramps and more. Campers will take home their car/equipment. With Traxxas' exclusive waterproof electronics, your Rustler can blast through dirt, puddles, mud and even snow, your R/C adventures are limited only by your imagination.

- **Truck Fee: \$200**

77) ULTIMATE FRISBEE

Session 1 & 2

Ultimate Frisbee is an exciting, non-contact team sport that is played throughout the world and whose popularity continues to rise. Ultimate is a unique mixture of Frisbee, football and soccer, providing an exhilarating workout. The spirit of the game stresses sportsmanship and fair play.

78) UNITY GAME MAKER

Session 2

Calling all aspiring video game developers! Using the Unity game engine, students will create a 2.5D platformer using various 2D, 3D, & Sound assets. The goal of this course is to have students design an appealing and fun game that gives them a solid foundation in programming. Campers will be able to create their own C# scripts that control behavior of the objects on screen as well as modify pre-written code provided by the instructor. Whether you have experience in coding or not, all that is required is a little bit of creativity and a passion for video games.

79) VIVE LA FRANCE

Session 1

Hop aboard the TVG and travel to Paris and the provinces of France. Discover the French countryside and Versailles. Traverse the Loire River, villages, food, and music. Students will pack their suitcase and travel with a real boarding pass and train tickets from the SNCF. This is a very interactive program including role-plays to allow students to learn the basics of the French language. Allons-y!

80) THE VOICE

Session 2

Sing, shine, and create in this dynamic vocal, musical theater, and songwriting class, perfect for children who love the spotlight! Students will explore a wide range of music, from catchy pop hits and enchanting Broadway showtunes to beloved Disney classics, with opportunities to sing their favorite songs karaoke-style. Alongside developing their singing and acting skills, young performers will dive into the basics of songwriting, learning simple harmonic progressions, melody writing, and lyric crafting. This lively and supportive environment builds confidence, encourages creativity, and prepares students for thrilling end-of-course performances that showcase their talents and original songs.

81) VOLLEYBALL**Session 1 & 2**

Bump, set, and spike your way into fun as we learn the basics of volleyball in a supportive and energetic environment. Practice teamwork, communication, and sportsmanship through drills and games. Campers will learn essential skills and build confidence on the court.

82) WATERCOLOR WONDERS**Session 1**

Splash, blend and create magical works of art in this class that introduces young artists to the world of watercolor painting. You will explore vibrant colors, experiment with different techniques, and create beautiful artwork that's full of imagination. With every brushstroke, you will discover the joy of painting butterflies, birds, flowers, rainbows and the endless, unique possibilities that watercolors can offer!

83) WIX WEB DESIGN**Session 1 & 2**

Creating interesting, dynamic Websites begins with knowing how to use the tools of Web design. We will be mastering Wix, an online software tool that will allow campers to create professional looking content. Through exploration of design concepts such as layout, contrast, readability, and interactive elements we will develop an understanding of what makes a great user experience. Campers will create websites on a variety of topics including movie reviews, game history, favorite musical genre, "how to..." and more. We will develop documentation skills through digital photography, explore proper digital citizenry and etiquette, and create interactive Web sites that will showcase campers' interests.

84) WONDERLAB**Session 2**

Step into the lab and unleash your inner scientist! This class is an explosion of fun (sometimes literally!) as we delve into the wonder of experiments across biology, chemistry, and physics. Grow crystals, create colorful chemical reactions, build gadgets that defy gravity, and solve puzzling science mysteries. With bubbling beakers, glowing gizmos, and fascinating discoveries, learn the secrets of the natural world while having a blast. Are you ready to make science the coolest thing ever?