Summer Wonders 2020
For bright, motivated students entering grades PK - 8th seeking new challenges and fresh inspiration.

Palatine
Session I: June 1-5
Session III: June 15-19
Session V: June 29-July 2
Session II: June 8-12
Session IV: June 22-26
Session VI: July 6-10

in partnership with
QuestAcademy

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Joan Franklin Smutny, Founder and Director

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Igniting Imaginations Since 1983!
**Course Offerings and Program Details**

**Session I**  
**June 1-5**  
**PK-8th grades**

- Adventures in Artificial Intelligence (2-5)
- Amazing Dinosaurs (PK-K)
- Animals, Stories, and Art (K-4)
- Art and Theater United (4-8)
- Artbotsics (4-8)
- Artbotsics Without Boys (4-8)
- Creative Writing (1-8)
- Crime and Puzzlement (3-8)
- Dynamic da Vinci (1-3)
- Explorers Lab (K-3)
- I Think I Can! (1-3)
- Innovators Lab (4-8)
- Lego WeDo Robotics (K-4)
- Makey Makey (3-8)
- Mother Goose Camp (PK-K)
- Motopets! STEM with SteAm: (3-8)
- The Art of Math (K-4)
- The Mathematics of Wordplay (4-8)
- Unwrapping Ancient Egypt (2-6)

**Session II**  
**June 8-12**  
**PK-6th grades**

- Abstract Strategy Games (3-6)
- Art in Expression (1-6)
- Bridge Mania (2-6)
- Checkmate! (K-6)
- Detective Science (1-4)
- Edible Architecture (K-6)
- Getting to Know the USA (PK-K)
- Improv and Theater Games (1-6)
- Interpretive Theater (K-1)
- Mad Scientists Loose in the Kitchen! (PK-K)
- Math of Chance (K-5)
- Minecraft (3-6)
- Musical Theater (2-6)
- Science and Showtime (K-2)
- Short Stories (3-6)
- Tinkercad (3-6)
- Writing and Art (1-2)

**Session III**  
**June 15-19**  
**PK-6th grades**

- Chemistry for the Courageous (K-2)
- Creative Writing (1-6)
- Drama and the Monologue (3-6)
- Furry, Feathered, Slimy (1-6)
- Improv and Theater Games (1-6)
- Lego Robotics (4-6)
- Lemonade Stand (2-3)
- Math Puzzles and Strategies (3-6)
- Math, Clues, and Codes (K-3)
- Mixed Media Masterpieces (1-6)
- Never Bored with Cardboard: (K-6)
- Ocean Explorers (PK-K)
- Project-Based Engineering (K-6)
- Science Experiments with Toys (3-6)
- Stories and Art:
  - The Caldecott Winners (PK-K)
- Zoology (K-3)

**Session IV**  
**June 22-26**  
**PK-6th grades**

- Art Adventures (K-6)
- Create Your Own Galaxy! (4-6)
- Dynamic Dramatics (K-6)
- Edible Math (PK-K)
- Electricity and Play Dough Circuits (K-4)
- Favorite Authors (K-2)
- Graphic Novels (3-6)
- Hopping Around the Continents (PK-K)
- Lego Innovation Lab (K-6)
- Lego Innovation Lab for Girls Only (K-6)
- Mathemagicians (K-2)
- Musical Theater (1-6)
- Slime, Flubber, and Other Fun Polymers (K-6)
- STEAM, Coding, and Maker! (2-6)
- The Science of Star Wars (3-6)
- Travel the Silk Road (1-6)

**Apply Online at www.centerforgifted.org**
Session V  
June 29-July 2  
PK-8th grades

African Safari (PK-K)  
Airplanes, Kites, and Rockets (3-8)  
Biological Explorations (4-8)  
Boys-to-Men Club (4-8)  
DIY Hammock: Hang and Relax (5-8)  
Favorite Authors (PK-K)  
Games Galore! (K-4)  
Grossology of Biology (K-3)  
Hands On Algebra (3-8)  
Lego Mindstorms EV3 (3-8)  
Medieval Mania (K-4)  
MGYA Literature, Projects, and Authors (5-8)  
Mysteries in History (1-3)  
Optical Illusions and Other Ways to Trick Your Brain (2-8)  
Powders and Potions: Witch’s Brew! (K-4)  
Science Fiction Writing (3-8)  
Sculpture Studio (3-8)  
Sharks, Quakes, and More! (4-8)  
The Art and Craft of Problem Solving (K-4)  
Writing and Art (1-2)

Session VI  
July 6-10  
PK-8th grades

Art in Expression (1-8)  
Best by Test (3-8)  
Create Lego Movies! (K-4)  
Creative Writing (4-8)  
Design Studio (K-3)  
Fairy Tail Festival (K-3)  
Harry Potter Explains U.S. Law (3-8)  
How to Measure an Elephant (PK-K)  
Improvs and Theater Games (1-8)  
Maker Space à la Rube Goldberg (3-8)  
Maze Game Design with PowerPoint (3-8)  
Musical Theater (1-8)  
Organic Chemistry (3-8)  
Quiz Bowl Junior (3-8)  
Stock Market (5-8)  
Trash to Treasure (4-8)  
Where the Wild Things Are (PK-K)

Questions?  
Call 847.901.0173

Location  
Quest Academy  
500 North Benton  
Palatine

Hours  
Full Day: 9:00-3:00  
Morning: 9:00-11:40  
Afternoon: 12:20-3:00  
Extended Care: 7:30-9:00 and 3:00-6:00

Tuition  
Per Session  
Sessions I, II, III, IV, VI: Full Day $440; Half Day $220  
Session V: Full Day $350; Half Day $175

Fees  
Non-refundable application fee: $10  
Morning extended care: $15 per day  
Afternoon extended care: $10 per hour  
Lab fees as indicated in course descriptions

See “Details” link on our website (upper left margin, under “Summer downloads for parents”) for more information, including eligibility, program format, application, placement, refunds, lunches, etc.

Please feel free to contact us anytime with questions, at: www.centerforgifted.org, or 847-901-0173. We’re always happy to hear from you.
Students select their favorite courses from the offerings below. Each day, full-day students who choose courses offered to grades that do not include “PK” will enjoy four 80-minute classes; and half-day students, two. Courses for “PK-K” offer a 160-minute interdisciplinary classroom experience each half day. For courses that span several grade levels, students are placed in classes with their age peers. Unless otherwise noted below, all courses are available both mornings and afternoons.

‘During Sessions II, III and IV, 6th-8th graders are invited to join us for Project ‘20 at this same location. See the flyer on our website, or contact us.

Abstract Strategy Games: Discover anew the world of board and card games. Challenge your opponents or work together to solve common problems. Try your hand at Euro-style games, which offer a level of abstract strategy and teamwork not found in games like Sorry! or Monopoly. (3-6)

Airplanes, Kites, and Rockets: Investigate principles of aerodynamics and physics as you design, build, and test your own models. Which will fly the highest? longest? fastest? If it doesn’t fly at all, rethink, redesign, and relaunch! (3-8)

Amazing Dinosaurs: How did dinosaurs live? What was their world like? Through creative, interdisciplinary activities, step back in time to explore the lives of dinosaurs, from the large brachiosaurus to the small compsognathus, from the swift ornithomimus to the slow stegosaurus. (PK-K)

Art and Theater United: From masks to puppets, create your own characters, build a set or backdrop and join your peers in presenting a puppet show, a drama performance, or a delightful combination of both. Use your favorite stories, or write your own. (4-8)

Art in Expression: Be the artist you always have wanted to be. Try your hand at various art forms, such as drawing, painting, or sketching. Let your imagination come forth. See how exciting and fun it can be to be an artist! (Session II, 1-6; Session VI, 1-8)

Adventures in Artificial Intelligence: Discover chatbots, facial recognition, and machine learning models. Experience hands-on learning from robots and coding. Learn to code using unplugged activities and multiple programming languages. Each day will offer a different theme with some of your favorite animated characters. Join us for a fun-filled week of creating ‘smart’ projects and exploring artificial intelligence; it is all around us! (2-5)

Animals, Stories, and Art: Do you like animal stories, especially with wonderful illustrations? Explore a rich diversity of stories--from Peter Rabbit to the Pigeon--and their artistic styles. Express your creativity and love of animals by writing and illustrating animal stories of your own. (K-4)

Artbotics: Do you enjoy both the technical and the creative? Explore this imaginative technology, which brings together art, robotics, and computer science and encourages creativity as integral to the construction and programming of robots. ($15 lab fee) (4-8)

African Safari: Embark upon a simulated safari through savannas, jungles, and deserts. Discover the rich diversity of African animals, from herds of wildebeests to shy mountain gorillas, from tall giraffes to small meerkats. (PK-K)

Art Adventures: Explore and experience paint, pastels, and watercolors in new and wondrous ways. Create your own ready-to-frame masterpieces on canvas and art papers. (Bring your imagination and your art smock.) (K-6)

Artbotics Without Boys: Exactly the same as Artbotics (above), but with no boys allowed. ($15 lab fee) (4-8)
Best by Test: Discover the science behind Consumer Reports as you explore the scientific world of consumer products. Employ the scientific method to do quantitative and qualitative analyses of some of your favorite consumer products, like popcorn, sports drinks, bubble gum, and orange juice. Is it all about the taste? Or is nutrition or cost the secret to success? (3-8)

Chemistry for the Courageous: Mix, swish, and create chemical concoctions that pop, fizz, crackle, snap, and maybe even explode, as you explore chemistry via hands-on experiments. (K-2)

Create Lego Movies! Using a digital camera, movie software, and Lego robots, create stop-action movies. Experiment with special effects, sound, and titles. Share your movies with family and friends! ($15 lab fee) (K-4)

Creatives: Mix, swish, and create chemical concoctions that pop, fizz, crackle, snap, and maybe even explode, as you explore chemistry via hands-on experiments. (K-2)

Design Studio: Identify a problem, then brainstorm, design, test, and evaluate solutions. Did your design solve the problem? What changes can improve your design? When engineers solve problems, their first solutions are rarely their best. They try different ideas, learn from their own as well as others’ mistakes, and try again. Discover how it works for you! (K-3)

Detective Science: Unravel mysteries! What are sleuthing skills and begin the investigation. Can you decipher the clues, gather and analyze evidence, and solve the case? Or will it remain in the unsolved archives? (1-4)

Boys-to-Men-Club: There are many things every child figures out eventually, but some things just need to be taught. Do you know how to change a tire? Do you know the difference between an Allen wrench and a socket wrench? Can you tie your own tie or are you still using clip-ons? Learn life’s essentials! (Girls welcome, of course.) (4-8)

Creative Writing: Compose stories (i.e. short stories, biographical fiction, fractured fairy tales), poems (i.e., free verse, imagery, rhymes, haiku), or prose—whether real or imagined, wild or tame, happy or sad (but happy is better)—inspired by myriad artistic stimuli. (Session I, 1-8; Session III, 1-6; Session VI, 4-8)

Bridge Mania: Design and build a variety of models, such as suspension, cable, stayed, beam, and arch, and test them. Which of your bridges will withstand pressure, and which will collapse, and the ultimate question—why? (2-6)

Crime and Puzzlement: Unravel mysteries! Employ your powers of deduction to gather evidence and clues. Will you convince your fellow detectives of your conclusions, or will the crime remain forever unsolved? (3-8)

DIY Hammock: Hang and Relax. It’s summer, and a perfect time for an elevated perspective on life. Many experts recommend using the outdoors to restore our minds as well as our bodies. You can accomplish both of these by building a hammock. Use math, sewing, rope craft, and situational awareness to create your own, hang it safely, avoid the awful “banana lay” and optimize your lazy days of summer! ($20 lab fee) (5-8)

Drama and the Monologue: You CAN love monologues! Discover how to use your voice and body to create a character in a monologue, to be funny, sad, dramatic, or bad. Have fun playing theater games with your classmates. (3-6)
Dynamic da Vinci: Calling all mad scientists and artists! Join Quest Academy teacher, Mrs. Diones, to explore earth science, physics, astronomy, and chemistry concepts by conducting experiments and participating in exciting hands-on projects, all while creating fantastic works of art. Topics will include recycled art, crafty gardening, and weird science. (1-3)

Dynamic Dramatics: Experience the world of live theater! Older students will work through a five-chapter story together and bring its accompanying five-act play to life. Younger students will read several versions of a folktale, then write and stage their own. All classes will culminate in performances for family and friends. (K-6)

Edible Architecture: Just as it sounds: Harness and blend your art, design, engineering, and culinary skills to build structures out of things that you can eat! (K-6)

Edible Math: Explore the fantastic and very real partnership between math and cooking. Discover delicious math via hands-on mathematical activities, games, and puzzles. (PK-K)

Electricity and Play Dough Circuits: Create your own circuits using conductive and insulating play dough to light LED’s, run motors, and play sound. Use meters and an oscilloscope to study the flow of electric current. Design and construct creatures incorporating LED’s and sound. ($15 lab fee) (K-4)

Explorers Lab: Do you like to try new activities? Challenge yourself! Create? Explore? Let your creative juices flow, brainstorm some great ideas, create a plan, choose from an abundance of materials, tools, and resources, and tinker away to build robots, microbots, inventions, machines, and anything your like. ($15 lab fee) (K-3)

Fairy Tail Festival: Imagine, dramatize, create and compose your way through the world of your favorite fantastic creatures and curious events in literature. (K-3)

Favorite Authors: Who are the famous authors behind the most wonderful children’s literature? Why do they write? Where do they get their ideas? How do they write so well? Investigate these authors and delve into their books through art, drama, and creative hands-on projects. (Session IV, K-2; Session V, PK-K)

Furry, Feathered, Slimy: Discover the wonder and wisdom of living, breathing, creepy-crawlies of various species, shapes, sizes, habits, and attitudes. (1-6)

Games Galore! Discover games that are old or new, inside or outside, loud or quiet, running or sitting, intellectual or pure luck. Create new games; modernize old ones. Come get in the game! (K-4)

Getting to Know the USA: Take a road trip around the United States. Explore the manifold geography of our country. Discover the individual identity and unique characteristics of each of our 50 states. (PK-K)

Graphic Novels: Do you like comic books, unique illustrations, creating unusual art, or writing stories? The graphic novel is one of the most exciting ways to tell a story. Create one of your own! Investigate the fundamentals of this singular art form, including panel-to-panel, text-to-images, and page layout. Conceive and develop an original story, create the characters and dialogue, and plot out the storyboard. (3-6)

Grossology of Biology: Embark on an in-depth investigation of the unmentionable yet fascinating functions that keep us alive. Gain an understanding of the science behind the human body systems. Investigate the importance of blood, phlegm, sweat, gas, mucus, pus, and all things gross but indispensable. (K-3)
**Hands-On Algebra:** Demystify algebra through visual and kinesthetic approach, such as using pawns and number cubes to understand how equations balance. Explore equality, the properties of addition and subtraction, the distributive property of multiplication over division, the zero properties, and the properties of inverse additives. If you can fluently add and subtract, then you can do algebra! (3-8)

**Harry Potter Explains U.S. Law:** With a lawyer as your instructor, explore U.S. laws metaphorically, allegorically and actually, through comparisons with the Harry Potter books. Costumes may be worn, if desired. (3-8)

**Hopping Around the Continents:** Launch an expedition around the world to discover its multifarious cultural and physical wonders. Brave the jungles of South America, endure the deserts of Africa or the winters of Siberia. Come explore our world! (PK-K)

**I Think I Can!** Dissect your thinking skills, which form your foundation for problem-solving, learning and self-identity. With help from our friends in the forest, explore lateral, vertical, visual, and evaluative approaches to thinking. Have fun role-playing with your peers to develop a variety of thinking strategies. Learn to express your individuality and ideas simply by the “hat” you wear. Quench your bursting curiosity and eagerness to share your perspectives—the main ingredients that spark your love of learning. (1-3)

**Improv and Theater Games:** If you can think on your feet, then you’re already half way to acting through improvisation. Explore its fundamentals—the basic tools, rules, and philosophy—through theater games, drills, and simple scenes. Have a great time with solo improvisation, or in teams alongside your classmates, in a supportive and noncompetitive atmosphere. (Sessions II and III, 1-6; Session VI, 1-8)

**How to Measure an Elephant:** Discover the math, science, and fun of calculating sizes, shapes, and volumes of things, from the ordinary to the very weird! (PK-K)

**Innovators Lab:** Got any ideas for new inventions? Bring them into being! Investigate great inventors from the past, like Galileo or the Wright brothers. Design and create your own innovations to present at your class’ Invention Convention. Who wants to be the next Tony Stark? ($15 lab fee) (4-8)

**Interpretive Theater:** Create your own costumes and props and act out a hilarious story based on the book Secret Pizza Party by Adam Rubin. Your last class will end with a REAL secret pizza party (shhhh!) (Mornings only) (K-1)

**Lego Innovation Lab:** Enjoy the challenges and fun of an abundant supply of Lego pieces of all shapes and sizes! Engage in a unique hands-on, minds-on environment as you work in groups to complete different Lego building challenges. (K-6)

**Lego Innovation Lab Without Boys:** Exactly the same as Lego Innovation Lab (above), but with no boys allowed. (K-6)

**Lego Mindstorms EV3:** Ever wonder how scientists and engineers solve real-world problems? Wonder no more! Start by constructing “missions” that recreate challenges we face today in building and maintaining skyscrapers. Brainstorm ways to solve the missions that interest your team. Program your robot using Lego Mindstorms EV3 software to navigate (hands-free!) through each mission. There is no limit to what you can do. Learn valuable 21st century problem-solving, collaboration, and leadership skills through this project-based approach. ($15 lab fee) (3-8)
**Lego Robotics:** Tackle various engineering challenges. Construct robots from motors, wheels, gears and sensors. Program them to solve challenges. ($15 lab fee) (4-6)

**Lego WeDo Robotics:** Select your favorite robot, such as an alligator, goalie, or airplane. Follow its building plans to bring it into shape using Legos, motors, gears and sensors. Connect to a laptop to program your robots’ actions and sounds. ($15 lab fee) (K-4)

**Lemonade Stand:** Discover the ins and outs of starting up a business, such as how to create unique ideas, budget costs, determine pricing, and advertise effectively. Work with your peers to plan a successful lemonade stand. (Morning only) (2-3)

**Mad Scientists Loose in the Kitchen!** Discover the amazing chemical phenomena happening in your pantries and refrigerators all the time, even while you sleep. Explore sundry science through hands-on experiments. (PK-K)

**Maker Space à la Rube Goldberg:** Your team's goal is to create a chain of actions that lead to an ultimate action. A blending of creativity, collaboration, cooperation, and critical thinking is crucial if you are to achieve your desired result. Practice with basic dominos and various setups, then substitute everyday objects, such as dishes, clocks, pots, string, rulers, boxes, toys, etc. Carefully construct each event so that it initiates the next, until they ultimately initiate your final event. ($10 lab fee) (3-8)

**Makey Makey:** Create game controllers, instruments and other fun projects using Scratch and Makey Makey boards, with cardboard, wire and other household materials. *(A free Scratch account is required; we will register accounts on the first day. Visit scratch.mit.edu and makey-makey.com for more information.)* ($15 lab fee) (3-8)

**Math of Chance:** Explore games and puzzles, principles of probability and problem-solving techniques. Maneuver mathematical and physical variables, like pennies, pies, and dice, to solve probability problems. (K-5)

**Math, Clues, and Codes:** Crack mathematical codes; uncover and unravel the wonders and mysteries of math; investigate logic-based problem solving; ponder enigmatic puzzles and perplexors. (K-3)

**Mathemagicians:** Discover secret sequences, play math games, and investigate intriguing puzzles. Create your own number tricks and puzzles to perplex your parents and peers! (K-2)

**Maze Game Design with PowerPoint:** Using interactive animation and hyperlinks teamed with slide transitions, effects, and timing, create mazes in PowerPoint. Design trick walls and create illusions to baffle friends and family. Will anyone find his way out of your maze? ($10 lab fee) (3-8)

**Medieval Mania:** Explore the age of castles, knights, and flying unicorns. Build a castle, design your coat of arms, rescue a princess or prince in distress—and don’t forget to feed your dragon! (K-4)
**MGYA Literature, Projects, and Authors:** The current explosion of Middle Grades and Young Adult (MGYA) literature has brought forth new opportunities for you to read novels with characters and plot lines developed specifically for you. You can identify and relate to characters’ experiences, enriching your understanding of their world. Choose and read an MGYA novel. (For a list of examples, contact The Center for Gifted.) Participate in class book discussions, lead a book talk, or write a detailed summary, a book review, or an analyses with specifically-cited passages. Produce a project about your book, create a book trailer, produce a book cover with inside-cover description, or write a letter to the author. Enjoy a visit from an MGYA author who will discuss his or her latest novel and read a passage from it. (5-8)

**Minecraft:** Experience the possibilities of designing and creating with a variety of different blocks in a 3D procedurally generated world, where high creativity is required to succeed. (3-6)

**Mixed Media Masterpieces:** Create new and exciting works of art using both traditional and non-traditional media, methods, and muses. (1-6)

**Mother Goose Camp:** Explore, expand and expound on a different Mother Goose rhyme each day. Learn songs, share stories with your peers, and enjoy projects, activities and dress-up play related to the day’s rhyme. (Morning only) (PK-K)

**Musical Theater:** No experience necessary! Do you like to sing and perform, or is musical theater new to you? Have a great time with your classmates as you act, sing, and even dance (if you want to) to put together an abridged version of a popular musical. Will you be ready for a live performance for family and friends on the last day of class? (A different musical will be chosen for each program or session in which this course is offered.) (Session II, 2-6; Session IV, 1-6; Session VI, 1-8)

**Moto-Pets! STEM with SteAm:** Design and engineer your own battery-powered motorized pets. Create vibrobots, bristlebots, and artbots in this creative technology class. Let your ingenuity take shape! ($20 lab fee) (3-8)

**Mysteries in History:** Investigate historical questions that defy explanation. Examine so-called evidence of Big Foot and the Loch Ness Monster. Discover the secrets of Atlantis and the Bermuda Triangle. And who was the real Robin Hood? Let’s search out some answers! (1-3)

**Never Bored with Cardboard:** Design and create, construct and decorate your own contraptions, gadgets, widgets, and gizmos using cardboard and everyday household items, with myriad supplies and materials at your fingertips. (K-6)

**Ocean Explorers:** Sail the ocean blue! Visit islands around the globe, investigate tidal pools, scuba dive around coral reefs, and discover the briny deep, through imaginative interdisciplinary activities. (PK-K)

**Optical Illusions and Other Ways to Trick Your Brain:** Could you possibly not notice a gorilla that is standing right in front of you? Can something be both hot and cold at the same time? Discover how to fool your brain and try your tricks on your friends and family. (2-8)

**Organic Chemistry:**

**Molecular Models:** The first steps in understanding the science and art of organic chemistry are to know how to name compounds from their structures and how to draw or build compounds from their names. Using molecular models, build a variety of organic compounds and learn to name them according to IUPAC rules. ($30 lab fee for molecular model kit) (3-8)
Powders and Potions: Witch’s Brew! Create mysterious solutions with curious chemical combinations and properties in this hands-on chemistry discovery class. Will the surprising chemical reactions spook you? (K-4)

Project-Based Engineering: Explore basic principles of physics, and structural and mechanical engineering. Invent, design, build and test your models. Experiment with various materials and theories to discover how to make your models operate most efficiently. ($10 lab fee) (K-6)

Quiz Bowl Junior: Do you like trivia or game shows like Jeopardy, or Who Wants to be a Millionaire? Whether you are on a Scholastic Bowl team or just like to have fun, join our group to grow your treasury of common and uncommon knowledge. (3-8)

Science and Showtime: Discover a fresh, creative approach to science. Explore physics, astronomy, nature, chemistry, and more; then expand and expound your conclusions from your myriad hands-on projects and experiments by creating and acting in short science plays. (K-2)

Science Experiments with Toys: Discover mystery eggs, feely balloons, burping bottles, and crushing cans. Explore the science and wonder of toys via hands-on fun and lab experiments. (3-6)

Science Fiction Writing: Analyze the elements that make a story eligible for the science fiction category. Explore some of the best science fiction classics for inspiration. What makes them so great? Become a science fiction author, yourself! (3-8)

Sculpture Studio: Shape, chisel, model, cast, whittle, or otherwise express your wildest ideas via wire, clay, paper, wood, fabric, baubles, ropes or paper mâché in this 3D-only, elbow deep, multi-media workshop. (3-8)

Sharks, Quakes, and More! Learn how to survive sharks and other dangers, such as wildfires, earthquakes, and animal attacks. On a less dramatic note, discover how to escape from duct tape and other practical life skills to keep yourself safe, intact, and unstuck. (4-8)

Short Stories: Everyone loves short stories. They offer huge literary wonders in small packages. What are your favorites? Explore a wide range of genres, such as adventure, fantasy, science fiction, biographical fiction, and fanfiction. Inspired by your new exploration and discoveries, create awesome short stories of your own. (3-6)

Slime, Flubber, and Other Fun Polymers: Experiment with different recipes for slime. Create other slippery, stretchy polymers in the slime family. Explore the properties of polymers. How far can you stretch it? How thin can it become? What makes it hold together? Play with your peers as you ponder the perplexities of your polymers. (K-6)

STEAM, Coding and Maker! Collaborate and innovate through STEAM challenges, coding, and fun Maker projects. Spark and quench your curiosity as you traverse daily themed activities while employing 21st century skills. ($10 lab fee)(2-6)

Stock Market: Probe the basic principles of stock market operations. Gain a solid foundation for understanding stocks, bonds, mutual funds, IRAs, 401Ks, and other investment tools for the future. Compete in a stock market competition through NationalSMS.com. Research companies in order to make informed trades, or how to build and maintain electronic portfolios and track market conditions with real-time quotes online. Budget money in a simulated checkbook with a modest salary. Examine the economic crisis of 2007 and why the market and economy crashed. By the end of the class, you will understand market conditions, know what it means to invest for the future, and produce a financial report for prospective customers. (5-8)
**Stories and Art:** The Caldecott Winners: What makes a book a Caldecott winner? How does the art express the story? How does the story inspire the art? What do you think of Caldecott stories and illustrations? Investigate artistic styles found in the superbly illustrated winners of the Caldecott Medal, and let them inspire you to create illustrations of your own. (PK-K)

**The Art and Craft of Problem Solving:** Learn strategies, tactics, attitudes, perspectives, and tools for overcoming mathematical obstacles. Develop strong problem-solving skills, intuition, and confidence. (K-4)

**The Art of Math:** Explore geometric patterns and puzzles; create, construct, and experiment with stuff like paper, string, straws, toothpicks and marshmallows. (K-4)

**The Mathematics of Wordplay:** Ambigrams are words that can be read correctly when viewed from different directions, perspectives, or orientations. Word lovers and puzzle enthusiasts solve crossword puzzles every day. How much does math underly the process of constructing a crossword puzzle? Even wordplay jokes are mathematical, and also very punny. Come join us on the fun side of math! (4-8)

**The Science of Star Wars:** Learn from many of the technical secrets and principles behind, for example, invisible cloaking, light sabers, tractor beams, light speed, ships (like Millennium Falcon), droids, fusion, lasers, weightlessness (zero gravity), then try reconstructing them. Simulate beaming someone or something to a planet. Investigate how many of these ideas are currently being researched in the real world. (3-6)

**Tinkercad:** Discover and design your own 3D printing projects using Tinkercad. Learn how to optimize your designs for smooth printing and ease of use. By the end of the week, you will have multiple projects to print at your local library. (A free Tinkercad account is required. Please create your own account before the first day of class at Tinkercad.com.) (3-6)

**Travel the Silk Road:** Walk in the footsteps of Marco Polo. Explore the wonders of ancient China and the meeting of the East and West! (1-6)

**Unwrapping Ancient Egypt:** Create microcosm simulations. Explore pharaohs and tradesmen, inventions and hieroglyphs, pyramids and mummies, gods and goddesses. (2-6)

**Where the Wild Things Are:** Imagine, discover, and dramatize your way through fantastic creatures and exotic places in literature. Create your own astonishing stories and wild characters. (PK-K)

**Writing and Art:** Do you like to tell stories? Express your imaginative tales through prose or poetry, whichever you prefer, then enhance and enrich your literary creations with your own creative illustrations. (1-2).

**Zoology:** Explore and discover the wonders of the animal kingdom—the evolution, history, habitats, habits, personalities, attitudes, and other characteristics of living and extinct species around the world. (K-3)