Dinosaur Modeling Making. Learn about your favorite dinosaurs, discover form and function of these amazing gigantic creatures that lived millions of years ago. We will learn about dinosaurs and create detailed models with clay and other materials.

Superstition. What is the difference between superstition and faith? Or magic? What are some common superstitions around the world? How are folk beliefs and indigenous religious practices minimized by being labeled by other cultures as “superstition?” What ones are still common today in the US? What are the roots of superstitions and what are their effects? Can they be dangerous? Can they be effective if one acts based on superstitions? All of these questions and more will be addressed (if not answered) in this class.
Writing Like A Lawyer. This class consists of a series of decontextualized puzzles focusing on analytic reasoning, reading comprehension, logic puzzles, and debate. The goal is using a pencil and paper to help organize our thoughts. "What we're writing" varies week to week; some days we'll be working on extended writing prompts, other days we'll work on sketching notes for how to attack hard questions.

Geology: Rocks, Minerals, and Crystals. A hands-on workshop focusing on the geological history of the earth, as told through ROCKS. We'll look at local rock types, go over identification and the rock cycle, talk about how minerals grow, and work on starting our own rock collections. This class will include a field trip to the Harvard Museum of Natural History and local trips to collect rocks near Parts and Crafts.

Stocks! We'll learn about what stocks are, how they work and get our feet wet with investing!

Stop Motion Animation. Love “Nightmare Before Christmas” or “Wallace and Gromit” or “Box Trolls?” We will watch short stop motion films and learn techniques in stop motion animation while creating short films together. Bring your imagination and humor.

Cosmos / Planet Earth. Close out the day with some classic documentaries! We'll be watching Carl Sagan's original Cosmos, exploring the history of the universe and the big bang, then switching gears to explore the diversity of life on earth with the BBC's Planet Earth.

TUESDAY

3D Modeling with Fusion 360: We'll be learning how to use Fusion 360 to design 3D models that will be 3D printed! Fusion 360 is a cloud-based 3D modeling software tool that combines organic shapes modeling with basic principles of mechanical design. It is a go-to CAD program for people who have outgrown resources like TinkerCAD and want to develop high-quality designs for the 3D printer.

Reptiles and Amphibians. Similar to snakes and reptiles, but focused on ecology vs. anatomy and behavior. We'll be exploring reptiles and amphibians of Florida and Massachusetts, looking at wetland habitats and how different animals have adapted to live in coastal environments.

Tiny Things. In the tiniest class in the world, we'll be working to build a scale model dollhouse.

Build a Computer. A class to learn about the insides of modern computers. We will take apart old computers and identify their components, do research about what these components do and then use our skills and knowledge to build a couple of new computers for Parts and Crafts from standard modular components.

Cooking Science. Delve into the mystery that is cooking. Food has been around for centuries, which is good cause where would we be without it. Discover why things work, what kinds of chemical changes are happening and food origins while we make edible science. We will experiment with bread, cookies, failed cakes, yogurt making, fermentation and other foods. Learn basic skills in the kitchen, substitution of ingredients and the science underneath what is happening.

Open Lab: A quiet space to work on programming projects, writing work, catch up on your math homework, and get 1-1 help with projects of various kinds. Kids are welcome to bring work from home or set up time for tutorials.

Creative Writing Club. Invent silly writing prompts for each other and write stories based on them!

WEDNESDAY
- **Video Game Analysis.** What defines a game? What makes it fun? What elements are video games composed of and how do these elements combine to create the experiences we have while playing them? We will read from the existing literature of game design, discuss these readings and the games we've played and loved (or hated) and write about our ideas and experiences.

- **Puppet Building Lab.** We will use this time to create new creatures to take over Parts and Crafts!!! We will try out new puppet mechanism and wacky conceptual characters. Bring your craziest ideas to life. Just add glue, tape, wood, fabric and cardboard.

- **Games Games Games!** We will explore and play awesome board games! They teach and encourage many things, including (but not limited to!) reading, math, critical thinking, sportsmanship, cooperation, healthy competition, strategy, chance, and patience. Anyone is welcome to drop in any time & bring suggestions and/or games from home. Favorites are games that involve a good mix of strategy and chance, with interesting mechanics. Examples are Settlers of Catan, Dominion, Magic: the Gathering, Mysterium, Seven Wonders, Coup, Pandemic, Ascension, Fluxx, among many others.

- **Board Game Design.** A hands-on workshop focused on making board games and card games. With index cards and markers and graph paper and rulers, working individually or together, we will come up with board game ideas and prototype them on paper as quickly and roughly as possible. Once we’ve made some prototypes we will playtest them together and use what we learn to make changes and improvements to our designs.

- **Cartooning.** Every week we’ll meet to draw anything and everything. Cartoons and exaggerations welcome. We often start by playing a drawing game, such as Add On, Destroyer, or Exquisite Corpse. After the warm up we work on our own comics and characters often discussing techniques, and sharing visual examples. It is mostly independent work as a group.

- **Open Lab.** A quiet space to work on programming projects, writing work, catch up on your math homework, and get 1-1 help with projects of various kinds. Kids are welcome to bring work from home or set up time for tutorials.

- **Magic: the Gathering Club.** Specifically focusing on the ever popular game Magic the Gathering, we’ll look at deck building, game play, strategy, etc.

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**THURSDAY**

- **Current Events.** In this current events based class, we will work on critical thinking, debate, and media awareness. Each week we will focus on a central article or issue from the media (newspaper, magazine, blog, video, etc), which everyone will read or watch. We’ll then break it down and analyse it from a number of angles: What if any logical fallacies are used? Who is the intended audience? What is the author’s bias? What is left out? Is it factual? All class participants are encouraged to find their own sources & bring in suggestions for deeper analysis from the rest of the class, and can share them via Classroom or email.

- **Puppetry.** Learn about puppet theater in all its many shapes and forms. We will explore styles, build different types of puppets, write skits, and perform our creations. We will also explore stage performance skills and puppetry performance while we create characters and world. This term we are reinterpreting and bringing myths to life

- **Open Lab.** A quiet space to work on programming projects, writing work, catch up on your math homework, and get 1-1 help with projects of various kinds. Kids are welcome to bring work from home or set up time for tutorials.
● **3D Animation with Maya.** We will learn the basics of 3D modelling and animation with a piece of software called Maya. Maya is a standard professional tool for producing 3D art and animation for movies, video-games and many other domains. Our primary resources for the class will be various step-by-step tutorial videos, and the class will be as much about the process of following instructions and using documentation to learn a complex tool and skill as it will be about 3D modelling itself.

● **Colonial Gothic.** Colonial Gothic is an historical RPG and collaborative writing project. Kids create their own characters and and co-write an alternate history of the American Revolution -- where magic is real, where society is matriarchal, and where historical events can be changed (and made ridiculous) in the blink of an eye.

● **Games Games Games!** We will explore and play awesome board games! They teach and encourage many things, including (but not limited to!) reading, math, critical thinking, sportsmanship, cooperation, healthy competition, strategy, chance, and patience. Anyone is welcome to drop in any time & bring suggestions and/or games from home. Favorites are games that involve a good mix of strategy and chance, with interesting mechanics. Examples are Settlers of Catan, Dominion, Magic: the Gathering, Mysterium, Seven Wonders, Coup, Pandemic, Ascension, Fluxx, among many others.

● **Book Club.** Last semester we read the Hitchhiker’s Guide to the Galaxy. This time around we’re reading the Restaurant at the End of the Universe!

**FRIDAY**

● Fridays are a mix of crafts, games, and field trips, led by our fabulous parent instructors Mike and Sara!