

# PROJECT DESCRIPTIONS

## Animatics

Do you enjoy drawing and telling stories? Come join the Animatics project! In this project, we will explore the world of animatics, also known as animated storyboards (doodles that tell a story). We will watch some animatics and even create some of our own over the course of the year.

Project members should have access to video editing software. A digital drawing tool with drawing software, like an iPad, is highly recommended. There are no age restrictions except for your patience -- animatics take many hours to make and you draw the same character(s) repeatedly. Although animatics take a lot of time and effort to make, the process can be really fun and the final result is super satisfying!



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## Archery



This project will focus on archery: a shooting sport. We will learn about:

1. Fundamentals of archery and nomenclature
2. Safety, rules, of 4h and of the range
3. Stance, anchoring and aiming
4. breath control, draw, focus, release, freeze
5. Knot tying

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## Creative Math

This is the 5th year of the Creative Math project and while we have explored many topics in discrete and recreational mathematics, we aren't finished yet! Inspired by George Hart and his daughter, Vi Hart, we are going to use cardstock, cardboard, Lego bricks, ZomeTools, string, and other materials to build mathematical and geometric structures. We'll try to build domes, hyperboloids, catenary arches, polyhedra, do curve stitching, and a lot more. The age range is wide because building these structures can be enjoyed by all ages. Math is not a competitive subject, and we approach our problems and puzzles with a spirit of cooperation and having fun, and fun is exactly what happens!



## Digital Art



This will be the 7th year of this project, and it's morphed into a teen workshop, where members work on their art together, talk, and learn from each other all while working on their own digital art with a computer or tablet. There's never pressure to share your work, it is a fun, light-hearted atmosphere to make art and learn from other teens.

We usually start meetings with a short lesson on art, and this year, we'll be pulling from various well-known artists, game designers, and graphic artists (using Lynda.com and possibly Skillshare) to find the opening lecture.

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## Environmental Stewardship: Plastics Pollution

We skipped a year, but this is our 14th year of the Plastics project in East Hills, and we are still focused on the problem of marine plastic pollution. What is plastic pollution, and what can we do about it? We'll learn about that as well as trying to educate others about the problem and possible solutions which includes plastic reduction, reuse, re-purposing and recycling efforts.



Our focus this year will be:

Cleanups and Microplastic study: we'll do individual coastal cleanups (cleaning up plastic debris at local shores in Oakland and San Leandro) and starting a "One Sq. Foot" study, where we do our own analysis on the soil on the beach/estuary to see how much microplastic has infiltrated the soil. After two cleanup meetings, we'll then meet at the leaders' house to sort and analyze the microplastics we've collected, using microscopes, sieves, and balances. Finally, the 3rd Saturday in September is the International Coastal Cleanup Day (Sept. 18th) which will be our 1st meeting (location TBD).

Research on plastic usage and pollution: members will tackle various questions about plastics on their own and then present findings to the others (informal sharing). Questions include myths about plastic recycling, what happened to the plastic bag bans, is BioPET truly compostable, and more. Algalita also offers a Wayfinder Society (free!) that makes it easy to learn about plastic issues.

Advocacy: we'll explore doing writing campaigns and City Hall advocacy to affect change in plastics issues.

## Fiber Arts



Join us each month to do some handwork together. That could include (but is not limited to) crochet, knitting, cross stitch, embroidery, latch hook, weaving, plastic canvas, and felting. This project will not be centered around any specific projects, but instead each individual will be able to work on the medium that they prefer. We will have some basic supplies and inspiration, members are encouraged to bring their own projects or project ideas. (Pinterest is an excellent place for finding ideas & inspiration) Beginners and experts welcome.

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## Flights of Fantasy

This is a book club project for teens where we will be reading a selection of high fantasy books. High fantasy is a story set in another world and usually includes some magic, wizards, and maybe a dragon or two. We'll start off the project reading *The Hobbit* and then *The Lord of the Rings* books. After that we have a selection of other fantasy novels.

Reading a good book is enjoyable, but experiencing it with friends is so much fun! We'll have monthly in person meetings (outside in the project leader's back yard) to discuss the books and all of our thoughts on them.



## Game of Go



A club for players to learn go online. Uses virtual websites like OGS and KGS. There are no competitions; instead we encourage players to enjoy and be stimulated from the game.

The beauty of go is that it is simple to learn yet takes a "lifetime to master". It requires players to make long-term strategic moves and forces them to look beyond simple formulas and rules. It is an extremely rewarding game both directly and indirectly.

## Hands On Chemistry

Using a terrific and fun curriculum from the American Chemical Society (<https://www.acs.org/content/acs/en/education/resources/k-8/inquiryinaction.html>) we will explore and learn chemistry using household materials, curious minds, and our outside hose for cleaning up afterwards! Meetings will be outside at one of the leaders' backyard, and our other leader will provide the chemistry expertise to help us figure out what is going on with our M&Ms dissolving in water, butter changing with heat, corn syrup mixtures, and more!



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## Hiking & Nature Project



Join us for a monthly hike and casual amateur naturalist explorations. (This might include small hands-on activities.) We will be hiking on local (mostly unpaved) trails and sharing our nature knowledge with one another. This project is intended to get older kids/teens outside, moving, and enjoying nature and time together. If younger siblings want to join and are solid hikers or are small enough to be carried by their adult, they are welcome!

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## Life Hacks

Do you love a good Life Hack? Does that Life Hack really work??? In this project we'll be trying out popular Life Hacks--tricks that are supposed to make your everyday tasks a little easier. Let us know which hacks you've seen and would like to try. Hopefully successful or not, we'll have fun trying!



## Digital Makerspace



Curious about developing your own software projects? Or learning an entirely new programming language? Join the Digital Makerspace project to have a space to explore computer science and technology with an experienced leader to help guide the way. In the past members have worked on games or small programs in Python, made their own websites using HTML and CSS, and used real world tools such as Github to work together. The project plan will be flexible and formed around the interests of the group, we'll use the first meeting (late September) to determine if there is a specific topic we'll focus on during the project but members are always free to pursue their own ideas and learn what they want.

Digital Makerspace will start online, and will move to in-person meetings if members decide to do so. We've also decided to meet more often than once a month for a shorter part of the 4-H year so that members can have more time to finish projects without losing the momentum of working on them. There is flexibility, but expect weekly meetings in October, November, and the beginning of December (perhaps skipping the last week in October and November to take a break). Again, the schedule is not entirely set in stone and changes to the time or day can be discussed at the first project meeting if needed.

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## Primary Makerspace

A makerspace project designed especially for our younger members! From low tech to high tech, we'll have fun making things. Each meeting is dedicated to exploring a specific topic. Topics from previous years include paper airplanes, electricity, LEGO chain reactions, stop-motion animation, musical instruments, and even 3-D printing!



## Medusa National Mythology Exam



We'll read and discuss classical books in preparation for the Medusa Mythology exam in May. See <https://www.etclassics.org/Contests/National-Mythology-Exam> for more information, but in short, members in grades 9-12 read challenging classical works and prepare for the multiple-choice exam in May. The primary sources for this year are: Argonautica by Apollonius Rhodius, Frogs by Aristophanes, Shield of Heracles by Hesiod, The Odyssey by Homer, Metamorphoses by Ovid, Bibliotheca by (Pseudo-) Apollodorus, and Dionysiaca Book 14 by Nonnus. These are original sources and not re-written myths for children; the Greeks didn't shy away from adult themes so please be sure your teen is ready for this. The leader has run multiple classes in the past with teens to prepare for this exam and is familiar with the sources. The readings will be done by members on their own, with the meetings being mostly discussion, going over study questions and activities, and review when we get close to the exam.

Finally, there is the Pegasus exam for grades 3-8, please contact Kris if you'd be interested in helping run a project for younger members. The sources for Pegasus are not the originals and would be appropriate for younger members.

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## NaNoWriMo



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## Rising Stars



This project is a county-wide public outreach project in which members bring awareness of 4-H to the community. This would be done by designing and executing an outreach project. While working on the project and other related tasks, they would develop skills in teamwork, leadership, public speaking, and citizenship. Activities could include planning and work parties and related field trips.

## Square Dancing

4-H members come join the fun! This is a county-wide project so you can meet members from other clubs. Boys and girls learn to square dance from basic beginner to Mainstream and Plus as well as some line dancing. There are also community service and project exhibit opportunities with this project. Square dancing outfits are not required, but be sure you wear tennis shoes, not slip-ons or sandals, and clothing you can move around in. In this project, you can have a lot of fun, meet new friends and get great exercise! Bring your friends (they don't have to be 4-H members) and parents too!



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## Succulent Gardening



Succulents are an incredibly diverse family of plants that store water in their leaves which allow them to survive drought and harsh conditions, all of which makes them perfect plants for new gardeners. In this project, we will learn about different types of succulents, how to grow them, making new baby plants from existing mother plants, and more. Members will be taking baby plants home to care for and will also assist with getting ready for the succulent plant sale in the spring to raise money for the East Hills club. We won't be meeting monthly since winter can be cold for playing in the dirt, but will meet in October, February, March, April, and some of the plant sale days.

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## Tabletop Games

Spin your wheels and roll your dice at our Tabletop Game Project! Project members can choose from a variety of games of varying complexity to play. We'll play new games and old favorites too, so feel free to bring a game you love to the meeting to share.

