



# Hands in Motion

Homeschool Enrichment

## Hands in Motion Fall 2020 Class Descriptions

### 1<sup>st</sup>-3<sup>rd</sup> Grade Program

Fridays 10:00-11:50 \$295

'Lil' Hearts and Hands- STEAM



We are excited to offer a program for homeschooling families of students grades 1st through 3rd, to supplement what they are learning at home. This engaging Hands-On class will cover education in character traits and social skills, along with multiple subjects such as math, language arts, history, science, art, etc., all in an environment that is a safe, nurturing, and a fun Hands-On style of learning. Creating a place where kids can explore and learn their potential while building relationships with fellow homeschooling students is of high priority. Come join us in putting your little one's Hands in Motion for learning. Class size is limited.

### Architectural Drafting & Model Building (Grades 4-H.S.) \$210

"Take it to the drawing board." Two classes wrapped up in one! In this class we will be learning drafting techniques and designs. Students will draw two-dimensional building models to scale. We will be using pencils, drafting instruments, and graph paper to create our blue prints. Students will then use these blue prints created to build 3D models.

Model Building... here things come to life! Students will learn & hone in on their drawing skills as they



envision the house, they may want to ultimately build one day. After drawing up their "blue prints," they will then be given the opportunity to have their design "leap off the paper and come to life!" Working with various sized balsa wood, they will create a model size version of their plans. This is an assisted project-based class. Students will be challenged to their ability and beyond. Some drafting instruments may be required for purchase.

**\*\*Targets State Standards for Math and Fine Arts\*\***

### **Drone Aviation I & II (Grades 6-H.S.) \$245-- STEAM STEAM in the Sky**

This exciting new STEAM course aims at immersing students in the unmanned aerial vehicles industry (UAV or Drones). This is an emerging industry. Students will be exposed to modeling and simulation technology that will prepare them for new in-demand career opportunities.

Our class objectives will focus on mastering the flight planes, execution of piloting the drones, and creating unique obstacle courses. Each drone is also equipped with a camera which we will use to create video clips of our adventures.

Space is limited. Drones are provided.

**\*\*Targets State Standards for Science, Technology, and Mathematics\*\***

### **Electronics I – “Zap IT” (Grades 4-8) \$195--STEAM**

Give your child an exciting, hands-on introduction to electronics.

From smart phones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. In this course, students will gain skills and knowledge through classroom and hands-on lab activities in the areas of basic DC circuits using switches, resistors, microphones, and capacitors. Over the course of the class we will be creating simplified working circuit boards just like the ones found in alarms, TV's, Radio, and other electronic devices.

**\*\*Targets State Standards for Science, Technology, and Mathematics\*\***

## **Jr. Carpentry (Grades 4-H.S.) \$225**

Get math skills through the back door. In this class students will practice measuring, plotting, graphing, arithmetic, geometry, and dimensions.... but they will be focusing on building their very own take-home projects.... not the math. Tool safety and instruction will be emphasized for such tools as a screwdriver, wrench, hammer, saw, router, drill, and various others. We will take ideas, learn how to draw and plan them out, and then have the skills to create them. **We start with raw wood materials to make individualized wood projects.** Students learn how to measure and calculate angles creating a blue print design for their project. They will then measure, cut, assemble, paint, stain, and engrave their very own projects to take home. Measuring tape, safety glasses, and pencils are required.

**\*\*Targets Standards for Art and Math\*\***

## **Lego® Robotics (Grades 4-8) \$195-- STEAM**

In today's world, it seems all students need to be equipped with STEAM (science, technology, engineering, art, and mathematics) knowledge and the creative problem-solving skills necessary to be innovative and creative thinkers.

This is a beginning course in robotics. We will be utilizing Lego Mindstorms NXT base sets. Lego Mindstorms uses a computer software platform and various Lego Robotics materials to introduce the student to computer robotic programming, building techniques, as well as problem solving strategies. Students will be involved in the development, building, and programming of a LEGO Mindstorms robot to perform desired tasks. Students will work hands-on in teams of two to design, build, and program selected robotic projects. Cause and effect learning is enhanced as the models work in conjunction with a computer and, similar to scientists working in labs, students can test and adjust their programming in real time. These projects will start with simple designs which will grow in complexity throughout the class. This robotics program was designed by the creators of the LEGO Mindstorms NXT Robotics systems (for Middle & High School students) and is a great way to introduce young students to foundational building and programming concepts. Computers are provided.

Students will learn

- How to collaborate in groups and teams
- How to design robots for specific activities and scenarios
- How to use robotics programming software on a laptop
- To design, develop, and complete robotic activities and challenges
- Computers and Lego Mindstorms provided



**\*\*Targets State Standards for Science, Technology, and Mathematics\*\***

## PE- “Minute to Get IT” - (Grades 4-8) \$185



Come join us for this fast pace class where everyone has a ton of fun. Here we will be reenacting some of the challenges from the TV series “Minute to Win It”. This is a great way to learn team building and create friendships. Each week we will be dividing into teams and work through blue prints that will challenge your depth perception, hand-eye coordination, agility, patience, and problem-solving techniques. No athletic experience required but come prepared for a good work out. Due to COVID restrictions, we will not be using any shared food items in these games.

**\*\*Target Standards for Physical Education\*\***

## PE—Games in the Gym (Grades 4-8) \$175

Parents, are you looking for a fun place for your children to get out and be active? Build friendships? In this class, the students will be playing, exercising, and learning all at the same time. Students will be exposed to sports such as basketball, soccer, dodgeball, volleyball, and others as we work on individual skills through drills. As well as focusing on the proper techniques in stretching, strengthening, and conditioning for better health. As restrictions ease, we’ll play non-competitive games focusing on teamwork and sportsmanlike conduct. Come join us for some healthy activity.

**\*\*Target Standards for Physical Education\*\***

## PE- Nerf Boot Camp/ Nerf Tag-Outdoor Style- Mondays (Grades 6-H.S.) \$195

Dodge the Bullet!!!!... This class is created around the military boot camp format. A “Master Drill Sargent” will train the students in hurdling walls, shooting range/target practice, calisthenics, & obstacle courses, as they train to succeed at the “Nerf War Games!” ALL the exercise with DOUBLE THE FUN!! This Nerf class is geared towards the older student with more military structure, physical conditioning, and Nerf games. We will be using the new Rival Nerf Guns in battle outside on our Nerf battlefield as well as Arrow Tag Obstacle course. **This is an outdoor “rain or shine class.”** “What kid wouldn’t want to battle in the rain and mud?! Children need to come prepared for the weather. (on days of extreme weather instructor may cancel class) Part of the class time will be focused on strength training, obstacle course achievements, team work, and self-discipline. Objectives covered will be developing an appreciation of the



importance of physical fitness, basic first-aid, and developing knowledge of team building and basic military skills. Rival Nerf Guns and ammo are provided for class time. T-Shirt and Hats included. Purchase of Army tactical pants and safety glasses are required.

**\*\*Targets State Standards for Physical Education\*\***

**\*\*New this year with Nerf Arrow Tag\*\***

### **Nerf Rival Wars- Tuesdays (Grades 4-9) \$185**

This Nerf class is for the kid who wants to see a little more action using the new Nerf Rival Guns. We will be focused mostly on fast pace Nerf Games in the gym along with battle strategies. We'll talk about how warfare has changed throughout history as we discuss some "famous and not so famous" battles that the US Military was engaged in. Bring lots of **WATER and wear good gym shoes**- you'll need it as you run around battling it out! Nerf Rival guns and ammo will be provided for class time. T-shirt included. Safety glasses are required.

**\*\*Targets State Standards for Physical Education\*\***

### **Science- Hands On: Tuesdays (Grades 4-8) \$225**

***With Labs (Some books available for rental)***

Come learn about science in a fun, hands on class that will target your science standards for the year. No boring lectures just lots of creative activities and experiments to promote learning. Building a solid science foundation for your elementary- and junior high-age kids so they will be well-prepared for high school is our goal! We use Real Science 4 Kids as our curriculum. Real Science 4 Kids is engaging and focuses on fundamentals, giving your child a confidence with essential concepts and terms. Chemistry I is the first part of the Level I curriculum, which includes basic **Chemistry** (introduces children to college-level chemistry concepts such as the atom and periodic table, molecular bonding and chemical reactions. acid-base reactions, mixtures and separating mixtures, and large molecules such as carbohydrates, polymers and enzymes), **Physics** (concepts covered are: Laws of physics and the scientific method; force, work and energy; potential and kinetic energy; motion; chemical and electrical energy; current, magnets and electromagnets; light and sound energy; and conservation of energy). **Biology** (topics covered: taxonomy, the cell, the specialized organelle (the chloroplast), plants, protozoa, frog and butterfly life cycles, ecosystems and cycles).

Class runs for the entire school year; however, new students are welcome in Spring. Prices are per semester.

**Required Text:** *Real Science 4 Kids Level I or Middle School by Rebecca W. Keller*

Text books are available for rental for \$25 for the year. Lab materials will be provided. Lab Manuals are optional and can be purchased separately.

Books can be ordered on [Amazon](#) or [Rainbow Resource](#)

**Fall: Chemistry/ Physics**

**Spring: Physics/Biology**

## **Science Labs- Middle School: Wednesdays (Grades 5-8) \$210**

*With Labs Level I*

Kids ask real science questions. Our Advanced Science Labs for middle school enables them to discover real science answers. Science disciplines are so interlaced, to learn one subject requires a foundational understanding of another. This year-long curriculum, with its fun-filled Hands on Labs, addresses this by focusing on the five core scientific disciplines of chemistry, biology, physics, geology, and astronomy.

Learn about acids, bases, pH, and acid-base neutralization, plus plotting data and nutritional chemistry. Discover different types of microscopes and their functions. Explore different types of protists and fungi (molds, yeasts, and mushrooms). Examine inertia, mass, friction, momentum, plus linear and non-linear motion. Study Earth as a system, its geosphere and atmosphere, how to use a star atlas, measuring time, different objects in our solar system Earth's stellar neighbors, and exoplanets.

**If you have completed our Real Science for Kids Science Labs from above, this is the next class for you. Older grades may take this as a stand-alone class as Hands on Science is recommended but not required as pre-req.**

**Required Text-** *Exploring the Building Blocks of Science Book 6 Student Textbook by Rebecca W. Keller*

Books can be purchased at [Rainbow Resource](#) or [Home Science Tools](#).

This book covers the entire school year. However, new students are welcome in Spring.

**\*\*Targets State Standards for Science- Experimentation\*\***

## Science Labs- Middle School: Mondays (Grades 6-9) \$210

### *With Labs Level II*

Kids ask real science questions. Our Advanced Science Labs for middle school enables them to discover real science answers. Science disciplines are so interlaced, to learn one subject requires a foundational understanding of another. This year-long curriculum, with its fun-filled Hands on Labs, addresses this by focusing on the five core scientific disciplines of chemistry, biology, physics, geology, and astronomy.

Learn about acids, bases, pH, and acid-base neutralization, plus plotting data and nutritional chemistry. Discover different types of microscopes and their functions. Explore different types of protists and fungi (molds, yeasts, and mushrooms). Examine inertia, mass, friction, momentum, plus linear and non-linear motion. Study Earth as a system, its geosphere and atmosphere, how to use a star atlas, measuring time, different objects in our solar system Earth's stellar neighbors, and exoplanets.

**If you have completed the Hands-on Science Labs Level I from above or Advanced Science Labs from last year, this is the next class for you. Older grades may take this as a stand-alone class as Hands on Science is recommended but not required as pre-req.**

High School students are welcome with the understanding this class does not qualify for A-G labs for H.S.

**Required Text**- *Exploring the Building Blocks of Science Book 7 Student Textbook* by Rebecca W. Keller

Books can be purchased at [Rainbow Resource](#) or [Home Science Tools](#).

This book covers the entire school year. However, new students are welcome in Spring.

**\*\*Targets State Standards for Science- Experimentation\*\***

## Sewing- Welcome to Sewing (Ages 8 +) Beginner- Adv. \$185



Learn how to sew. Join Mrs. Tina Rohl in learning how to operate your sewing machine to create beautiful projects. All levels of seamstresses are welcome as students will have the opportunity to work on individual projects. Topics covered will be: machine safety, threading, ripping a seam, sewing a button, stitching techniques, and creating various projects. Students will need to bring their own machines to work on in class as well as a short supply list. See student materials link.

## **Small Engines and Machines (Grades 5-H.S.) \$195**

This hands-on course introduces 4-stroke engine components and system through labs. Students use small engine blocks to learn how each piece fits and works together to power the operation of four-cycle engines commonly found on lawn mowers, garden tractors, snow blowers, rotary tillers, chainsaws, and other equipment. Instructional topics include: principles of operation of internal combustion engines, routine maintenance along with disassembly of engine. Engine part identification and definitions of terms, such as torque and horsepower, are emphasized. Students will be paired up in teams to work on individual engines. In addition to the above topics, this class will give the students opportunities to become familiar and experienced in using mechanical hand tools. This class is designed to prepare students for our Small Engine Repair class held in the Spring. All tools will be provided. Safety glasses are required.

One semester class for new students.

**\*\*Targets State Standards for Science\*\***

## **Story of the World- Medieval Times (Grades 4-8) \$195**

Let's explore history in a fun and interactive way. We'll take a captivating tour through The Middle Ages as we work with maps, timelines, and PowerPoints. We'll turn the pages of "The Story of the World" history curriculum as we take an integrated approach to the history of the whole world. Creating such projects as sugar-cube castles, make our own paper, and concoct a cauldron of Eye-of-Newt Soup. Spring students will join us where we are currently reading in the book.

**Required Text:** Students are required to purchase The Story of the World **textbook** Volume2: The Middle Ages by Susan Wise Bauer. Books can be purchased on [Amazon](#) or [Rainbow Resource](#)

**\*\*Targets State Standards for History\*\***



## **U.S Government- (Grades 6-H.S.) \$195**

### **U.S. and Local Government**



**Today more than ever, we need to educate how to “make our voices heard.”  
Be involved in our local government**

In this class we will be learning how the founding fathers of America had the foresight to have separation of powers within our government so that no one branch becomes more powerful than another.

Starting with the Federal government, we will be learning about the three branches of government, how to aspire to serve in the branches, and the duties of each. After which we'll move to the state level to compare and contrast the Federal to the State government. Students will learn that each state has their own State Constitution which outlines how the state governs itself. Focusing on California's Constitution, we'll learn about the offices held by elected officials and how the state elects its officials. During this time the student will be introduced to the major political parties that operate within our political system. We'll be inviting local, state, and federal officials of all political parties to share with the students and be available for Q and A.

The two goals for this class are for the student to learn about and to be inspired to get involved in their own government; whether it be on the local, state, or federal level; and to understand what is meant by 'Representation of the people by the people.' Party affiliation will remain neutral.

**\*\*Targets State Standards for History and US Government\*\***

### **Tennis- Private and Semi-Private Available for all ages**

Join us for some fun on the court. Chris Androkitis has been a professional tennis instructor for over 25 years. He is certified with the United States Tennis Registry and is skilled in especially working with children.

It is encouraged for students to have their own racquets. Some are available for loan.

\$65/hr. Private or Semi-Private Contact us for availability.

Classes held at Crethaven Park just a couple blocks from the classroom.

**\*\*Targets State Standards for Physical Education\*\***

# Athletics at California Family Fitness Rocklin Sports Complex

## **Athletics Sports Program**

at Cal Fit Rocklin

(Grades- 4-H.S.) \$165 per session



**Session Dates TBD- We are working with CalFit to follow COVID guidelines.**

A fun place for students to get out and be active, practice sports, and build friendships! They'll be playing, exercising, and learning in a positive environment. Students will be exposed to sports such as basketball, soccer, dodgeball, volleyball, Nerf, and others as we work on individual skills through drills. As well as focusing on the proper techniques in stretching, strengthening, and conditioning for better health. As COVID restrictions ease, focus on teamwork along with sportsmanlike conduct in games and scrimmages at the state-of-the-art facilities of California Family Fitness Rocklin Sports Center will be implemented. Discounts for multiple session enrollment available.

**\*\*Targets State Standards for Physical Education\*\***

## **Athletics Sports Program**

at Cal Fit Rocklin- *Movin' and Grovin'*

(Grades- K-3) \$95 per session

**Session Dates TBD- We are working with CalFit to follow COVID guidelines.**

Parents, are you looking for a fun place for your children to get out and be active? Build friendships and practice teamwork? In this class, the students will be playing, exercising, and learning all at the same time. Weekly students will be introduced to games and activities such as relays, 4 square, kickball, parachutes, soccer, balloon volleyball, etc. We want to get them moving, stretching, and thinking about overall health. They will learn the proper techniques in stretching, strengthening, and conditioning. Class size will be limited. Come join us for some healthy play!

**\*\*Targets State Standards for Physical Education\*\***

## **Building Trades & Shed Fundraiser Program (Grades 6-H.S.) \$295**

**Held at: 725 Vernon Street Roseville, 95678**

### **Classroom:**

Planning/Drawing/Budgeting/Ordering/Marketing

### **Building Lab:**

Framing, Electrical, Doors, Windows, and Roofing



How do they do that?!! There are many trades that come together to build a house, and in this class, we will be introducing your child to many of these trades. Students will be working towards skills to build wood structured sheds carpentry/rough framing, electrical, roofing, and installation of windows and doors.

These sheds will then become part of a larger project to create a fundraiser. We will explore ideas on **marketing, entrepreneurship, project planning, budgeting, production, and delivery.**

Class size is limited due to the nature of the class. This class is designed for children who like to work with tools and have expressed an interest in this area, but no experience is required.

Funds: Charter funds are accepted for S. Sutter, Visions, Horizon, Inspire, Heritage Peak, Sutter Peak, and Forest. Hands in Motion by Jennifer Androkitis  
Cash, Check, or Credit Cards also welcomed.

Fees include all tools and materials. Students will need to bring a pair of safety glasses and gloves.

Hands in Motion Homeschool  
HandsInMotion4learning.com  
916-412-4331

Charter Vendor Jennifer Androkitis  
DBA: Hands in Motion Homeschool  
301 West Whyte Ave. Rsvle., 95678

[HandsInMotionHomeschool@gmail.com](mailto:HandsInMotionHomeschool@gmail.com)