

**DECEMBER 20-22, 27-29 AND JANUARY 2 >> TO REGISTER ONLINE, CLICK [HERE](#)**

- ▶ Classes for boys & girls Grades 1st through 9th. December 20-22, December 27-29 and January 2. 9:00 AM - 5:00 PM. Morning sessions run 9:00 AM to 12:30 PM, afternoon sessions from 1:30 to 5:00 PM and full day from 9:00 AM to 5:00 PM with a supervised lunch from 12:30 to 1:30 PM. We offer a grace period of 30 minutes with drop off starting at 8:30 AM and pickup until 5:30 PM with no special arrangements or extra charges. For \$5 per half hour per child per day, we can accommodate earlier drops and later pickups upon request.
- ▶ Classes during Christmas Break will not repeat projects so two half day camps can be combined for a full day.
- ▶ For your convenience, you may pay by credit card either on-line or at Newton's Attic, however, to help us reduce credit card processing fees, you can choose to pay by check (or cash) on the first day of class. Thank you! Our Tax I.D. for your Flexible Spending Accounts is 52-2115824.
- ▶ Please send a sack lunch with your child if s/he is staying all day. Additionally, we sell bottled water, soft drinks and snacks or you may send your own. We provide a refrigerator, freezer, toaster oven and microwave for your convenience. Parents are welcome anytime, and we offer wifi and a lounge.
- ▶ We are located at 4974 Old Versailles Rd. on the corner of Versailles and Old Versailles Rd. From Lexington, take Versailles Rd. toward the airport and travel 1.6 miles past Man O' War to a left onto Old Versailles Rd. We are your first left just before the Carpet Barn in an olive green building in a gravel lot.
- ▶ [Sign up for our e-newsletter](#) to receive complete information on our afterschool and weekend classes, summer camps, scout programs, and birthday parties.

## Camp Chemistry

**Grades 3rd -5th** Cost: \$45 per half day

12/20, 12/21 and/or 12/22: Half day • 9:00 AM-12:30 PM

12/27, 12/28 and/or 12/29: Half day • 9:00 AM-12:30 PM •

Glowing water, blue and red flames, and mountains of oozing foam are everyday occurrences in Camp Chemistry at Newton's Attic. This camp will expose students to the fun and sometimes bizarre world of chemistry, chemical reactions and exciting things that can be made with the right mixture of knowledge, chemicals and materials. So, let's all put on our safety glasses, lab aprons and rubber gloves and see what strange potions we can concoct.

## Da Vinci Kids

**Grades 1st-3rd** Cost: \$45 per half day

12/20, 12/21 or 12/22: Half day • 9:00 AM-12:30 PM

01/02: Half day • 1:30 PM-5:00 PM

Science, math, engineering, art: Da Vinci was a master of it all. In this class designed exclusively for young developing minds, students get to follow in his footsteps by engaging in a variety of stimulating activities that cut across a wide range of disciplines. Tool use, building and engineering, chemistry and biology, art and design, spontaneous improvisation, and a healthy dose of brain and body play are all mixed together to form this experience. Each activity will last anywhere from 30 to 60 minutes as students move from one subject to the next while making new discoveries about the diverse world around them. Who knows - with this wide range of topics, your child just may discover something of interest that he or she never even imagined.

## Don't Try This At Home!

**Grades 5th and Up** Cost: \$49.50 per half day

12/20, 12/21 and/or 12/22: Half day • 1:30 PM-5:00 PM

01/02: Half day • 1:30 PM-5:00 PM

The name says it all. It's the one phrase that strikes terror in the hearts of parents everywhere. It's also the one phrase that almost guarantees that kids will try to do something unwise in the basement or garage. But fear not, the purpose of this camp is to help youngsters vent the natural desire to do 'exciting' things, and we'll do them here at Newton's Attic - all under close adult supervision - saving you all the headaches. Most of the activities will be science related stunts or things presented on YouTube that would otherwise be very difficult or costly to do at home. So grab your safety glasses, earplugs, heavy gloves (all provided by Newton's Attic) and let's create some excitement!

## Fig Newtons

**Grades 1st-3rd** Cost: \$45 per half day

12/20, 12/21 and/or 12/22: Half day • 1:30 PM-5:00 PM

Little campers having big fun in the shop is what Fig Newtons is all about. Fig Newtons offers the opportunity to spend time in the shop making hands-on projects that teach about science and engineering. Egg drop vessels, stomp rockets, and tool boxes are just a few examples of the types of projects kids will fabricate and take home with them. Grab your aprons, dust off your safety glasses and get ready to get your hands dirty in the shop at Newton's Attic.

Distribution of non-school materials does not imply sponsorship or endorsement of the contents by the Fayette County Public Schools. Students needing financial assistance may apply to Newton's Attic for sponsorships.

4974 Old Versailles Rd. • Lexington, KY 40510 • 859.368.7334 • Email: [NewtonsAttic@gmail.com](mailto:NewtonsAttic@gmail.com) • [www.NewtonsAttic.org](http://www.NewtonsAttic.org)

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## Kerbal Space

**Grades 5th and Up** Cost: \$45 per half day

12/20, 12/21 and/or 12/22: Half day • 9:00 AM–12:30 PM

01/02: Half day • 9:00 AM–12:30 PM

**Grades 3rd -5th** Cost: \$45 per half day

12/27, 12/28 and/or 12/29: Half day • 9:00 AM–12:30 PM

Just about everyone has heard of Minecraft, but there is another computer game phenomenon that is just as much fun and much more educational. It's called Kerbal Space Program, and its popularity is skyrocketing. In this computer based camp, students will learn how to use the game software to create and manage their own mini-space program. They construct virtual rockets, launch them into orbit and attempt to do a variety of NASA like activities like dock with a space station, land on the moon, or attempt to mine an asteroid. Although this is a computer game, playing it is not as whimsical as one would think. Students must learn and apply some basic physics, math, engineering and even a little orbital mechanics as they attempt to become virtual test pilots and astronauts. It's not just a kid's computer game, it actually IS rocket science.

## Maker Mania

**Grades 5th and Up** Cost: \$45 per half day

12/27, 12/28 and/or 12/29: Half day • 9:00 AM–12:30 PM

This program is for students with varying levels of experience using tools and building projects. This structured, supervised class introduces students to the engineering process and hand and power tool use. Students work in the shop on pre-designated, age-appropriate projects for the duration of the class. No experience is required, but students must be able to exercise self-discipline and some amount of self-reliance. Please make sure your child is interested in and comfortable with learning to build projects and use tools before registering him or her for this class.

## Minecraft Mod with MCreator

**Grades 3rd -5th** Cost: \$45 per half day

12/20, 12/21 and/or 12/22: Half day • 9:00 AM–12:30 PM

By popular demand, we have adapted the Minecraft Mod class to include revisions to the curriculum to allow students as young as 8 to join in. The students will be introduced to MCreator, a code-generating program that is used to make modifications without programming knowledge. The class will teach students to work with the code of other developers and to read and decipher preexisting code, a common practice in the software development field. No previous programming

experience is required, but students must have a Minecraft account prior to joining the class. If students would like to work on code outside of class, they should bring a flash drive.

## Mini-Makers

**Grades 1st-3rd** Cost: \$45 per half day

12/27, 12/28 and/or 12/29: Half day • 1:30 PM–5:00 PM

01/02: Half day • 1:30 PM–5:00 PM

In the spirit of Fig Newtons, Jr. Apprentices and Da Vinci Kids, Mini-Makers allows 1st-3rd grade children to use tools as they build a series of hands-on projects. Projects will be different from those done in the other 1st -3rd grade classes, and students will keep the projects they make.

## Nerf Gun Mods

**Grades 5th and Up** Cost: \$185 for 3 classes

12/20-12/22: 3 Half days • 9:00 AM–12:30 PM • Cost: \$185

12/27-12/29: 3 Half days • 9:00 AM–12:30 PM • Cost: \$185

Lots of youngsters love nerf guns, and the only thing more fun than shooting foam darts at each other is modifying our favorite model so that it shoots farther and faster and has more bling. In this toy filled camp (and yes, there are plenty of adult engineering lessons to be learned studying how toys work), we will provide each student with a popular model of nerf gun and proceed to mod the heck out of it. We'll overvolt the motors, add flashing lights, customized mechanical parts and maybe even a laser sight. Students will learn about electrical circuits and mechanical design as they tweak the shooters. Toward the end of the camp, students will design and construct reactive targets to use in shootout competitions. Students keep the nerf guns as part of the camp.

## Rube Goldberg Machines

**Grades 3rd -5th** Cost: \$85 per full day

01/02: Full day • 9:00 AM–5:00 PM • Cost: \$85

We've all seen them, but not everyone knows them by name. Rube Goldberg machines are contraptions made of household items, junk and just about anything that can be connected together in a convoluted arrangement that can be set off to produce a chain reaction of motion that typically ends in some sort of grand finale. In this introductory class, young students learn how to engineer table top sized Rube Goldbergs from all sorts of items found in the extensive collection of vintage parts at Newton's Attic. So crank up your creativity, imagination, sense of humor, and get ready to learn about tool use, basic engineering and outside the box thinking in this entertaining and educational experience.

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## Tesla Tykes

**Grades 1st-3rd** Cost: \$45 per half day

**12/27, 12/28 and/or 12/29: Half day • 9:00 AM-12:30 PM**

Tesla was the master of electricity and father of alternating current. Like Da Vinci Kids, Tesla Tykes is a mixture of projects, demonstrations and activities but will focus on Tesla-inspired projects that relate to electricity and simple circuitry. The projects and demonstrations will be different than those in Da Vinci Kids, Fig Newtons, Jr. Apprentices and Kiddie Chemistry so that you can enroll your child in any combination of these classes without being concerned that your child will be repeating projects.

## \*NEW\* Virtual Reality

**Grades 6th and Up** Cost: \$45 per half day

**12/20, 12/21 and/or 12/22: Half day • 1:30 PM-5:00 PM**

Have you ever wanted to explore the reality of your favorite game? Wield ultimate virtual magical power? Construct cities or glide around the globe with a flick of your wrist? Then this may be the class for you. Virtual Reality is a rapidly expanding field of study for many computer specialists, from game developers to medical researchers. The ability to create and explore a full-size reactive model of your project is an invaluable talent for many engineers, and the recent developments in home VR and room scale interaction have made this ever more possible. Students who sign up for this class can expect to learn how to set up and operate a room-scale virtual reality tool made by HTC called the Vive. Students will also learn how to use one of several industry standard modeling or CAD suites (exactly which modeling software is up to the class's discretion) to create 3D models and environments. Students who stay for at least two classes will get the opportunity to load their personal 3D models into their virtual environments and manipulate them as they see fit. Students will also experience collaborative development environments when tasked with making models that will match a general theme chosen by the class. They will create an environment with many different models and a lot of interaction while still maintaining a cohesive theme.

## War Games

**Grades 6th and Up** Cost: \$45 per half day

**12/20, 12/21 and/or 12/22: Half day • 9:00 AM-12:30 PM**

**12/27, 12/28 and/or 12/29: Half day • 9:00 AM-12:30 PM**

Part action, part engineering, and big part pure fun defines this camp. Each day in this thrill packed experience, students will design and use tools in the shop to construct their own mechanical devices that shoot, propel or otherwise launch some sort of (safe) projectile that will be used in a paintball style activity. Mechanisms include pvc bows for archery tag (google it), sling shots, foam rocket launchers and a modern day atlatl. Each day, after designing and working in the shop, students will use their devices in competitions in the outdoor Newton's Attic Wargames arena, a field filled with obstacles through which students chase each other. So, let's suit up in plenty of safety gear and have a ball exploring the science and engineering of things that shoot in this exciting camp. Please send children in appropriate clothing for the weather for the outdoor component, and consider sending a change of socks and shoes in the event of snow or rain.