

## Academic Camp Triathlon Summer Sessions

NEW

Children will be grouped by grade level and ability. Each fun filled day is loaded with an hour of Math, an hour of Reading, and an hour of Science for all campers.

**Cost:** Resident \$160 / Non-Resident \$175 **Min:** 12 **Max:** 20 **Five - 3 Hour Sessions**

**Camp Hours: 9:00 am - 12:00 pm at Math Monkey at 151st and Nall**

### June 8 – 12 Simple Machines and Inventions

Find out how gizmos like wedges, screws and levers help us in our daily lives. Campers will be introduced to the concepts of simple machines: the wheel, axle, levers, wedges, inclined planes, screws, and pulleys. Campers will observe the awesome power of pneumatics and hydraulics. They will participate in a pincher relay, experiment with pulley systems, investigate the force of friction, construct their own mega-pinchers, micro-pinchers and a miniature catapult to take home. They will consider how by combining these simple machines they can create very complex machines such as robots. Together we will read *The X-ed-Out X-Ray* by Ron Roy.

### June 22 - 26 Creepy Crawly Ecology

Welcome to the wonderful world outdoors! Use microscopes to investigate tiny parts of plants, animals and insects. Create cool tie-dye designs using nature's beautiful colors and play the role of a naturalist developing the skills of tracking animals in the wild. Discover the science of ornithology by investigating different species of birds and how they fit into their own niches in the environment. You will even build your own birdhouse and create your own blend of bird food. Learn the parts of an insect by creating your own bug model, study insect life cycles, and behavior by building a tiny bug house. Together we will read *The Falcon's Feathers* by Ron Roy.

### June 29 – July 3 Chemistry of Art

Investigate chemical reactions happening all around us every day: in the kitchen, in the laundry, in the garden, and even in the walls! Campers will build crystals, make sidewalk chalk, bath fizzers, a chromatograph T-shirt, investigate water absorbing chemicals, and use chemical reactions to make their own ice cream. Together we will read and study famous artists like Monet, Van Gogh, and Picasso. We will read the book *From the Mixed-up Files of Mrs. Basil E. Frankweiler* by E.L. Koningsburg, exploring the adventures of two children who decide to live in the Metropolitan Museum of Art!

### July 6 – 10 Newton's Wonderland of Physics

We need it to ride bicycles, play games, and even to just sit or stand still. One of nature's most powerful law but usually taken for granted... not anymore! Learn to appreciate and understand the wonders of gravity and experiment with inertia and centripetal force. We'll build amazing devices to see these awesome forces at work. Math, reading, and science concepts will revolve around wonders of physics with games, puzzles, and hands-on activities!

### July 20 – 24 Matter Matters: Solid, Liquid or Gas?

This class introduces children to the building blocks of the universe! Children will learn the fundamentals of chemistry, from the atomic theory to the structure, dynamics, characteristics, and possible combinations of the simplest to the most complex molecules. Together we will read *The Ninth Nugget (A to Z Mysteries)* by Ron Roy. Math, reading, and science concepts will revolve around the three states of matter with games, puzzles, and hands-on activities!

### July 27 – 31 Ancient Ruins: Dinosaurs Unearthed

Investigate the habits, needs and characteristics of dinosaurs. Learn how to tell the difference between carnivores and herbivores. Explore the process of fossilization and make your own dinosaur tooth. Then become a junior paleontologist and work on a dinosaur dig to find fossils. Enjoy the life of a paleontologist through math, reading, and science concepts with games, puzzles, and hands-on activities! Together we will read about some children exploring the world of dinosaurs in *The Talking T-Rex* by Ron Roy.

### August 3 – 7 Rocketry: Shoot for the Stars!

Children will discover the principals of flight, the parts of a rocket, rocket design, and the stages of rocket flight. Learn the history of space travel in between the outdoor launches of several model rockets of varying sizes and designs. We will read *Midnight on the Moon* by Mary Pope Osborne as well as other books about rocketry and space. Math, reading, and science concepts will revolve around a rocket theme with games, puzzles, and hands-on activities!

### August 10-14 Weather Wonders

Welcome to the wild world of weather! Investigate why it rains, what causes lightning, and even how weather can be predicted via a science called meteorology. Step into the shoes of a meteorologist and create some of your own regional weather forecasts. The book of choice for this class is *Brainstorming* by Katie Horner. As a special treat, Friday, August 14th, the parents are to take the children to KCTV 5 instead of Math Monkey for a detailed tour of the station given by Katie Horner.