

Physics Fun:

Games of Motion

Gravity... Inertia... Centripetal force... who could ever imagine that an introduction to physics could be so much fun? We'll experience these awesome forces for ourselves and create some cool devices to watch them at work! Build a rocket from recycled materials, a gravity simulator, learn how your favorite games and toys are all about physics! Design an amazing stick bomb track and discover Newton's Laws of Motion and more in this hands-on program all about motion. **(Ages 7 – 11)**

Our camp includes everything your child needs during our camp day. However, if you wish to continue your child's interest in rocket launches outside our camp, you will need to purchase a launch kit at a hobby shop.

These are only a sample of some of the activities that we will be doing each day. The topics will not necessarily follow this order. However, each of these topics will be included at some point in the camp.

Newton's Loco-Motion – Fasten your seatbelt for a day of motion! Sir Isaac Newton was very curious about how things move. Children will play a tower building game, experiment to learn how inertia works and how gravity is a physical force that keeps all objects "stuck" to the Earth. See how magicians can pull the tablecloth out from under dishes!

Launching Into Science – Build your own rocket made of recycled materials. Investigate Newton's Laws of Motion first-hand. Learn about propulsion with air propelled miniature rockets, and then design your own! Build your own rocket pinwheel. Test yourself with the stomp rocket challenge and make things fly with a balloon blast!

Fantastic Forces – Campers continue to feel the forces! Learn how your center of gravity and inertia affect balance using a balancing puzzle. Practice your new knowledge with an inertia stick. Complete your recycled rocket to take home.

Marvelous Motion – Be awed by the wonders of physics as you race paper rockets and fly gliders. Discover how pendulums work. Finish up with an amazing rocket car reaction!

Spin City – Campers get rolling with an amazing spinning machine that defies gravity. They will build a "gravity simulator," and an "inertia tester" to take home to continue their exploration of motion at home. Learn about the forces that keep a hula hoop up. Experience the pull of invisible forces with a rotation sensation!

