



Rocket Blast Off

Grades 2 - 6

3-2-1 Blast Off! This action packed week focuses solely on rockets and rocket flight. Learn about model rocket design, building, aerodynamics, propulsion, launching, safety, recovery, and repair. Take part in daily launches. Take home your own rockets and an abundance of model rocket knowledge. This Mad Science camp is a blast for boys and girls alike.

Rocket Scientists

Young rocket scientists scratch-build a real model rocket using a sturdy paper towel tube for a body, a plastic egg for a nose and payload bay, pipe insulation for an engine mount, a soda straw for a launch lug, and a plastic bag and crochet thread for a parachute. The Rex Rocket not only flies using a real model rocket engine, but it can be converted into a two-stage rocket. The fun never ends as this and other model rockets can be launched again and again.

Mission Control

Learn what makes a rocket stable while investigating problems and finding solutions for successful model rocketry. Understand why the center of balance and the center of pressure are so important in keeping their rockets on a safe path. Build a Mad Science *Skyblazer* model rocket to take home.

Astronaut Training

Newly acquired knowledge will be used to build an aerodynamic paper rocket that blasts off the end of a straw, a fizzler rocket that is powered by a chemical reaction, and a stomp rocket that is powered by air pressure. Learn some of the history behind model rocketry.

Mission Recovery

Did you know that there are eight different ways to recover your rockets, and bring them safely back to Earth? This camp day focuses not only on recovery systems, but also rocket engines and other propellants. Most model rockets can use a range of engine sizes. Learn which engine size to use depending on weather conditions and the size of the recovery field. Build another model rocket to take home.

Go for Launch (only in 5 day camps)

Experiment with rocket transportation and payloads. Prepare and launch a two-stage rocket and discover the aerodynamics of a souped-up soda bottle rocket that flies over 100 feet high on air pressure. Learn how to measure the height of an object using a homemade altitude finder.

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