

Program Overview

The Club Invention program is a weeklong summer enrichment program that partners with schools across the country to reinforce the traditional school year with science, technology, engineering, and math (STEM) activities through inquiry-based, hands-on activities.

Taught by local educators, each Club Invention program consists of four modules, which comprise 32.5 hours of programming. Typically delivered in five consecutive 6.5-hour days, all four modules align with national and state education standards and are designed to meet the needs of varying age groups through primary and intermediate activities.

The CREATE Program

In the ***Problem Solving on Planet ZAK***[®] module, children are immersed in the wondrous world of science fiction as they use their creative and critical-thinking skills to keep themselves safe and nourished after crash-landing on a strange planet. They first work together to “reassemble” their crashed spacecraft from a variety of common objects. Then, children assess relevant weather data to design shelter and clothing during their stay on *Planet ZAK* and use creative problem solving to reach an unusual, hard-to-find food source. Finally, they design ways to launch their spacecraft in time for the countdown to blastoff.

Children are introduced to environmental science and the concept of conservation when they are challenged to rebuild a cleaner, more eco-friendly city that has been polluted to the point of ruin in the ***Saving Sludge City***[™] module. Before construction begins, children investigate and recreate the actions that polluted the city and determine effective methods to clean it up. Participants explore green city design, water filtration systems, safe waste disposal, conservation techniques, and renewable energy as they completely reconstruct the town.

In the ***I Can Invent: Balloon Burst***[™] module, participants dismantle broken machines from home using real tools and create multi-step inventions that they name and prepare to market. Participants use science, creative problem solving, and hands-on applications to further their inventiveness and critical-thinking skills. Working in teams, younger participants focus on balloon breaking machines that break a water balloon on a target, while older participants create multi-step, Rube Goldberg-type water balloon breaking machine.

The ***Action and Adventure Games***[™] module scores a home run by combining physical activity and creativity. Children practice teamwork, cooperation, coordination, and creative problem solving processes during fun, energetic games. Action and Adventure Games activities are based on the premise that traditional games can be modified using nontraditional approaches. Employing the concept of upcycling, children use found materials to create completely new games. Unlike competitive games or sports, this module stresses creative problem solving, rather than winning or losing, while boosting self-confidence and encouraging active physical participation.