



Club invention[®]

A program of Invent Now[®]

2012-2013 Club Invention Afterschool Program 60-minute or 90-minute sessions

Format:

The Club Invention Afterschool program is an out-of-school-time enrichment program for children in grades one through six. Taught by local instructors, this hands-on inquiry-based program includes a choice of eight activity-oriented STEM (science, technology, engineering, and math) modules which align with national and state education standards. All eight modules are flexible to meet various time requirements during out-of-school hours.

Instructor's choice of eight 60-minute sessions or five 90-minute sessions (total of 7.5 to 8 hours of programming).

PROGRAM PRICING OPTIONS

Tuition Model

Program Provides:

- Curriculum per module selected
- 100% of hands-on materials
- Instructor training manual and video
- Flyer template for club member registration
- Instructor compensation: \$200 + \$50 bonus if class size reaches 20-22 participants

Host Site Provides:

- Single classroom
- One instructor
- Minimum of 12 participants; maximum of 22 club participants
- Flyers and registration for participant sign-up

Investment:

- \$59 per child
- Sibling discount: \$5 per child after 1st child is enrolled at full price
- Instructor: \$25 per child in immediate family
- Volunteer: \$25 per child in immediate family

License Model

Program Provides:

- Curriculum per module selected
- 100% of hands-on materials
- Instructor training manual and video
- Flyer template for participant registration

Host Site Provides:

- Single classroom
- One instructor
- Up to 22 participants per licensed module
- Flyers and registration for participant sign-up

Investment Per Module:

(When procured simultaneously)

- \$1,000 (1-5 modules)
- \$900 (6-11 modules)
- \$800 (12+ modules)

To get started, please select:

- Dates for each Club
- Location of each Club
- Teacher (name and contact information)
- Module chosen

For questions contact:

Michele Millikan, Regional Coordinator
800-968-4332 ext. 1959 or campinvention@att.net
www.clubinvention.org



2012 - 2013 Club Invention Afterschool Curriculum Overview

Note: Participants will attend one module for eight 60-minute sessions or five 90-minute sessions

Bolder Builders™

From building simple tents and elaborate town structures to imploding buildings, children race to change the town name from “Unlucky” to “Lucky.” Children explore the field of biomimicry; create an understanding of engineering as they model and test shelters that will house town residents during different weather conditions. Children will also utilize the physics as they apply building principles to help the town of Unlucky.

Castles, Catapults, and Coats of Arms™

Children will travel back in time to examine medieval life scientifically. Children will explore the effects of Archimedes principle by sculpting clay boats that float across a moat. Children will apply science and engineering principles to the construction of a castle wall, explore the concept of center of gravity, and the effect of momentum. Finally, children will explore the use of simple machines by creating a weight-bearing drawbridge.

E.Z. Science™

Children must help E.Z. Science with a host of challenges. First, children will use chemical reactions to create a specific amount of a gas to fill a balloon. Invent a method to protect eggs from a fall and a machine to help with homework. Children will utilize methods of printmaking to create a magazine template and use mathematics and logical thinking to map out a route to deliver magazines.

Flight Sight™

Children investigate flight from different views of the Earth. Children will explore perspective, create three-dimensional maps, build a flight simulator, and design a flight craft of the future. Children will investigate the ways that invention has enabled flight through the years. Finally, children will be prompted to imagine and create cockpits of a fantasy aircraft that can fly in outer space.

Passage to Planet ROG™

Children will Explore Planet ROG, a planet far from Earth. This module combines deductive thinking and creative problem solving to engage children in inquiry science. During this module, children will engage in observation, collecting data, and teamwork. Children will explore hands-on the principles of engineering as they solve challenges that help their fantasy space mission. Children will employ logic and reason to uncover the mysterious fantasy planet of ROG.

Phys. Ed: Physics in Motion™

Children will focus on the work of famous scientists to create competitive and entertaining games. Children explore the work of physicists such as Galileo and use it as inspiration to build games that demonstrate the movement of objects. Children will use Newton's theories to demonstrate center of gravity. They will apply Bernoulli's theories of air pressure to create parachutes and utilize Gilbert's description of magnetism to create magnetic games.

SOS: Endangered Earth™

The Saving Our Species organization (SOS) has asked participants to help protect and save animal habitats. Children will be exposed to the concept of ecology and explore how to preserve natural resources and protect endangered species. Children will build inventions to solve the challenges of human and wild animal interactions, as well as demonstrate the harmful affect of a simulated oil spill on birds and mammals.

Trash Island: A Garbage Patch Journey™

Children hear of the extreme build-up of trash in the North Pacific Central Ocean Gyre. Children will identify ways that waste makes its way into water systems. They will build machines to clean contaminants from water systems and will investigate the use of eco-friendly, sustainable living through reducing, reusing, and recycling and by creating inventions to clean up contaminated water by using pH strips and a pH scale.