

# Sparking Imaginative Learning MAD SCIENCE AFTER-SCHOOL SCIENCE PROGRAM

The "**Eureka**!" program offers eight weeks (4 topics; 1 topic over 2 weeks) of exciting hands-on science based activities. Watch fascinating demonstrations, join in enquiry-based discussions, participate in individual and group experiments, and make amazing takehomes. Mad Science will spark the curiosity and imagination of children with fun science activities that will help them understand the world around them.

#### **ROCK, PAPER, SCISSORS**

Inventing means curiosity! Leonardo da Vinci started as an artist and developed many scientific observations that he recorded in his notebooks over the course of his lifetime. Children learn about his many discoveries and try their hand at his experiments, from writing notes backwards, measuring human proportions, building a self-supporting arch bridge to building catapults.

### WHIZ KIDS

Inventing means practicality! Inventions and patents to protect an invention were very popular in the late 1800s. Inventors Alexander Graham Bell, Thomas Edison and Nikola Tesla were locked in several battles over electrical inventions of their era. They talk about sound and learn that anyone, a child, woman or man, can be an inventor. The topic moves from simple devices to Rube Goldberg devices and the children perform as parts of a complex human-machine.

#### THINK FAST

Inventing means cooperation! Orville and Wilbur Wright worked together to develop the first self-controlled motorized flying machine. Their team efforts also lead to improved bicycle pedals and faster sleds. Children review technological advances in flight and work together to produce improved paper plane designs.

## **SCIENCE FICTION**

Inventing means dreaming! Jules Verne and Isaac Asimov wrote about things that would be available in the future. These science fiction writers developed the reality of their current technology into future possibilities. The children develop submarines that rise or sink, wind-up space stations, and design safety capsules for payloads returning from space. They follow a telecommunications timeline and develop one for transportation.

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