

# Year-long Enrichment Programs for the Gifted & Talented

Whether you have an entire class of students who are academically gifted and talented or you have a smaller group of students brought together to cover curriculum as the schedule allows, we have programs developed to meet both needs.



Wind and Water:
Building for the Weather
Grades 2-3



The Environment Through Artists' Eyes



Solar Astronomy

Grade 5



Crime Scene Investigation

Grade 6



Go With the Flow: Plankton Adventures Grade 7



Environmental Planning

Grade 8

## **Descriptions**

### Grades 2-3 Wind and Water: Building for the Weather

In this elementary STEM program, young engineers will be exposed to the forces of nature resulting from weather. Hands-on models will be used to demonstrate how wind and water can impact human structures and change the land. Teams will then investigate ways to resist weather effects. Using natural materials and testing criteria, can students build a wind-resistant tower AND float their boats? A fun, open-ended exploration!

### Grade 4 The Environment Through Artists' Eyes

This program allows children to explore their surroundings through visual art. MEC staff will introduce students to how artists have historically portrayed the environment, together with the vocabulary of the elements of art. After exploring and field sketching outdoors, each student will create a personal work of art to portray the environment through his or her own eyes. All works are put on display and shared in a student gallery at the end of the day. Students bring their artwork home.

### Grade 5 Solar Astronomy

The Sun Through Time is a one day convocation featuring drama, technology, and model demonstrations, all in support of understanding our closest star. Students will participate in modules highlighting human understanding of the Sun through history with themes such as ancient sundials, telescope development, and modern solar energy. The convocation will culminate in student presentations with a creative spin.

#### Grade 6 Crime Scene Investigation

Forensic Science is the star of this one day program, where students will investigate a (fictitious) crime scene in our Science Building. Students will learn how to properly collect, analyze, and document evidence in one of several forensic specialties, such as fingerprinting, hair & fur, tracks, fragments, or ink analysis. Forensic groups will then present their evidence findings to "law enforcement" and discuss building a criminal case. Do we have enough to know "Who Done It".

#### Grade 7 Go With the Flow: Plankton Adventures

The concept of density will be made concrete for your students while investigating water, buoyancy, and some of the planet's most numerous organisms: PLANKTON! We'll introduce and microscopically observe plankton samples, and participate in activities about sinking, floating, and measuring density. Teams will then apply these principles in the Design-a-Drifter Challenge using common craft materials, office supplies, and stuff from the junk drawer.

### Grade 8 Environmental Planning

The issues of flooding and poor water quality that many New Jersey citizens deal with demonstrate the familiar adage "Failing to plan is planning to fail." In this program students will investigate the benefits and pitfalls of various land uses and attempt to strike a balance between the wants and needs of a community and best practices for preserving the integrity of the watershed. Their investigation culminates in the building and presentation of a 3-D model of their environmentally friendly town.

Costs: \$250 for up to 10 students; \$25 each additional Availability: Programs are offered all year

For more information, please contact Michele Daly at mdaly@ramapo.edu or call 201-390-5583.