



Greater San Diego:

Science & Engineering Fair

The City of San Diego Environmental Services Department is pleased to recognize the following students whose Science Fair projects were selected as outstanding examples of environmental science and research. The department's panel of environmental professionals judged more than 80 projects and these students were selected as winners because of their clear, concise presentation, thorough research and the value of their projects to the preservation of San Diego's environment.



Senior Division

First Place **Charles Wong, High Tech High**

The Affecting Oil: Increase in Algae Concentration

Charles' project studied the effects of motor oil on the concentration of Dunaliella Salina in the ocean. Several tests were performed to test the growth of phytoplankton in new and used oil treatments. The results of his analysis suggest that perhaps the nutrients in the motor oil itself stimulate the growth of the algae.

Second Place **Hang Pham, Crawford High School**

Absorption Levels of Bananas

The objective of Hang's experiment was to study the absorption levels and the impact of pesticides on banana fruit. The tests showed that bananas have a very high absorption level. If this result is applied to pesticides, Hang concluded that the greater amount of pesticides that are being sprayed increases the chances of a higher concentration in the bananas.

Junior Division

First Place **Eric Lamar Newton, Muirlands Middle School**

Magnetism as a Prospective Future Vehicle Drive

In Eric's project, the purpose was to prove whether a slot car can be powered using magnetic forces. Eric completed multiple trials of four basic experiments to ultimately determine if he could run his car through a series of magnets. The results of the experiments were successful. Eric was able to keep the car continually moving through a series of magnets.

Second Place **Connor James McMahon, School of Madeleine**

Solar Power

The objective of Connor's experiment was to prove whether one particular wavelength in the visible spectrum produces more solar power. Using a Styrofoam boat, two solar panels, a solar motor, a propeller and four colored filters (red, green, yellow and blue), Connor found that the yellow filter does produce the most solar energy.

Honorable Mention

Bernice Denira Ramirez

Preuss School
Effects of Slope Aspect and Disturbance
On the Recovery of Vegetation

Julia Brooke Wilson

Holy Family
Weed Killer: Effectiveness and Harm
to the Environment

Monica Katarzyna Jaroszynski

High Tech High
The San Diego Wildfire and Its Effect
on Plant Growth

Bryce Nicole Altona

Marston Middle School
Storm Drain Dangers?

***Congratulations to All Students for their
Outstanding Scientific Achievements!***