



**RIVERSIDE COUNTY
OFFICE OF EDUCATION**
EDWIN GOMEZ, Ed.D. | County Superintendent of Schools

2025 RIVERSIDE COUNTY SCIENCE AND ENGINEERING FAIR (RCSEF)



Awards Ceremony

**March 1, 2025
12:00 p.m.**



ISEF Affiliate



2025 Riverside County Science and Engineering Fair

Awards Ceremony

Welcome

Dominique Samario
Chief Strategic Partnerships and Communications Officer

Remarks

Stephan McPeace
Assistant Superintendent of Leadership, Wellness, and Student Services

Awards Presentation

In addition to the various community awards being presented,
the following organizations also provide awards for selected winners of the

Riverside County Science and Engineering Fair:

- American Psychological Association
- Association for Women Geoscientists
- Environmental Protection Agency (EPA)
- Lemelson Early Inventor Prize
- NASA Earth System Science Award
- National Oceanic and Atmospheric Administration
- Regeneron Biomedical Science Award
- Ricoh USA, Inc.
- Society for In Vitro Biology
- Society for Science
- U.S. Metric Association
- United States Air Force
- Water Environment Federation/Stockholm Junior Water Prize
- Yale Science and Engineering Association

2025 Community Awards

Broadcom Foundation - Coding with Commitment

The *Broadcom Coding with Commitment* award is uniquely intended to reward a student's passion for improving the community and for attempting to apply basic coding or rudimentary computational thinking to solve a problem – regardless of whether this project would rise to the level of standards for becoming a state or national competitor. The goals of *Broadcom Coding with Commitment* are for students to:

- Demonstrate how STEM knowledge and technology come together to create solutions that protect, preserve, save, improve, or promote quality of life or nature;
- Advocate coding as an important 21st century+ skill that all young people can use to enhance their opportunities and life choices; and
- Inspire budding scientists, engineers, and innovators to "think globally and act locally"

The award recipient will receive a \$250 gift card and a Raspberry Pi Pico Kit.

Inland Empire Professional Engineers in California (PECG) Awards

PECG represents over 13,000 engineers, architects, land surveyors and many other professional classes across a large number of state agencies. These state agencies include Caltrans, Water Resources, Regional Water Boards, Air Resources, Public Utilities Commission, Department of Toxic Substances Control, the State Architect, etc. These state-employed engineers and related professionals are responsible for designing and inspecting California's highways and bridges. Moreover, these state engineers and professionals are committed to ensuring that schools and hospitals are safe during earthquakes, while protecting our air, water, and beaches from polluters.

To encourage students to pursue a higher education, PECG will present three awards to students including a \$250.00 award in grades 4-5 (combined), a \$750.00 award in the Junior Division (grades 6-8), and a \$1,000.00 award in the Senior Division (grades 9-12).

Science and Technology Education Partnership (STEP) Science Fair Awards

STEP Inspires students to pursue Science, Technology, Engineering, Mathematics (STEM) careers and education. An annual STEP conference has been provided for students since 2000. The inaugural attendance of 900 conference participants has significantly grown over the years to most recently 14,000 conference attendees. STEP will present one \$500.00 award to a Senior Division (grades 9-12) project, a \$250.00 award to a Junior Division (grades 6-8) project, a \$100.00 award to an Elementary Division (grades 4-5) project.

The Air Pollution Research Center (APRC) Award

The Air Pollution Research Center (APRC) at the University of California, Riverside conducts research on photochemical air pollution and air quality. APRC has contributed greatly to our understanding of air pollution formation and the improvement of air quality. This community award honors APRC for outstanding projects in air quality and atmospheric science.

APRC will award:

- Junior Division - certification or equivalent and \$100 check or gift certificate
- Senior Division - certification or equivalent and \$100 check or gift certificate

ACKNOWLEDGEMENTS

Riverside County Superintendent of Schools

Edwin Gomez, Ed.D.

Riverside County Board of Education

Elizabeth F. Romero, President

Kim Joseph Cousins, Vice President

Ben Johnson II, Member

Jamie Azpeitia-Sachs, Member

Bruce N. Dennis, Member

Ray "Coach" Curtis, Member

Jennifer Mejares Pham, Member

Riverside County Office of Education

Dominique Samario, Chief Strategic Partnerships and Communications Officer

Neftali Galarza, Director

Yadira Chavelas, Administrator

Alyssa Juarez, Events Technician

Madelynn Knust, Events Technician

A special thank you to the following who have donated countless hours and been valuable sources of support for the Riverside County Science and Engineering Fair.

Science Review Committee Members:

Kelley Ambriz

Kianny Dominguez Ponce

Cheryl Frye

Dr. Subhas Gupta

Dr. Manjunath Keremane

Sara Lapan

Dr. Loralee Larios

Dr. Richard Lee

Karon Myles

James Palcik

Nick Perez

Henri Shimojyo

Yamileth Shimojyo

Harry Tom

Sarah Yeakel

Volunteer Judges

Welcome to the Riverside County Science and Engineering Fair, an annual competition of science and engineering projects designed, developed, and displayed by elementary and secondary students from public, private, charter, and parochial schools in Riverside County.

Participants share their creative abilities, knowledge, and interests with other students and adult judges who critique the projects for qualities including scientific thought, design and methodology, clarity of presentation, creativity, data collection, analysis, interpretation, construction, and testing.

PARTICIPATING AFFILIATE FAIRS

Alvord USD
Banning USD
Beaumont USD
Chámmakilawish Pechanga School
Coachella Valley USD
Corona-Norco USD
Desert Center USD
Desert Sands USD
Hemet USD
Jurupa USD
Lake Elsinore USD
Mission Vista Academy
Moreno Valley USD
Nuvieh Union SD

Palm Springs USD
Palo Verde USD
Perris Elementary SD
REACH Leadership STEAM Academy
River Springs Charter Schools
Riverside USD
Romoland SD
Sacred Heart School
San Jacinto USD
St. Catherine of Alexandria School
St. Edward School
Sycamore Academy Charter School
Temecula Preparatory School
Val Verde USD

PROJECT CATEGORIES

01 - ANIMAL SCIENCES	12 - ENGINEERING TECHNOLOGY: STATICS AND DYNAMICS
02 - BEHAVIORAL & SOCIAL SCIENCES	13 - ENVIRONMENTAL ENGINEERING
03 - BIOCHEMISTRY	14 - MATERIALS SCIENCE
04 - BIOMEDICAL AND HEALTH SCIENCES	15 - MATHEMATICS
05 - BIOMEDICAL ENGINEERING	16 - MICROBIOLOGY
06 - CELLULAR AND MOLECULAR BIOLOGY	17 - PHYSICS AND ASTRONOMY
07 - CHEMISTRY	18 - PLANT SCIENCES
08 - COMPUTATIONAL BIOLOGY AND BIOINFORMATICS	19 - ROBOTICS AND INTELLIGENT MACHINES
09 - EARTH AND ENVIRONMENTAL SCIENCES	20 - SYSTEMS SOFTWARE
10 - EMBEDDED SYSTEMS	21 - TECHNOLOGY ENHANCES THE ARTS
11 - ENERGY: SUSTAINABLE MATERIALS AND DESIGN	22 - TRANSLATIONAL MEDICAL SCIENCE

GRADE 4 PROJECTS

<i>What Shape Ice Melts the Fastest?</i>	4-BCHM-001
Ajay Pico-Tinsley Chammakilawish Pechanga School	
<i>Should people still be using the 5 second rule?</i>	4-CELL-121
Azalea Fiore Sacred Heart School	
<i>DNA Extraction Lab</i>	4-CELL-204
Benjamin Sommers Cahuilla Elementary School, Palm Springs Unified School District	
<i>DNA Extraction of Fruits</i>	4-CELL-316
Chloe Pruitt McAuliffe Elementary School, Alvord Unified School District	
<i>Sugar Science: Where Sweet Meets Smart</i>	4-CHEM-004
Charli Wooldridge Brookside Elementary School, Beaumont Unified School District	
<i>Sometime It's Better to Have Pennies than Gold</i>	4-CHEM-031
Sebastian Goodwin 21st Century Learning Institute, Beaumont Unified School District	
<i>Got Milk? Got Plastic?</i>	4-CHEM-063
Declan Anderson North Ridge Elementary School, Moreno Valley Unified School District	
<i>How Does Temperature Effect Crystal</i>	4-CHEM-069
Jelani Logan Towngate Elementary School, Moreno Valley Unified School District	
<i>Fastest Dissolver</i>	4-CHEM-075
Hudson Miller Mission Vista Academy	

GRADE 4 PROJECTS

<i>Sweet Energy</i>	4-CHEM-203
Cesar Cedillo Cahuilla Elementary School, Palm Springs Unified School District	
<i>Baking Cheesecake</i>	4-CHEM-211
Daisy Manco Cabot Yerxa Elementary School, Palm Springs Unified School District	
<i>Which liquid do you think will keep apples freshest</i>	4-CHEM-323
Didier Garcia de la Roca Avalon Elementary School, Val Verde Unified School District	
<i>Self Sustaining Ecosystem</i>	4-EAEV-017
Paul Chavez/Richard Flores Felix J. Appleby Elementary School, Palo Verde Unified School District	
<i>DIY water filter</i>	4-EAEV-124
Sofia Beltran-Aguirre Ruth Brown Elementary School, Palo Verde Unified School District	
<i>Is the water around Mead Valley elementary school safe to drink?</i>	4-EAEV-329
Julio Armenta Ibarra Mead Valley Elementary School, Val Verde Unified School District	
<i>The Best Power Plant</i>	4-EGSD-301
Austin Solorzano Megan Cope Elementary School, San Jacinto Unified School District	
<i>Water Screw</i>	4-ENEV-067
Logan Stiles Bear Valley Elementary School, Moreno Valley Unified School District	
<i>What Water Bottle Keeps Your Water the Coldest?</i>	4-ENEV-232
Julian Estrada Pedley Elementary School, Jurupa Unified School District	

GRADE 4 PROJECTS

<i>How Does the Presence of Stabilizing Fins Affect the Movement of a Submarine?</i>	4-ETSD-263
Amarachi Nwachukwu Corona Ranch Elementary School, Corona-Norco Unified School District	
<i>Shake It Off</i>	4-ETSD-268
Naveen Lalwani Lincoln Fundamental Elementary School, Corona-Norco Unified School District	
<i>Electromagnetic Train</i>	4-ETSD-352
Matthew Kreps James Monroe Elementary School, Desert Sands Unified School District	
<i>Liquids vs. S.A.P's.</i>	4-MATS-028
Paisly Becker Tournament Hills Elementary School, Beaumont Unified School District	
<i>The Stretch Test</i>	4-MATS-273
Zainab Shokair Temescal Valley Elementary School, Corona-Norco Unified School District	
<i>Bright Ideas: exploring series and parallel circuits.</i>	4-PHYS-048
Brielle Martinez Anna M. Hause Elementary School, Beaumont Unified School District	
<i>Frozen in Time: Exploring Water's Consciousness</i>	4-PHYS-205
MacKenzie Lee Katherine Finch Elementary School, Palm Springs Unified School District	
<i>Magnets In Action</i>	4-PHYS-309
Logan Preciado Park Hill Elementary School, San Jacinto Unified School District	
<i>Magic Balloon</i>	4-PHYS-330
Mason Ochoa Triple Crown Elementary School, Val Verde Unified School District	

GRADE 4 PROJECTS

<i>Effect of Plane Wings</i>	4-PHYS-349
John Cuevas Gerald Ford Elementary School, Desert Sands Unified School District	
<i>Air Time</i>	4-PHYS-353
Lucio Marmolejo James Monroe Elementary School, Desert Sands Unified School District	
<i>Triangular v. Rectangular Bridge Design</i>	4-PHYS-357
Atticus Ramirez Ronald Reagan Elementary School, Desert Sands Unified School District	
<i>Spinach Science: Water Wars</i>	4-PLNT-011
Sydney Starr Starlight Elementary School, Beaumont Unified School District	
<i>Fastrack Plants</i>	4-PLNT-120
Calan Dierker REACH Leadership STEAM Academy,	
<i>Artificial v. Natural</i>	4-PLNT-318
Vivian Shaver James Carter Elementary School, Desert Sands Unified School District	
<i>Bot or Not? Testing Human Ability to Detect AI-Generated Text</i>	4-ROBO-055
Abraham Holm Seneca Elementary School, Moreno Valley Unified School District	
<i>Space Explorers: Building A Model Planetary Lander</i>	4-ROBO-062
Noah Pineda Sunnymead Elementary School, Moreno Valley Unified School District	
<i>Rozzum - 7134</i>	4-ROBO-279
Vismaad Ahluwalia Susan B. Anthony Elementary School, Corona-Norco Unified School District	

GRADE 5 PROJECTS

Dog Training Experiment 5-ANIM-029
Kaelyn Lutz
River Springs Charter School,

Are fossils fragile? 5-ANIM-108
Gabriel Sosa
River Springs Charter School,

How can Venus fly traps thrive? 5-ANIM-230
Andres Chiquito/Julian Diaz-Griego/Antonio Osorio
Stone Avenue Elementary, Jurupa Unified School District

Picture Perfect 5-ANIM-317
Sadie Royea/Jayci Royea
James Monroe Elementary School, Desert Sands Unified School District

What Chocolate Brand Melts the Fastest? 5-BCHM-002
Ezra Ibanez-Reinoso
Chammakilawish Pechanga School

What Water Brand Will Freeze the Fastest? 5-BCHM-003
Charlie Flores
Chammakilawish Pechanga School

Do Clorox cleaning wipes really kill germs better? 5-BCHM-077
Grace Proctor
Harvest Valley Elementary School, Romoland School District

Shining Bright 5-BCHM-319
Santiago Arriaga-Rauk
James Carter Elementary School, Desert Sands Unified School District

"Can (the act of) Peeling a Citrus Fruit Sanitize Your Fingers 5-BCHM-322
Karina Rea
Avalon Elementary School, Val Verde Unified School District

GRADE 5 PROJECTS

<i>What Liquid Keeps Apples From Turning Brown?</i>	5-BCHM-363
Brooklyn Ramirez Ronald Reagan Elementary School, Desert Sands Unified School District	
<i>Color Psychology</i>	5-BEHA-321
Aria Enriquez Promenade Elementary School, Alvord Unified School District	
<i>Do Certain Colors Make You Feel a Certain Way?</i>	5-BEHA-351
Saige Fincher/Kaylyn Kirsch James Monroe Elementary School, Desert Sands Unified School District	
<i>The Rotten Smile</i>	5-BMED-117
Jenna Lewis Three Rings Ranch Elementary School, Beaumont Unified School District	
<i>Which food will decompose first?</i>	5-CELL-235
Mila Hernandez Stone Avenue Elementary, Jurupa Unified School District	
<i>Green pools and how to clean them</i>	5-CHEM-072
Kamila Saba Railway Elementary School, Perris Elementary School District	
<i>Dissolving Waters</i>	5-CHEM-078
David Coon Anna M. Hause Elementary School, Beaumont Unified School District	
<i>Carbonation Explosion</i>	5-CHEM-079
Isaac Molina Enchanted Hills Elementary School, Perris Elementary School District	
<i>Cupcake Fluffiness</i>	5-CHEM-080
Avery Nelson Boulder Ridge Elementary School, Romoland School District	

GRADE 5 PROJECTS

Can Milk turn into Plastic? 5-CHEM-082

Leonitus Rivers

Tournament Hills Elementary School, Beaumont Unified School District

Can Baby Oil Make Nail Polish Dry Faster? 5-CHEM-125

Zara Stalling

Mesa View Elementary School, Romoland School District

To Drink or Not to Drink: Is Tap Water Safe to Drink? 5-CHEM-160

Senitha Weerakoon

Kennedy Elementary School, Riverside Unified School District

Chemicals On The Move 5-CHEM-198

Hussayn Waheed

Mission Vista Academy

Greasy Fries 5-CHEM-212

Violetta Lopez

Cabot Yerxa Elementary School, Palm Springs Unified School District

Stain stain go away 5-CHEM-246

Melanie Gutierrez

Central Elementary School, Banning Unified School District

Pop! 5-CHEM-302

Nayana Williams

Central Elementary School, Banning Unified School District

The Slime Dyed 5-CHEM-342

Ivy Jacobson

James Carter Elementary School, Desert Sands Unified School District

Burn Baby Burn 5-CHEM-345

Abbigail Rice

James Carter Elementary School, Desert Sands Unified School District

GRADE 5 PROJECTS

<i>Nucleation: The Secret Behind Soda Eruption</i>	5-CHEM-358
Julian Bonillas Ronald Reagan Elementary School, Desert Sands Unified School District	
<i>Fruit Juice Transformation</i>	5-CHEM-360
Zayden Lopez Ronald Reagan Elementary School, Desert Sands Unified School District	
<i>Soil Your Undies</i>	5-EAEV-010
Caleb Clays Starlight Elementary School, Beaumont Unified School District	
<i>Water Filtration</i>	5-EAEV-059
Alena Sosa/Adeline Sosa Harvest Valley Elementary School, Romoland School District	
<i>Salton Sea Toxic Dust</i>	5-EAEV-076
Maximus Bautista Mountain Vista Elementary School, Coachella Valley Unified School District	
<i>Natural Fertilizer Boost</i>	5-EAEV-094
Kara Riomas Valley View Elementary School, Nuview Union School District	
<i>Earth Shaking Plates</i>	5-EAEV-200
Levi Swayzer REACH Leadership STEAM Academy,	
<i>Desalination Station</i>	5-EAEV-253
Dev Patel/Dylan Tran Garretson Elementary School, Corona-Norco Unified School District	
<i>"Water" We Going to Drink?</i>	5-EAEV-343
Mila Zadeh James Carter Elementary School, Desert Sands Unified School District	

GRADE 5 PROJECTS

How Safe is Your Water? 5-EAEV-359
Julieta Jacquez
Ronald Reagan Elementary School, Desert Sands Unified School District

How Hard is Our Water? 5-EAEV-361
Freyja Askins
Ronald Reagan Elementary School, Desert Sands Unified School District

The Water Experiment 5-EAEV-383
Ily Mares
Juan Bautista De Anza Elementary School, San Jacinto Unified School District

Does the size of a rubber band impact how a car travels? 5-EGSD-049
Abraham Pacheco
Bear Valley Elementary School, Moreno Valley Unified School District

SOLAR ON THE GO 5-EGSD-093
Julian Gallagher
Starlight Elementary School, Beaumont Unified School District

The Coolest House on the Block: The Effect of Color and Material on House Temperature 5-EGSD-258
Natalya Benor
Clara Barton Elementary School, Corona-Norco Unified School District

Solar Panel Mirror 5-EGSD-385
Guillermo Nava
Juan Bautista De Anza Elementary School, San Jacinto Unified School District

Mechanical Arm 5-ENBM-210
Odin Garcia
Della S. Lindley Elementary School, Palm Springs Unified School District

Wind Powered Junkbot 5-ENEV-092
Sofia Mercy Rubalcava
Enchanted Hills Elementary School, Perris Elementary School District

GRADE 5 PROJECTS

<i>Zuni Bowls: Using Native Knowledge to Prevent Soil Erosion</i>	5-ENEV-163
William Sanchez Washington Elementary School, Riverside Unified School District	
<i>Water Filtration</i>	5-ENEV-209
Kenneth Stock Rio Vista Elementary School, Palm Springs Unified School District	
<i>Fountain of Truth</i>	5-ENEV-225
Melanie Avila/Zaden Zamudio Hemmerling Elementary School, Banning Unified School District	
<i>Is our local water safe?</i>	5-ENEV-237
Javier Aguilar/Joseph Calvillo Camino Real Elementary School, Jurupa Unified School District	
<i>Solar Power and the Effect on the Distance a Solar Powered Car Can Go</i>	5-ENEV-338
Lucas Viramontes Leiva May Ranch Elementary School, Val Verde Unified School District	
<i>SpeedQuest</i>	5-ETSD-083
Daniel Cordova/Maximilian Kurzawa Sacred Heart School	
<i>Rubber band powered car</i>	5-ETSD-102
Barr Wardwell Sacred Heart School	
<i>The Lemon Powered Battery</i>	5-ETSD-233
Amitoj Singh Glen Avon Elementary School, Jurupa Unified School District	
<i>Hydraulics Engineering - Year 2</i>	5-ETSD-365
Zak Bryant Harry Truman Elementary School, Desert Sands Unified School District	

GRADE 5 PROJECTS

<i>Analyzing the Performance Effects of Materials on Insulation</i>	5-MATS-066
Sophia Ortiz Hidden Springs Elementary School, Moreno Valley Unified School District	
<i>Exploring the Impact of Liquids on Teeth Enamel Using Eggshells</i>	5-MATS-168
Ariana Cano Washington Elementary School, Riverside Unified School District	
<i>From Snacks to Plaque</i>	5-MCRO-057
Sophie Luna Anna M. Hause Elementary School, Beaumont Unified School District	
<i>Blend it up!</i>	5-MCRO-095
Luz de Luna Gomez REACH Leadership STEAM Academy,	
<i>Bacteria Mysteries: Vegetable Edition</i>	5-MCRO-106
Marissa Rivas/Madison White Margaret White Elementary School, Palo Verde Unified School District	
<i>Bacteria Hiding In My House</i>	5-MCRO-208
Dillon Molhoek Rio Vista Elementary School, Palm Springs Unified School District	
<i>Which Method of disinfecting toothbrushes kills the most bacteria ?</i>	5-MCRO-245
Natalia Moran/Audrey Villarreal Valley View Elementary School, Alvord Unified School District	
<i>Chillin Pepsi</i>	5-PHYS-008
Avery Hughes Anna M. Hause Elementary School, Beaumont Unified School District	
<i>Colormeter</i>	5-PHYS-012
Finley Hollingworth Starlight Elementary School, Beaumont Unified School District	

GRADE 5 PROJECTS

<i>Magnet Strength at Different Temperatures</i>	5-PHYS-021
Jacqueline Jorn Three Rings Ranch Elementary School, Beaumont Unified School District	
<i>Detecting Nuclear Particles</i>	5-PHYS-065
Joshua Abarca/Damian Maciel Tellez Ramona Elementary School, Moreno Valley Unified School District	
<i>How much friction does sandpaper give?</i>	5-PHYS-105
Ryan Freitas/Maxwell Mejia/Eli Vega Camino Real Elementary School, Jurupa Unified School District	
<i>Propeller Shape</i>	5-PHYS-335
Matthew Nguyen Triple Crown Elementary School, Val Verde Unified School District	
<i>Take Flight</i>	5-PHYS-344
Bree Lindly James Carter Elementary School, Desert Sands Unified School District	
<i>Which Parachutes Work Better?</i>	5-PHYS-348
Angel Sanchez Dr. Carreon Academy, Desert Sands Unified School District	
<i>Who's Got the Power?</i>	5-PHYS-354
Aria Smith James Monroe Elementary School, Desert Sands Unified School District	
<i>Fertilize Supersize</i>	5-PLNT-172
Alannah Clark Kennedy Elementary School, Riverside Unified School District	
<i>DNA Visionare</i>	5-PLNT-315
Isaac Mohammed Lake Hills Elementary School, Alvord Unified School District	

GRADE 5 PROJECTS

Ready Set Grow 5-PLNT-347
Hollis Strosnider
Dr. Carreon Academy, Desert Sands Unified School District

Protein Plant Power! 5-PLNT-356
Tessa Beltran
Ronald Reagan Elementary School, Desert Sands Unified School District

What is the Effect of Artificial Light on Plant Growth? 5-PLNT-364
Presley Bucklar
Ronald Reagan Elementary School, Desert Sands Unified School District

The robo sweeper- solar powered robotic trash collector 5-ROBO-177
Rose Dagrella
Lake Mathews Elementary School, Riverside Unified School District

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>It Smells!</i>	6-BCHM-052
Jose Chaidez Araujo/Gael Cruz Las Palmitas Elementary School, Coachella Valley Unified School District	
<i>Paws for Thought</i>	6-BEHA-113
Makenzie Crider Western Center Academy, Hemet Unified School District	
<i>Colors to Dye For</i>	6-BMED-111
Kaileigh Baker REACH Leadership STEAM Academy,	
<i>Sweet or not, testing sugar levels in baby food</i>	6-BMED-119
Olivia Templeton REACH Leadership STEAM Academy,	
<i>Dancing With The Decibels</i>	6-BMED-182
Aria Chitwood Washington Elementary School, Riverside Unified School District	
<i>Acne, No!</i>	6-BMED-213
Lotus Avina Cielo Vista Charter School, Palm Springs Unified School District	
<i>Boba For Good</i>	6-CHEM-054
Mia Barrera St. Edward School	
<i>Balloon Inflators</i>	6-CHEM-084
Ivanna Hernandez Enchanted Hills Elementary School, Perris Elementary School District	
<i>Design Your Own Slime</i>	6-CHEM-085
Melania Avila/Amelia Stanford Sacred Heart School	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Dancing Gummy Bears.</i>	6-CHEM-118
Emerson Craig Eagle Mountain School, Desert Center Unified School District	
<i>Bubble Overflow.</i>	6-CHEM-199
Willow Totten Eagle Mountain School, Desert Center Unified School District	
<i>Ceramic coating or Carnauba Wax?</i>	6-CHEM-228
Kimball Clark Camino Real Elementary School, Jurupa Unified School District	
<i>Sugar Rush</i>	6-CHEM-372
Kristopher Crawford Edward Hyatt World Language Academy, San Jacinto Unified School District	
<i>Electromagnetic Frequency Radiation from AirPods: Are Teenagers in Danger?</i>	6-EBED-005
Oliver Abeyta St. Edward School	
<i>Whirling Wonders</i>	6-EGSD-027
Daniel Aguilar/Samuel Owens/Erick Sanchez Palm View Elementary School, Coachella Valley Unified School District	
<i>Solar Water Heater</i>	6-EGSD-040
Madison Caparas/Bonnie LeQuire Vista Heights Middle School, Moreno Valley Unified School District	
<i>What Battery has the Most Power?</i>	6-EGSD-127
Jayden Ruiz Mountain Vista Elementary School, Coachella Valley Unified School District	
<i>Nuts for Energy</i>	6-EGSD-130
Gael Serrano Mountain Vista Elementary School, Coachella Valley Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>How to make a solar car faster</i>	6-EGSD-190
Paulo Keck Washington Elementary School, Riverside Unified School District	
<i>Air Motors</i>	6-EGSD-214
Nolan Lopez Betti Cielo Vista Charter School, Palm Springs Unified School District	
<i>Best Battery; Fruit or Vegetable?</i>	6-EGSD-226
Abraham McBride Arizona Middle School, Alvord Unified School District	
<i>Ionic Propulsion</i>	6-EGSD-291
Beckett Clayton Raney Intermediate School, Corona-Norco Unified School District	
<i>From Water Wheel to Wind Power</i>	6-ENEV-022
Estevan Castellanos/Issayr Pina/Genaro Reyes Palm View Elementary School, Coachella Valley Unified School District	
<i>Portable Fire Pit</i>	6-ENEV-042
Isabelle Myers Palm Middle School, Moreno Valley Unified School District	
<i>From Tension to Trajectory</i>	6-ETSD-018
Danna Figueroa/Cynthia Ortiz/Camila Romero Palm View Elementary School, Coachella Valley Unified School District	
<i>Limb-itless Possibilities</i>	6-ETSD-104
Jasmin Florencio Villicana/Crystal Garcia/Maria Rivera Sandoval Saul Martinez Elementary School, Coachella Valley Unified School District	
<i>Earthquake Resistant Structure Foundations</i>	6-ETSD-129
Renzo Niklaus Adelan Western Center Academy, Hemet Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Perpetual Motion Machine</i>	6-ETSD-314
Carlos Isaac Murguia Sycamore Academy Charter School	
<i>Dicey Desicions</i>	6-MATH-024
Kamila Beltran/Nohely Meza/Valeria Rodriguez Palm View Elementary School, Coachella Valley Unified School District	
<i>Scientific Sweepstakes</i>	6-MATH-025
Bryan Lopez/Matthew Murillo/Victor Valencia Palm View Elementary School, Coachella Valley Unified School District	
<i>Thermal Tumblers</i>	6-MATS-026
Melly Espinoza/Lailane Fernandez/Sofia Vargas Palm View Elementary School, Coachella Valley Unified School District	
<i>Solar Drive: Reducing Carbon Emissions</i>	6-MATS-058
Luis De La Herran Saul Martinez Elementary School, Coachella Valley Unified School District	
<i>Building Better Bridges</i>	6-MATS-128
Benjamin Cherland Western Center Academy, Hemet Unified School District	
<i>What Type Of Paper Is The Most Soundproof?: Does Shape Matter?</i>	6-MATS-256
Sophia Lai Philistine Rondo School of Discovery, Corona-Norco Unified School District	
<i>Germs Are Everywhere</i>	6-MCRO-173
Olivia Breyer Alcott Elementary School, Riverside Unified School District	
<i>Paper Airplanes</i>	6-PHYS-100
Abel Aguilar Gutierrez/Abdiel Castorena Romero/Miguel Perez Moreno Saul Martinez Elementary School, Coachella Valley Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Hidden Hues of Light</i>	6-PHYS-221
Alexandra Miramontes Cielo Vista Charter School, Palm Springs Unified School District	
<i>Elevation Revelation</i>	6-PHYS-270
Aidan Anderson Susan B. Anthony Elementary School, Corona-Norco Unified School District	
<i>Produce-ing Produce</i>	6-PLNT-019
Naomi McAllister River Springs Charter School,	
<i>Magnets Effects on Plants</i>	6-PLNT-223
Leobardo De Anda Vidal/Emilio Hernandez/Nathan Johnson Raymond Cree Middle School, Palm Springs Unified School District	
<i>TrashBot Surge 2024</i>	6-ROBO-123
Jesus Gastelum/Austin Mercado Cano/Aiden Sicairos Saul Martinez Elementary School, Coachella Valley Unified School District	
<i>FrA.I./ Future</i>	6-TECA-023
Aimee Almanza/Daisy Vargas/Jazlyn Zepeda Palm View Elementary School, Coachella Valley Unified School District	
<i>Real or AI</i>	6-TECA-081
Stephanie Hernandez Innovative Horizons Charter School, Perris Elementary School District	
<i>Do You Hear What You See?</i>	7-BEHA-053
Shalyn Jerominski Sacred Heart School	
<i>Preggie Pops!: Helping Haiti</i>	7-BMED-247
Grace Lopez/Madelyn Rudd/Addison Wright St. Catherine of Alexandria School	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Sunscreen Science</i>	7-BMED-299
Arykah Donachy Mira Loma Middle School, Jurupa Unified School District	
<i>How does soda affect your teeth?</i>	7-BMED-326
Nicholas Audelo/Chris Jimenez Toral Lakeside Middle School, Val Verde Unified School District	
<i>Spherification</i>	7-CHEM-041
Liam Wood Mountain View Middle School, Moreno Valley Unified School District	
<i>Red cabbage acid</i>	7-CHEM-091
Drew Castor Eagle Mountain School, Desert Center Unified School District	
<i>Bubble Trouble.</i>	7-CHEM-219
Jennevieve Ingersoll Cielo Vista Charter School, Palm Springs Unified School District	
<i>The Effects of Substances on the Melting of Ice</i>	7-CHEM-222
Ivan Labrada Escobar Cielo Vista Charter School, Palm Springs Unified School District	
<i>UV Defense: Testing How Efficiently Different SPF Levels Protect Skin from UV Rays.</i>	7-CHEM-327
Chizara Odimegwu Vista Verde Middle School, Val Verde Unified School District	
<i>The pH of cleansers revealed!</i>	7-CHEM-373
Piper Austin/Nadia Kamara/Anushka Srinivasan Temecula Preparatory School	
<i>Water Contamination in Drinking Water</i>	7-EAEV-034
Londyn White Landmark Middle School, Moreno Valley Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Coefficient of Restitution</i>	7-EGSD-379
Aulelei Enosa/Kara Ibardolaza/Jayden Shinn San Jacinto Leadership Academy, San Jacinto Unified School District	
<i>Heart Rate Monitor</i>	7-ENBM-032
Hannah Calderon/Amiya Suggars/Adriana Vasquez Vista Heights Middle School, Moreno Valley Unified School District	
<i>Removing Microplastics from Water Using Household Materials</i>	7-ENEV-161
Henry Grover Riverside STEM Academy, Riverside Unified School District	
<i>From Dirty to Drinkable</i>	7-ENEV-252
Angela Ananthanathan Corona Fundamental Intermediate School, Corona-Norco Unified School District	
<i>Lego tower vs earthquake</i>	7-ETSD-071
Aiden Anderson/Jedidiah Thomas River Springs Charter School,	
<i>Ring of Fire</i>	7-ETSD-126
Ivan Guzman Arizona Middle School, Alvord Unified School District	
<i>Pulley System</i>	7-ETSD-218
Jaeda Mullen Cielo Vista Charter School, Palm Springs Unified School District	
<i>Signal Interference Solutions</i>	7-ETSD-328
Jayden Jimenez/Andres Ledesma/Travis Ngo Vista Verde Middle School, Val Verde Unified School District	
<i>Rolling the Odds: Comparing Random Number Generators</i>	7-MATH-064
Elijah Holm Vista Heights Middle School, Moreno Valley Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>What's the overall healthiest sports drink?</i>	7-MATS-169
Noah Chiek Gage Middle School, Riverside Unified School District	
<i>Which Charcoal Works Best For a Fingerprint</i>	7-MATS-215
Savannah Fourier/Mackenzie Soto Cielo Vista Charter School, Palm Springs Unified School District	
<i>How To Make The Best Handwarmer</i>	7-MATS-382
Isaac Almanza/Hallee Cozart San Jacinto Leadership Academy, San Jacinto Unified School District	
<i>Scented vs. Popular vs. Off-Brand</i>	7-MCRO-179
Geraldine Solis Sierra Middle School, Riverside Unified School District	
<i>Reducing Pesticide Residue and Microbial Contamination on Apples</i>	7-MCRO-260
Mackenzie Yi Raney Intermediate School, Corona-Norco Unified School District	
<i>How do different temperatures affect the bouncing ability of rubber balls?</i>	7-PHYS-044
Zoey Madrigal/Jennifer Nguyen Sunnymead Middle School, Moreno Valley Unified School District	
<i>Hydrogels as a Soil Alternative for Growing Plants in Space</i>	7-PLNT-189
Jack Grover Riverside STEM Academy, Riverside Unified School District	
<i>Growing Green</i>	7-PLNT-243
Luke Roble Del Sol Academy, Jurupa Unified School District	
<i>Plants be Salty</i>	7-PLNT-336
James Lozano/Dominic Macaraeg/Xander Tsimogianis Vista Verde Middle School, Val Verde Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>The Impacts of Various Water Types on Pinto Beans</i>	7-PLNT-339
Cairha Cosio/Qian Godoy	
Lakeside Middle School, Val Verde Unified School District	
<i>The effects of grey water on plants.</i>	7-PLNT-369
Phoebe Pearce	
Sierra Middle School, Riverside Unified School District	
<i>How does pollution affect plants?</i>	7-PLNT-378
Emma Carillo	
San Jacinto Leadership Academy, San Jacinto Unified School District	
<i>Automatic Plant Watering System</i>	7-ROBO-157
Benjamin Achiriloiae	
Riverside STEM Academy, Riverside Unified School District	
<i>Can We Solve HIV/AIDS? Using Python to Determine The Process of Eradicating Latent Viral Reservoirs of HIV from the Body</i>	7-SOFT-280
Vienna Zhou	
El Cerrito Middle School, Corona-Norco Unified School District	
<i>AN 'IRONIC' BREASKFAST</i>	7-TMED-109
Sophia Valentin	
Arizona Middle School, Alvord Unified School District	
<i>Smooth Operators: A Scientific Look at Moisturizers.</i>	8-BCHM-217
Audrey Cruz	
St. Edward School	
<i>Sleep Study</i>	8-BEHA-013
Monzerrat Fernandez/Noemi Prieto/Kaya Sain	
Ruth Brown Elementary School, Palo Verde Unified School District	
<i>Is The Media Your Friend Or Enemy?</i>	8-BEHA-073
Kendall Dela Cruz	
St. Edward School	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Why Are Some Medicines Injections And Not Pills?</i>	8-BMED-030
Jesse Goodwin 21st Century Learning Institute, Beaumont Unified School District	
<i>Does Heat Change the Electrolyte Count in Sport Drinks?</i>	8-BMED-283
Yuvraj Rism Raney Intermediate School, Corona-Norco Unified School District	
<i>What has more bacteria, a cell phone, a door knob or a toilet seat?</i>	8-BMED-297
Anthony Thomas Nicolet Middle School, Banning Unified School District	
<i>Are Fingerprints Hereditary</i>	8-CELL-051
Delila Everett/Elizabeth Gagnon/Iris Luna Ruth Brown Elementary School, Palo Verde Unified School District	
<i>High Quality H2O</i>	8-CHEM-009
Cameron CENTNER Summerwind Trails School, Beaumont Unified School District	
<i>Water of Life</i>	8-CHEM-014
Carsten Chu/Karissa Chu/Gwendolyn Aranda River Springs Charter School,	
<i>elephant toothpaste ratios</i>	8-CHEM-097
Lee Smith Innovative Horizons Charter School, Perris Elementary School District	
<i>Crime Scene Chemistry</i>	8-CHEM-240
Melody Lopez-Aguayo Mission Middle School, Jurupa Unified School District	
<i>Which Method of Apple Slice Preservation is Most Successful Without Compromising Taste?</i>	8-CHEM-250
Elizabeth Scott-Magedman Nicolet Middle School, Banning Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Reapply or Be Fried</i>	8-CHEM-332
Athena Chacon Vista Verde Middle School, Val Verde Unified School District	
<i>BOMB FIZZY</i>	8-CHEM-362
Michael Marquez Badger Springs Middle School, Moreno Valley Unified School District	
<i>Water Risk</i>	8-CHEM-370
Allison Elizondo Edward Hyatt World Language Academy, San Jacinto Unified School District	
<i>The Urbanization Effect</i>	8-EAEV-132
Kasiah Cherland Western Center Academy, Hemet Unified School District	
<i>Inhale...or Not?</i>	8-EAEV-186
Naomi Zhang Riverside STEM Academy, Riverside Unified School District	
<i>Be part of the solution not the pollution</i>	8-EAEV-227
Audrina Aquino Villegas Middle School, Alvord Unified School District	
<i>Growing Garbage</i>	8-EAEV-287
Gracelyn Chu/Peyton Gonzales Norco Intermediate School, Corona-Norco Unified School District	
<i>Nature's Repellent</i>	8-EAEV-333
Edward Hernandez/Caleb McMahon/Rodrigo Rangel Vista Verde Middle School, Val Verde Unified School District	
<i>Step up to vertical gardening</i>	8-ENEV-043
Laisha Bautista/Naomi Godoy/Nicolas Gonzalez Landmark Middle School, Moreno Valley Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Water Purification</i>	8-ENEV-224
Thea Baladad Raymond Cree Middle School, Palm Springs Unified School District	
<i>Filter Water, Save Lives</i>	8-ENEV-305
Joseph Anicoche/Adalene Truong/Malak Hawat St. Catherine of Alexandria School	
<i>How's Housing in India?</i>	8-ENEV-306
Bella Calvillo/Brandon Ramirez/Denyse Perez St. Catherine of Alexandria School	
<i>"Which type of writing utensil is best for recycled paper?"</i>	8-ENEV-325
Julian Perez/Juan Pintado/Audrey Quevedo Tomas Rivera Middle School, Val Verde Unified School District	
<i>Grape Fruit Tree Health</i>	8-ENEV-376
James Moore/Evelyn Stoh San Jacinto Leadership Academy, San Jacinto Unified School District	
<i>Spin It Off</i>	8-ETSD-165
Siwei Wang Riverside STEM Academy, Riverside Unified School District	
<i>Wash Your Vision</i>	8-ETSD-238
Jimena Gonzalez Jurupa Middle School, Jurupa Unified School District	
<i>SUBZERO mini cold pack for backpack</i>	8-MATS-374
Joshua Mclean-Lilio/Alexandre Zuk San Jacinto Leadership Academy, San Jacinto Unified School District	
<i>Decontamination of Water with Citrus Fruits</i>	8-MCRO-006
Lilly Abeyta St. Edward School	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

<i>Egg Drop</i>	8-PHYS-020
Sai Patel/Gabriel Rivas Ruth Brown Elementary School, Palo Verde Unified School District	
<i>Chromatic Illusions: The Effect of Different Colored Lights on Colored Papers</i>	8-PHYS-184
Ryan Samer Abu Hilal/Ritobroto Roy-Chowdhury Riverside STEM Academy, Riverside Unified School District	
<i>Ball size vs Distance</i>	8-PHYS-265
Jonathan Gutierrez Raney Intermediate School, Corona-Norco Unified School District	
<i>Plant Growth</i>	8-PLNT-216
Darla Orosco Nicolet Middle School, Banning Unified School District	
<i>Produce Preservation</i>	8-PLNT-220
Jonathan Perla/Logan Rivera/Alexa Solorzano Cielo Vista Charter School, Palm Springs Unified School District	
<i>What Environment will Cause Kiwi and Strawberry to Mold More?</i>	8-PLNT-244
Leah Carrillo/Nancy Diaz/Carter Scott Mission Middle School, Jurupa Unified School District	
<i>What color light makes a lavender plant grow the quickest?</i>	8-PLNT-337
Kaydence Contreras March Middle School, Val Verde Unified School District	
<i>Can a homemade Chuck E. Cheese animatronic replace the discontinued Chuck E. Cheese animatronic?</i>	8-ROBO-061
Eli Woodson River Springs Charter School,	
<i>Integrating Renewable Energy and Innovative Solutions for Sustainable Automated Fire Fighting</i>	8-ROBO-275
Shreyansh Medatati Dr. Augustine Ramirez Intermediate School, Corona-Norco Unified School District	

JUNIOR DIVISION (GRADES 6-8) PROJECTS

Drone Explorers: Pattern Exploration 8-ROBO-350

Evelyn Trujillo

John Glenn Middle School, Desert Sands Unified School District

Stent Designs for Aneurysm Rupture Prevention 8-TMED-131

Hannah Jang

Western Center Academy, Hemet Unified School District

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Ant Bait, The Affects of Red 40 on ant behavior and mortality.....</i>	9-ANIM-039
Javier Ruano/Nathaniel Sloup/Nathan Zwirn Valley View High School, Moreno Valley Unified School District	
<i>Altering Piperacillin to Increase the Binding Affinity to the Active Site to hvKp.....</i>	9-BCHM-175
Hari Gajaria/Hewanam Arachige Samaranayake Martin Luther King High School, Riverside Unified School District	
<i>Diurnal Fluctuations in Student Scholastic Efficacy and Proactive Output and Productivity during Ante-Meridian Phases</i>	9-BEHA-183
Gurlyn Gill/Aashi Shah Martin Luther King High School, Riverside Unified School District	
<i>AI in Action: Revolutionizing Thyroid Cancer Recurrence Prediction.</i>	9-BMED-257
Tarini Siram Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>Electro-stimulated Regenerative Dynamics in Stem Cells</i>	9-CELL-267
Daniel An/Saisriven Thati Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>Impact of Channels on Effectiveness of Hydrodynamic Cavitation Removal of Microplastics</i>	9-EAEV-254
Caitlin Buensuceso/Brayden Goytia Centennial High School, Corona-Norco Unified School District	
<i>Oil Waste Cleanup Using Biodegradables.</i>	9-EAEV-324
Genesis Catalan/Naielah Gipson/Isabella Ramirez Echeverria Rancho Verde High School, Val Verde Unified School District	
<i>The Guide to Creating a Recycled Notebook.</i>	9-EGSD-074
Lorena Campos/Kayla Caoile/Amiyah Spencer Valley View High School, Moreno Valley Unified School District	
<i>Diabetes Decoded: The Journey to Creating an Artificial Pancreas.</i>	9-ENBM-278
Sai Srinika Bommineni Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

Automated Plant Care System 9-ENEV-033
Liliana Vargas/Laurieann Villa
Moreno Valley High School, Moreno Valley Unified School District

The Roof Suit 9-ENEV-050
Hayden Cox
Valley View High School, Moreno Valley Unified School District

Can a fire retardant created with cacao husks match the effectiveness of Phos-Chek retardant while also being less toxic to the environment? 9-ENEV-289
Arav Randhawa/Avijeet Randhawa
Corona High School, Corona-Norco Unified School District

How small differences between landside mitigation barriers can impact towards its performance 9-ENEV-334
Alex Inthichack
Rancho Verde High School, Val Verde Unified School District

The Makings of Stealth Aircraft 9-ETSD-045
Elizabeth Glover/Hannah Glover
Canyon Springs High School, Moreno Valley Unified School District

Pneumatic engine 9-ETSD-239
Ramon Mendoza
Jurupa Valley High School, Jurupa Unified School District

How Light Affects Vitamin C Content in Oranges and Strawberries 9-PLNT-046
Maya Lamadrid
Valley View High School, Moreno Valley Unified School District

Effects of different sunscreen ingredients on Java Moss 9-PLNT-340
Natalia Cardoso
Rancho Verde High School, Val Verde Unified School District

Predicting Surgical Outcomes in Traumatic Brain Injury and the Impact of Pre-Operative Clinical Burden 9-ROBO-311
Saanvi Chandra
Centennial High School, Corona-Norco Unified School District

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Data to Discovery; Using the Power of AI for Faster Drug Discovery</i>	9-SOFT-286
Aneri Patel Centennial High School, Corona-Norco Unified School District	
<i>Come Play With Me! Advancing a New Learning Method Towards Pediatric Learning Anxiety</i>	10-ANIM-285
Scarlett Kim/Anusha Mahajan/Si-Jing Yan Centennial High School, Corona-Norco Unified School District	
<i>A Safer Solution to Mosquitoes at the Source: Targeting Mosquito Breeding Vectors Synergistically to Create An Environmentally Friendly and Resistance-Proof Spatial Repellent.</i>	10-BCHM-251
Lauren Ho Centennial High School, Corona-Norco Unified School District	
<i>What Color is Math?</i>	10-BEHA-159
Vivian Long Poly High School, Riverside Unified School District	
<i>Pose to Perception: Unveiling How Time and Pose Shape Confidence</i>	10-BEHA-188
JiSeon Kazsuk/Erin Nguyen-Khoa Martin Luther King High School, Riverside Unified School District	
<i>Comparing Productivity of <i>Lactobacillus rhamnosus</i> when Grown in Differing pH Scales</i>	10-BMED-060
Jocelyn Nguyen/Savannah Nguyen Norte Vista High School, Corona-Norco Unified School District	
<i>Filtering for the Future</i>	10-BMED-197
Josephine Nguyen Norte Vista High School, Corona-Norco Unified School District	
<i>Eco Friendly Sunscreen</i>	10-BMED-207
Clover Valverde Desert Hot Springs High School, Palm Springs Unified School District	
<i>A Quantitative Systems Pharmacology Approach to Analyzing Topical Melatonin for Atopic Dermatitis Treatment</i>	10-CBIO-140
Capri Snyder Temescal Canyon High School, Lake Elsinore Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>The Implementation and Training of Convolutional Neural Networks in Cost Effective Hardware for Real Time Detection In Suburban Mosquito Breeding Sites</i>	10-CBIO-272
Tristan Trang Centennial High School, Corona-Norco Unified School District	
<i>Sunscreen and Elodia Bioassay experiment</i>	10-EAEV-185
Lucy Bilhartz/Travis Holmes/Amelia Standerfer Poly High School, Riverside Unified School District	
<i>Going Green As You Clean!</i>	10-EAEV-386
Sadie Javier Hillcrest High School, Alvord Unified School District	
<i>Grey Water to Great Water</i>	10-EGSD-036
Emelly Xicohtencatl Vista Del Lago High School, Moreno Valley Unified School District	
<i>Freeway to Free Energy</i>	10-EGSD-038
Jennavieve Covington/Lilyana Covington Vista Heights Middle School, Moreno Valley Unified School District	
<i>Wax, Water, and Phase Change: Employing Phase Change Materials for Compact Thermal Energy Storage in Residential Heating Systems</i>	10-EGSD-269
Harleen Virk Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>Sustainable Illumination</i>	10-EGSD-381
John Richards San Jacinto Leadership Academy, San Jacinto Unified School District	
<i>Ecolrrigation</i>	10-ENEV-194
Alana Dominguez-Johnson Poly High School, Riverside Unified School District	
<i>Development and Electrochemical Optimization of an Environmentally Sustainable Aluminum Metal Based Battery with Advanced Electrolyte Systems for High-Efficiency Electric Vehicle Energy Storage.</i> ..	10-ENEV-255
Ishita Saxena Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Comparing water bottles</i>	10-ENEV-331
Melissa Hernandez/Zoe Suazo Hernandez Orange Vista High School, Val Verde Unified School District	
<i>Stanley Cup Holder</i>	10-ETSD-236
Emmanuel Casanova/Mikayla Mendez/Jocelynn Mendoza Jurupa Valley High School, Jurupa Unified School District	
<i>The Power of Sound: Testing Acoustic Levitation at Different Frequencies on a Red Solo Cup</i>	10-PHYS-187
Vincent Solis Poly High School, Riverside Unified School District	
<i>Investigation of Thermosensing Photobodies Reveals A Genetic Basis for Climate Adaptation in Plants</i> ..	10-PLNT-195
Erik Chen/Shivani Talati/Deng Tingdan Martin Luther King High School, Riverside Unified School District	
<i>LEGO Prosthetic Arm</i>	10-ROBO-037
Nathan Christensen Valley View High School, Moreno Valley Unified School District	
<i>Spot the AI</i>	10-ROBO-068
Valeria Puentes/Vivian Rodriguez Valley View High School, Moreno Valley Unified School District	
<i>A Novel Approach to Fall Prediction and Prevention: Integrating Machine Learning and IoT for Elderly Safety</i>	10-ROBO-313
Ava George Centennial High School, Corona-Norco Unified School District	
<i>School Navigation App</i>	10-SOFT-047
Yaretzi Mercado/Hugo Ngo/Helen Pham Valley View High School, Moreno Valley Unified School District	
<i>Combining Accessibility with Machine Learning: Utilizing Machine Learning to Create a User Friendly Medical Application to Process and Detect Histopathological Images of Oral Squamous Cell Carcinoma</i>	10-TMED-296
Rayyan Khalique/Trevon Nguyen/Dylan Patel Centennial High School, Corona-Norco Unified School District	

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<i>Black Bears hibernation duration based on temperature.</i>	11-ANIM-137
Arlenn Orozco Temescal Canyon High School, Lake Elsinore Unified School District	
<i>How Exposure and No Exposure to Artificial Light Affect Glow-in-the-Dark Organisms</i>	11-ANIM-142
Payton Smith/Darlene Thieu Temescal Canyon High School, Lake Elsinore Unified School District	
<i>To Ban or Not To Ban: Testing Tropical and Native Milkweed as Host Plants for Monarch Butterflies, Danaus plexippus</i>	11-ANIM-167
Hank Jennings Martin Luther King High School, Riverside Unified School District	
<i>Targeting OXTR and V2R Signaling Pathways: A Novel Approach to Optimizing Oxytocin and Arginine Vasopressin Receptors with Synthetic Analogs to Mitigate Social Deficits in Autism</i>	11-BCHM-171
Anthony Hernandez Riverside STEM Academy, Riverside Unified School District	
<i>Comparing Amount of Electrolytes in popular sports drinks</i>	11-BCHM-368
Dylan Cascario/Aerin Medina/Tylor Tietjen Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Bouba Kiki Effect</i>	11-BEHA-056
Jose Oliva Coachella Valley High School, Coachella Valley Unified School District	
<i>Predicting Water Quality Trends in Income-Based Neighborhoods</i>	11-BEHA-290
Amelia Fabian/Keila Goodall Centennial High School, Corona-Norco Unified School District	
<i>The Effects of High Altitude Acclimatization on Inflammation</i>	11-BMED-166
Olivia Goodman/Emersyn Zink Martin Luther King High School, Riverside Unified School District	
<i>Improving Mental Health Through Music</i>	11-BMED-202
Cheradyn Taylor Canyon Springs High School, Moreno Valley Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Stabilizing Blood Glucose</i>	11-BMED-206
Azalea Manco Desert Hot Springs High School, Palm Springs Unified School District	
<i>From Sunscreen to Skin Cream: The Silent Impact of Endocrine Disrupting Chemicals on Reproduction</i> 11-BMED-262	
Lara Randhawa Corona High School, Corona-Norco Unified School District	
<i>Which Metals Best Kill Bacteria</i>	11-BMED-367
Ines Yanez Temecula Preparatory School	
<i>Mapping the Molecular Landscape of the Mouse Motor Cortex: Integrating Single-Cell Transcriptomics and Spatial Data to Explore Neuropathic Pain Pathways</i>	11-CBIO-276
Zichen Xiang Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>Decoding Neural Signatures: Advanced Machine Learning for Early Detection and Diagnosis of Parkinson's Disease</i>	11-CBIO-282
Jason Sun Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>Computational Discovery and Synthesis of NX-91, a Bio-Reversible Alternative to Counteracting Fentanyl</i>	11-CBIO-288
Derek Zhang Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>Carcinogenic Skincare: Investigation of Benzoyl Peroxide's Decomposition Into Benzene</i>	11-CHEM-145
Darius Fields Lakeside High School, Lake Elsinore Unified School District	
<i>Chlorine vs Saltwater</i>	11-CHEM-150
Ethan Deller/Chloe Foland/Mai Kelly Temescal Canyon High School, Lake Elsinore Unified School District	
<i>The Prevention of Iron Corrosion and Oxidation Through the Use of Green Inhibitors and Natural Adhesives</i>	11-CHEM-293
Gurnoor Kaur Centennial High School, Corona-Norco Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Investigating Nitrate Contamination in Groundwater: Is Weather the Cause?</i>	11-EAEV-122
Zayra Leon Reyes Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Role of Hydroxyl Radical in Inorganic Sulfate Formation Resulting from Atmospheric Ozonolysis of Thiophene</i>	11-EAEV-174
Hewanam Flowery Samaranayake Martin Luther King High School, Riverside Unified School District	
<i>Mechanistic Insights on Reactive Oxygen Species Formation from Particulate Phase Organoselenium-derived Secondary Aerosols</i>	11-EAEV-180
Aiden Pianalto Martin Luther King High School, Riverside Unified School District	
<i>Metal-Modified Photocatalytic Degradation of Waterborne Microplastics: Comparative Evaluation of Graphene Oxide Doped Titanium Dioxide as an Enhanced Photocatalytic Degrader for Practical Microplastic Environmental Remediation in Aquatic Environments</i>	11-EAEV-259
Ruilin Li Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>3D-Printed Organ: An Aorta Phantom Model for Evaluating Robotic Catheters</i>	11-ENBM-191
Robert Christian Flores/Aiden Rheem Martin Luther King High School, Riverside Unified School District	
<i>Comparative Analysis of Energy Modes for Prosthetic Limb Efficiency: A Simulation-Based Study on Balance and Terrain Navigation</i>	11-ENBM-274
Clara Nguyen/Aria Panjabi Centennial High School, Corona-Norco Unified School District	
<i>The Road to Clean Water-Year four: Mitigating Wildfire Ash Pollution in Water Sources Using Sustainable Coconut Husk Filtration</i>	11-ENEV-133
Tenzing Carvalho Western Center Academy, Hemet Unified School District	
<i>Temperature Effect on PFAS Degradation by UV/Sulfite: Insights on Molecular Transformation and Quantum Yield</i>	11-ENEV-196
Erica Yin/Zoe Zhang Martin Luther King High School, Riverside Unified School District	
<i>Petal Poise</i>	11-ENEV-234
Luis Aguayo-Melendrez/Julissa Garcia/Patnaree Palacios Jurupa Valley High School, Jurupa Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Hydrodynamic and Elastic Interactions of Rigid Beads on Flexible Hairy Surfaces in Viscous Fluids . . .</i>	11-ETSD-158
Daniel Kim/Rohan Vasireddy Martin Luther King High School, Riverside Unified School District	
<i>A Global Revolution in Electronics: Bandgap Engineering and Investigation of Spinel Phase ZnGaO for Semiconductor Applications . . .</i>	11-ETSD-164
Kaden Ren Martin Luther King High School, Riverside Unified School District	
<i>Boxing Handwrap . . .</i>	11-ETSD-231
Jonathan Medel/Samuel Torres/Angel Vargas-Sosa Jurupa Valley High School, Jurupa Unified School District	
<i>Backpack Hook. . .</i>	11-ETSD-241
David Mendoza/Alberto Moreno/Benjamin Valenzuela Jurupa Valley High School, Jurupa Unified School District	
<i>AI Takes Flight: Generative Design and Wing Structural Dynamics. . .</i>	11-ETSD-355
James Riviere Palm Desert High School, Desert Sands Unified School District	
<i>Power Plays: Optimizing Energy Consumption in American Households Using Classical Optimization Methods . . .</i>	11-MATH-261
Nimmer Kaur Centennial High School, Corona-Norco Unified School District	
<i>Porous Pores Shun Safety. . .</i>	11-MATS-138
Gabriella Phommatha Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Examining the Effects of Natural and Synthetic Dyes and Mordants on Water Quality: pH and Dissolved Oxygen Levels . . .</i>	11-MATS-143
Anthony Carmona Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Creating large-area vertically aligned magnetic nanorods with high aspect ratios . . .</i>	11-MATS-170
Ian Do/Caelan Shelton/Ian Zhang Martin Luther King High School, Riverside Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>The Effect of Terramycin on the Germination of Basil (Ocimum Basilicum) Seeds</i>	11-MCRO-153
Enaas Khan Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Reducing Rate of Evaporation in Water Reservoir With Refrigeration System</i>	11-PHYS-277
Omar Syed Centennial High School, Corona-Norco Unified School District	
<i>Plant Growth Vs Color</i>	11-PLNT-070
Krystal Keele Bayside Community School, Moreno Valley Unified School District	
<i>Nitrates in Fertilizers Effect on Plant Growth and Runoff</i>	11-PLNT-096
Sonnet Finnern Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Will it Grow</i>	11-PLNT-146
Daralynn Fausto/Laura Vargas Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Gene Expression and Ion Homeostasis in Tomato: A Novel Genomic-lonomic Approach to Evaluate Salt Stress Responses in Solanum lycopersicum</i>	11-PLNT-192
Emmanuel Pudussery Riverside STEM Academy, Riverside Unified School District	
<i>Predicting Future Water Quality with Machine Learning: A Random Forest Approach to Monitoring Dissolved Oxygen</i>	11-ROBO-035
Noah Holm Moreno Valley High School, Moreno Valley Unified School District	
<i>Extra Hand</i>	11-ROBO-114
Noah Bailey/Diego Garcia/Cayden Hennessey Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Pricelytics</i>	11-ROBO-154
Andrew Melek Lakeside High School, Lake Elsinore Unified School District	

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<i>Predicting Traffic Congestion Using Machine Learning Algorithms</i>	11-ROBO-310
Angela Cho Centennial High School, Corona-Norco Unified School District	
<i>Exploratory Data Analysis in Fetal Ultrasound Images Utilizing Prenatal Markers to Detect Down Syndrome</i>	11-ROBO-312
Vinaya Ayinampudi Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>A Machine Learning Approach for the Classification of Meningioma, Pituitary, and Glioma Brain Tumors in MRI Scans</i>	11-SOFT-112
Cassandra Caluag Temescal Canyon High School, Lake Elsinore Unified School District	
<i>M_PDL: Socio-Spatially Aware Monkeypox Virus Preventative Care Using Transmission Forecasting</i> ..	11-TMED-295
Ayaan Sidky Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	
<i>Listening for Silent Flight - The Morphology of Silent Flight in Birds of Prey</i>	12-ANIM-162
Tom Reznick Riverside STEM Academy, Riverside Unified School District	
<i>Advancing a Cure for HIV: Creating Novel Latency-Reversing Agent Analogs to Optimize Safety and Efficacy in Reactivating Latent HIV-1 Reservoirs</i>	12-BCHM-178
Caden Lee/Yoonchan Lee/Brian Ngo Martin Luther King High School, Riverside Unified School District	
<i>How sleep induces different heart rates and blood pressure in athletes</i>	12-BMED-249
Uday Mahmood Temescal Canyon High School, Lake Elsinore Unified School District	
<i>The Effects of Salt on Soil Permeability</i>	12-EAEV-139
Estefanee Gutierrez Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Assessing the Environmental Impact of Different Paint Types and Developing Eco-Friendly Alternatives</i> ..	12-EBED-264
Avery Wise Centennial High School, Corona-Norco Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Electrocardiogram Instrumentation: Implementing Low-pass Filtration to Improve Cardiac Signal Clarity</i>	12-ENBM-284
Ivan Huerta/Olivia Miller Norco High School, Corona-Norco Unified School District	
<i>Autonomous Marine Drone: Engineering a Cleaner Future</i>	12-ENEV-149
Mashfee Tabeeb Lakeside High School, Lake Elsinore Unified School District	
<i>Sprinklers Head Shapes Impact on Water Coverage Area</i>	12-ENEV-294
Victoria Ruiz-Carrillo Centennial High School, Corona-Norco Unified School District	
<i>Lipgloss stopper</i>	12-ETSD-229
Ivana Correa/Briana Estrada/Dora Rueda - Ruiz Jurupa Valley High School, Jurupa Unified School District	
<i>Algae-Based Bioplastic</i>	12-MATS-176
Cadence Esterling/Arabella Kats/Sydney Katzenstein Poly High School, Riverside Unified School District	
<i>How Do Different Ratios of Starch, Agar, and Glycerin in Biodegradable Plastics Affect Their Biodegradation Rate?</i>	12-MATS-266
Vaishali Jain Centennial High School, Corona-Norco Unified School District	
<i>Peeling Back the Layers-Garlic's Antibacterial Effectiveness on Bacteria Growth of Chicken Thighs</i>	12-MCRO-148
Ailanny Nguyen Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Characterization of a PFAS-Defluorinating Bacterium from an AFFF-Impacted Site</i>	12-MCRO-181
Patrick Moon/Shanmukh Bachhu Martin Luther King High School, Riverside Unified School District	
<i>A Novel Insight Into Phage Therapy: Jumbo Bacteriophages Isolated From Human Gut Wastewater Are Active Against Multidrug-Resistant <i>Salmonella</i> spp. and <i>ESBL E. coli</i></i>	12-MCRO-271
Haoyuan Wang Eastvale STEM Academy/Eleanor Roosevelt High School, Corona-Norco Unified School District	

SENIOR DIVISION (GRADES 9-12) PROJECTS

<i>Wing factor: what design soars best?</i>	12-PHYS-136
Cameron Gilstrap/Miranda Gomez/James Woodward Temescal Canyon High School, Lake Elsinore Unified School District	
<i>Comparing The Synergistic Effect of Soil pH levels and Mycorrhizal Fungi on Native and Invasive Plant Species Growth</i>	12-PLNT-281
Ishaan Gupta Centennial High School, Corona-Norco Unified School District	
<i>Guitar for Blind Musicians</i>	12-TECA-292
Melody Alvarez Centennial High School, Corona-Norco Unified School District	
<i>Climate change and Alzheimer's rates in California</i>	12-TMED-156
Paige Williams Temescal Canyon High School, Lake Elsinore Unified School District	