Project Title	Division	Category	Award(s)	Students	Teacher	School
Micro:bits Create and Play: Rock-Paper-Scissors	CIF	Computer Science Showcase	Intel Computer Science Award	3rd Grade Micro:bits	Becky McClain, Barbara Richardson Melinda Miller	Andersen Elementary School
Project Elimination	CIF	Computer Science Showcase	State Farm Computer Science Award	Evan Garcia Jaden Bullock Caden Villarreal	Tonya McMillan	Tarwater Elementary School
Sight Sense	CIF	Invention Convention	Waymo Invention Award Grand Canyon University Invention Convention Award	KGA 6th	Deepa lyer	Knox Gifted Academy
Energy Collisions	CIF	Project Based Learning	Grand Canyon University PBL Award	Mrs. Wilson's 4th Grade Class	Sylvia Wilson	Hartford Sylvia Encinas Elementary School
Rain Barrels	CIF	Project Based Learning	City of Chandler Environmental Award	Eliana Sario Isaiah Carroll Robert Henry	Sonia Ballesteros	Navarrete Elementary School
The Effect of Electric Aircraft on Greenhouse Gas Emissions	CIF	Project Based Learning	SRP PBL Award	ACP-0 Green Knights	Michelle Daly	Arizona College Prep - Oakland Campus
Decepticons	CIF	Robotics Competition	Robotics Competition - Vex IQ Squared Away 1st Place	Decepticons	John Flores	Conley Elementary School
Ice Tea	CIF	Robotics Competition	Robotics Competition - Vex IQ Squared Away 2nd Place	Ice Tea	Michelle Miller	Sanborn Elementary School
Lego Lions	CIF	Robotics Competition	Robotics Competition - First Lego League Winner	Lego Lions	Sonia Campbell	Galveston Elementary School
Cortex Crew Tournament Robot Team D	CIF	Robotics Showcase	Intel Robotics Showcase Award	Amelia Thomas	Michelle Mohrweis	Bogle Junior High School
Isopropyl Alcohol Effects on Brine Shrimp	HISEF - Elementary Division (5th - 6th Grade)	Animal Sciences	2nd Place (HISEF)	Anne Skalski Evelyn Francis	Charina DeCaro	Basha High School
Interesting Behavior of Desert Millipedes	HISEF - Elementary Division (5th - 6th Grade)	Animal Sciences	1st Place (HISEF)	Nathan Taylortaft	Megan DeFrancesco	Jacobson Elementary School
Crickets in the Spotlight: The Effect of Different Colored Lights on Cricket Attraction	HISEF - Elementary Division (5th - 6th Grade)	Animal Sciences	1st Place (HISEF)	Addison Lai	Carlie Moss	Arizona College Prep - Oakland Campus
Memory Madness	HISEF - Elementary Division (5th - 6th Grade)	Behavioral & Social Sciences	1st Place (HISEF)	Lucy Wegener Aline Moody	Hannah Ross	Santan Elementary School
The Scoop on Stroop	HISEF - Elementary Division (5th - 6th Grade)	Behavioral & Social Sciences	2nd Place (HISEF)	Brooklyn Catchpole	Deanna Hansen	Elite Performance Academy
Can Color Affect Memory?	HISEF - Elementary Division (5th - 6th Grade)	Behavioral & Social Sciences	3rd Place (HISEF)	Amaya Weeks Rachel Loiselle	Deanna Hansen	Elite Performance Academy
Sight vs Sound	HISEF - Elementary Division (5th - 6th Grade)	Behavioral & Social Sciences	3rd Place (HISEF)	Connor Wright Ryne Moss Sydney Cortez	Jerome Hale	CTA - Humphrey Campus
How Math Affects Art	HISEF - Elementary Division (5th - 6th Grade)	Behavioral & Social Sciences	2nd Place (HISEF)	Tara Nair Sriya Mamillapalli	Albert Notley	Knox Gifted Academy
Are People Trustworthy?	HISEF - Elementary Division (5th - 6th Grade)	Behavioral & Social Sciences	Honorable Mention (HISEF)	Natalie Neilson Everett Watson Jr Kathryn Slavinsky	Jerome Hale	CTA - Humphrey Campus
The Effect of Defensive Shifts on the Amount of Hits in Baseball	HISEF - Elementary Division (5th - 6th Grade)	Behavioral & Social Sciences	1st Place (HISEF)	Cooper Aron	Carlie Moss	Arizona College Prep - Oakland Campus

Project Title	Division	Category	Award(s)	Students	Teacher	School
Yeast and Sugar Reaction Project	HISEF - Elementary Division (5th - 6th Grade)	Cellular & Molecular Biology	2nd Place (HISEF)	Nathan Fortier Miti Togafau	Charina DeCaro	Basha High School
The Effect of GMO Type on Nutritional Value	HISEF - Elementary Division (5th - 6th Grade)	Cellular & Molecular Biology	1st Place (HISEF)	Baker Bryce	Carlie Moss	Arizona College Prep - Oakland Campus
Skittles	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	2nd Place (HISEF)	Natalie Mack	Lisa Krietenstein	Elite Performance Academy
Yeast Growth	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	2nd Place (HISEF)	Jorge Coracides Nolyn Fought Robert Naujokaitis	Ivi Montano	Carlson Elementary School
DNA of a Strawberry	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	3rd Place (HISEF)	Sophie Echols Sydney Cathcart Katherine L Sherman	Krista Yubeta	CTA - Freedom Campus
Sunscreen vs Sun Heat	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	1st Place (HISEF)	Guang Wen He Liam Lampert	Sue Clapham	Jacobson Elementary School
Tooth Decay 101	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	3rd Place (HISEF)	Calvin Owens Mason Ansburg Marco Gallina	Sue Clapham	Jacobson Elementary School
Cheaper Water Filtration	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	Honorable Mention (HISEF)	Soham Joshi Varin Hoskoti Krish Gopalan	Albert Notley	Knox Gifted Academy
The Effect of Vegan Butter Substitute Type on Cake Quality and Texture	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	1st Place (HISEF)	Mia Wells	Carlie Moss	Arizona College Prep - Oakland Campus
Diaper Dilemma: A Look at Diapers and Their Absorbency	HISEF - Elementary Division (5th - 6th Grade)	Chemistry	Honorable Mention (HISEF)	Jyn Mei Schnulo Eleda Dickenson	Caroline Hall	Ryan Elementary School
Creating an App to Calculate the Amount of Black Carbon Produced from Freight Transport Trucks	HISEF - Elementary Division (5th - 6th Grade)	Computer Science	Honorable Mention (HISEF)	Aharnish Tripathi	Carlie Moss	Arizona College Prep - Oakland Campus
Mighty Magnets	HISEF - Elementary Division (5th - 6th Grade)	Earth & Planetary Science	2nd Place (HISEF)	Alexandra Scrimpshire Paige McKeever	Amy Hoffman	Elite Performance Academy
Blinded by Reflections	HISEF - Elementary Division (5th - 6th Grade)	Earth & Planetary Science	Honorable Mention (HISEF)	Brecken Paulk Saint Fields	Danielle Williams	Andersen Elementary School
Solar Oven	HISEF - Elementary Division (5th - 6th Grade)	Earth & Planetary Science	3rd Place (HISEF)	Hannah Lavin Haydon Judd Grayson Oakes	Mary Jo White	CTA - Freedom Campus
Hardness of Rocks	HISEF - Elementary Division (5th - 6th Grade)	Earth & Planetary Science	1st Place (HISEF)	Atul Sundar Daelynn Torres Hestin Walters	Sabrina Klinsmith	CTA - Goodman Campus
Energy Essentials	HISEF - Elementary Division (5th - 6th Grade)	Earth & Planetary Science	3rd Place (HISEF)	Chiara Banda Tania Pariva Taylor Estrella	Tera St. John	CTA - Independence Campus
Rollicking Roller	HISEF - Elementary Division (5th - 6th Grade)	Earth & Planetary Science	1st Place (HISEF)	Allyson Cherry Anna Carlson Ella Muller	Tera St. John	CTA - Independence Campus
The Science of Windows: The Effect of Window Blind Type on Keeping a Model House Cool	HISEF - Elementary Division (5th - 6th Grade)	Earth & Planetary Science	2nd Place (HISEF)	Adhyaksha Chandrasekaran	Carlie Moss	Arizona College Prep - Oakland Campus
Juicy Batteries	HISEF - Elementary Division (5th - 6th Grade)	Engineering	Honorable Mention (HISEF)	Chloe Bailey Taylor Morrison	Amy Hoffman	Elite Performance Academy
Pool Surface Cleaner	HISEF - Elementary Division (5th - 6th Grade)	Engineering	1st Place (HISEF)	Lexi Swint Aracely Soto	Brian Navarro	Santan Elementary School

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Music in a Bottle	HISEF - Elementary Division (5th - 6th Grade)	Engineering	Honorable Mention (HISEF)	Jenna Kellum Emma Smith	Kelly Miller	Navarrete Elementary School
How Much Weight Can Your Boat Float?	HISEF - Elementary Division (5th - 6th Grade)	Engineering	2nd Place (HISEF)	Daphne Van Heur Daisy Hebbring Will Hundley	Carrie Coking	Jacobson Elementary School
Give It a Lift With a Lever	HISEF - Elementary Division (5th - 6th Grade)	Engineering	3rd Place (HISEF)	Niko Rios Jonathan Hall	Alaina Hartnett	Shumway Leadership Academy
Solar Success	HISEF - Elementary Division (5th - 6th Grade)	Engineering	1st Place (HISEF)	Sumedh Sangam Keiserinne Li Michael Simon	Albert Notley	Knox Gifted Academy
Piezoelectric Scooters	HISEF - Elementary Division (5th - 6th Grade)	Engineering	2nd Place (HISEF)	Micah Knipmeyer Grayson Cagle	Deepa Iyer	Knox Gifted Academy
Building Bridges: Which is the Strongest Bridge?	HISEF - Elementary Division (5th - 6th Grade)	Engineering	3rd Place (HISEF)	Kylan Catch	Caroline Hall	Ryan Elementary School
Worldwide Waters	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	1st Place (HISEF)	Emmie Conti Michael Nellis Alexis Lawmaster	Maryann Eberhart	Santan Elementary School
Sea Savers	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	3rd Place (HISEF)	Grant Moberg Max Cain Sophia Lyons	Tisha Edwards	Santan Elementary School
pH Water Quality	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	2nd Place (HISEF)	Molly Chitila Ava Ruiz Fiona Porteck	Beth Northrop	Basha Elementary School
Bottled-Up Buoyancy	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	Honorable Mention (HISEF)	Marlin Posvar Hayden Petrosky Evan Wright	Mary Jo White	CTA - Freedom Campus
Flush or Not?	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	3rd Place (HISEF)	Bella Taylor Kaelie Lemon	Jennifer Kraemer	Weinberg Elementary School
The Effectiveness of Carbon Dioxide Reduction Methods	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	2nd Place (HISEF)	Siyaa Poddar Sadie Brown Kennedy In	Mary Thompson	Knox Gifted Academy
Keep Your Cells Cool: The Effect of Method of Cooling of a Solar Cell on the Output	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	Honorable Mention (HISEF)	Mason Hill	Carlie Moss	Arizona College Prep - Oakland Campus
Why Apples Turn Brown	HISEF - Elementary Division (5th - 6th Grade)	Environmental Sciences	1st Place (HISEF)	Brayden Cameron Keoki Clark Ethan Howe	Frances Weber	Ryan Elementary School
Lighting Up the World	HISEF - Elementary Division (5th - 6th Grade)	Mathematical Sciences	3rd Place (HISEF)	Ila Hatwal Ceyda Oz	Lauren Leahy	Knox Gifted Academy
Flipped Numbers? Don't Flip Out! The Effect of Different Divisors on Finding Transposition Errors in Various Base Systems	HISEF - Elementary Division (5th - 6th Grade)	Mathematical Sciences	2nd Place (HISEF)	Twyla Morrison	Carlie Moss	Arizona College Prep - Oakland Campus
Knock Your Blocks Off: The Mechanics of Carnival Games	HISEF - Elementary Division (5th - 6th Grade)	Mathematical Sciences	Honorable Mention (HISEF)	Aubrey McBurney Megan Cox Ava Jackowski	Frances Weber	Ryan Elementary School
What Water Has the Lowest pH?	HISEF - Elementary Division (5th - 6th Grade)	Medicine & Health Sciences	Honorable Mention (HISEF)	John Rutherford	Kristin Miller	Sanborn Elementary School
Soaked	HISEF - Elementary Division (5th - 6th Grade)	Medicine & Health Sciences	3rd Place (HISEF)	Lainey Shimkus Taylor Hinton Tatum Howey	Maria Martin	Haley Elementary School
Heat Resistance	HISEF - Elementary Division (5th - 6th Grade)	Medicine & Health Sciences	2nd Place (HISEF)	Austin Adams	Brad Guggisberg	Haley Elementary School

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Stupendous Sports Drinks	HISEF - Elementary Division (5th - 6th Grade)	Medicine & Health Sciences	2nd Place (HISEF)	Kylie Ray Paul McPhail	Ashleigh Gahn	Jacobson Elementary School
Shant Be Slippin'	HISEF - Elementary Division (5th - 6th Grade)	Medicine & Health Sciences	1st Place (HISEF)	Kyra Hogarth Leia Lattuca Jaelyn Sasik	Albert Notley	Knox Gifted Academy
Oils Can Be Deadly: The Effect of Types of Fats and Oils on Clogging Simulated Arteries	HISEF - Elementary Division (5th - 6th Grade)	Medicine & Health Sciences	1st Place (HISEF)	Preston Winterburn	Carlie Moss	Arizona College Prep - Oakland Campus
Shining a Light on Sunscreen	HISEF - Elementary Division (5th - 6th Grade)	Medicine & Health Sciences	3rd Place (HISEF)	Ava Olenburg Milly Carpenter	Caroline Hall	Ryan Elementary School
Magnetic Car	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	3rd Place (HISEF)	Luke Henderson Connor Hughes	Stephanie Goodell	Fulton Elementary School
Penny Battery	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	2nd Place (HISEF)	Mirai Z Mutema Kaitlyn L Smith	Krista Yubeta	CTA - Freedom Campus
Solar Panel Rover	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	Honorable Mention (HISEF)	Ty Worthen Kent Peek	Mary Jo White	CTA - Freedom Campus
How ot Make a Car Levitate	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	2nd Place (HISEF)	Emma Kennedy Ryann Logas A'Koa Purdie	Mary Jo White	CTA - Freedom Campus
What is the Most Cost Effective Material to Put in a Life Vest?	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	1st Place (HISEF) Intel Innovator Award	Domino Derksen Katie Tolman	Kristin Miller	Sanborn Elementary School
Plants in Simulated Martian Regolith	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	1st Place (HISEF)	Saumit Sripathi Isaac Rubenstein	Albert Notley	Knox Gifted Academy
Soaring Science	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	3rd Place (HISEF)	Jaxon Terrigino Noah Lee	Kierstin Yamashita	Hull Elementary School
Water Drag: The Effect of Type of Swimsuit, Swim Cap and Hand Positions on the Amount of Drag in Water While Swimming	HISEF - Elementary Division (5th - 6th Grade)	Physics & Astronomy	Honorable Mention (HISEF)	MacKenzie Fauth	Carlie Moss	Arizona College Prep - Oakland Campus
Zucchini Experiment	HISEF - Elementary Division (5th - 6th Grade)	Plant Sciences	3rd Place (HISEF)	Julie J Choi Reagan A Hookom Gracie L Emrick-Schneider	Krista Yubeta	CTA - Freedom Campus
Extreme Temperatures	HISEF - Elementary Division (5th - 6th Grade)	Plant Sciences	Honorable Mention (HISEF)	Kamryn Moyer Abby Wicoff Aileen Luna	Shelley Weight	Navarrete Elementary School
Red and Green Light	HISEF - Elementary Division (5th - 6th Grade)	Plant Sciences	2nd Place (HISEF)	Sharon Victor Paul Ramos	Sabrina Klinsmith	CTA - Goodman Campus
Project Plant	HISEF - Elementary Division (5th - 6th Grade)	Plant Sciences	3rd Place (HISEF)	Jocelyn Beall Katelyn Moak Wyatt Collins	Brad Guggisberg	Haley Elementary School
Vitamin Water Grass	HISEF - Elementary Division (5th - 6th Grade)	Plant Sciences	1st Place (HISEF)	Maximus Fausto Avabelle Dodge Margaret Poulson	Jerome Hale	CTA - Humphrey Campus
Hi-Tech Hydration	HISEF - Elementary Division (5th - 6th Grade)	Plant Sciences	2nd Place (HISEF) Water Wise Award	Brielle Carlson Brenna Acklam Sarah Walker	Ashleigh Gahn	Jacobson Elementary School
pH and Peppers: The Effect of pH Level on Pepper Plant Heath Grown in Hydroponics System	HISEF - Elementary Division (5th - 6th Grade)	Plant Sciences	1st Place (HISEF)	Maya Komenaka	Carlie Moss	Arizona College Prep - Oakland Campus
Do Crickets Eat More When Alone or With Other Crickets?	HISEF - Junior Division (7th - 8th Grade)	Animal Sciences	3rd Place (HISEF)	Grant Jones	Brad Eyanson	Payne Junior High School

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Testing Natural Repellents on Farmer Ants	HISEF - Junior Division (7th - 8th Grade)	Animal Sciences	3rd Place (HISEF)	Paxton Minter Rafael Cedillo	Jason Prichard	Willis Junior High School
Oily Feathers	HISEF - Junior Division (7th - 8th Grade)	Animal Sciences	1st Place (HISEF)	Ryan Fisk Meera Domadia	Kara Odom	Santan Junior High School
Crickets Run Away	HISEF - Junior Division (7th - 8th Grade)	Animal Sciences	2nd Place (HISEF)	Abigail Loutzenheiser Shreya Ganesh	Michael Davitt	Basha High School
Amazing Rats	HISEF - Junior Division (7th - 8th Grade)	Animal Sciences	2nd Place (HISEF)	Irissa Bain Eleni Crews	Kate Nall	Basha High School
Pavement Paws!	HISEF - Junior Division (7th - 8th Grade)	Animal Sciences	Honorable Mention (HISEF)	Caelyn Bambanian	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of Repellent Type on the Amount of Cabbage Eaten by Locusts	HISEF - Junior Division (7th - 8th Grade)	Animal Sciences	1st Place (HISEF)	Advaitha Vemuri	Michelle Daly	Arizona College Prep - Oakland Campus
Gender Discrimination in Presidential Elections	HISEF - Junior Division (7th - 8th Grade)	Behavioral & Social Sciences	2nd Place (HISEF)	Emma Hogarth Ella Kraver	Jason Prichard	Willis Junior High School
The Effect of Non-Essential Information on Reading Comprehension, Perception Time, and Readability Rating	HISEF - Junior Division (7th - 8th Grade)	Behavioral & Social Sciences	1st Place (HISEF)	Margaret Wang	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of the Genre of Video on the Interest of the Audience	HISEF - Junior Division (7th - 8th Grade)	Behavioral & Social Sciences	3rd Place (HISEF)	Aydin Kabir	Larissa Brown	Arizona College Prep - Oakland Campus
The Effect of Different Genres of Music on Human Memory	HISEF - Junior Division (7th - 8th Grade)	Behavioral & Social Sciences	1st Place (HISEF)	Isabel Valencia	Michelle Daly	Arizona College Prep - Oakland Campus
The Effect of Student Grade Level on Tendency to Show as Altruistic on an Altruism Test	HISEF - Junior Division (7th - 8th Grade)	Behavioral & Social Sciences	2nd Place (HISEF)	Aiden Oh	Michelle Daly	Arizona College Prep - Oakland Campus
Tomato DNA	HISEF - Junior Division (7th - 8th Grade)	Cellular & Molecular Biology	2nd Place (HISEF)	Adelaide Howard Sidney Weed Jocelyn Dickey	Kara Odom	Santan Junior High School
Germy Places	HISEF - Junior Division (7th - 8th Grade)	Cellular & Molecular Biology	1st Place (HISEF)	Alexis Taylor	Kristina Plona	Santan Junior High School
Antibiotics: A Blight on Bacteria	HISEF - Junior Division (7th - 8th Grade)	Cellular & Molecular Biology	2nd Place (HISEF)	Emily Chao	Jason Prichard	Willis Junior High School
Osmosis in Potatoes	HISEF - Junior Division (7th - 8th Grade)	Cellular & Molecular Biology	3rd Place (HISEF)	Kylie Gorecki Abby Johnson	Robin Flyte	Casteel High School
The Effect of Type of Honey on the Amount of Bacteria Grown	HISEF - Junior Division (7th - 8th Grade)	Cellular & Molecular Biology	1st Place (HISEF)	Marie Chen	Clair Gustafson	Arizona College Prep - Oakland Campus
Different Types of Flour	HISEF - Junior Division (7th - 8th Grade)	Chemistry	3rd Place (HISEF)	Halle Chamberlain	Jamie Collier	Payne Junior High School
Stain's a Pain	HISEF - Junior Division (7th - 8th Grade)	Chemistry	Honorable Mention (HISEF)	Joseph Garner	Jamie Collier	Payne Junior High School
The Effect of Certain Biodegradable Straws on PPM of Water After a Certain Amount of Time	HISEF - Junior Division (7th - 8th Grade)	Chemistry	2nd Place (HISEF)	Nathan Feely	Jason Prichard	Willis Junior High School
Apple Browning	HISEF - Junior Division (7th - 8th Grade)	Chemistry	3rd Place (HISEF)	Alexandra Longfellow	Ryan Kneeling	Santan Junior High School

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Popping Power	HISEF - Junior Division (7th - 8th Grade)	Chemistry	Honorable Mention (HISEF)	Yuxuan Deng	Meghan Dunigan	Basha High School
Who's the Coolest?	HISEF - Junior Division (7th - 8th Grade)	Chemistry	2nd Place (HISEF)	Ivy Brooke	Penny Kalscheur	Casteel High School
The Effect of Food Waste Type on Energy Produced	HISEF - Junior Division (7th - 8th Grade)	Chemistry	1st Place (HISEF) Intel Innovator Award	Doer He	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of the Type of Sweetener in French Macarons on the Similarity of the Result to the Original Recipe	HISEF - Junior Division (7th - 8th Grade)	Chemistry	1st Place (HISEF)	Denise Magarinos	Michelle Daly	Arizona College Prep - Oakland Campus
The Effect of the Temperature at Which to Add Yogurt to Milk on the Quality of the Yogurt	HISEF - Junior Division (7th - 8th Grade)	Chemistry	2nd Place (HISEF)	Ohm Patel	Michelle Daly	Arizona College Prep - Oakland Campus
How Different Weather Conditions Affect Camera Visibility On Cars	HISEF - Junior Division (7th - 8th Grade)	Computer Science	Honorable Mention (HISEF)	Cullen Schreiner Tauceti Lopez Grant Gibbons	Jason Prichard	Willis Junior High School
Et Tu, Brute Force?	HISEF - Junior Division (7th - 8th Grade)	Computer Science	3rd Place (HISEF)	Jay Tambe	Dan Fortney	Bogle Junior High School
Hiding in Plain Sight	HISEF - Junior Division (7th - 8th Grade)	Computer Science	2nd Place (HISEF)	Leela Raj-Sankar Wen-Chin (Milton) Lin	Sara Nichols	Bogle Junior High School
Insiteful Experiment	HISEF - Junior Division (7th - 8th Grade)	Computer Science	3rd Place (HISEF)	Brian Chung Alex Coles	Kristina Plona	Santan Junior High School
The Dangers of the Internet: How Cyber-Savvy Are You?	HISEF - Junior Division (7th - 8th Grade)	Computer Science	1st Place (HISEF)	Eashari Ghosh	Kate Nall	Basha High School
The Effect of Letter Covered on the Accuracy of Recognition	HISEF - Junior Division (7th - 8th Grade)	Computer Science	1st Place (HISEF)	Michael Lau	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of the Learning Speed of a Neural Network on the Accuracy of a Neural Network	HISEF - Junior Division (7th - 8th Grade)	Computer Science	2nd Place (HISEF)	Kabir Sahai	Clair Gustafson	Arizona College Prep - Oakland Campus
Resisting Earthquakes	HISEF - Junior Division (7th - 8th Grade)	Earth & Planetary Science	2nd Place (HISEF)	Alexander Holdren Simon Aleksov Rodriguez	Jason Prichard	Willis Junior High School
Enhanced Weathering	HISEF - Junior Division (7th - 8th Grade)	Earth & Planetary Science	3rd Place (HISEF)	Madison Ferrari Taylor Relvas	Jason Prichard	Willis Junior High School
Soil Wars	HISEF - Junior Division (7th - 8th Grade)	Earth & Planetary Science	Honorable Mention (HISEF)	Kole Fluckiger Madison McPoland Layla Hammad	Valerie Sherrill	Santan Junior High School
Tsunami vs Structure	HISEF - Junior Division (7th - 8th Grade)	Earth & Planetary Science	Honorable Mention (HISEF)	Joshua Sherman Landyn Morgan Niall Sphier	Kara Odom	Santan Junior High School
The Effect of Different Water Features on the Runoff Water Amount	HISEF - Junior Division (7th - 8th Grade)	Earth & Planetary Science	1st Place (HISEF) Water Wise Award	Shragavi Pote	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of the Type of String on the Height of Water and Height of Plant	HISEF - Junior Division (7th - 8th Grade)	Earth & Planetary Science	2nd Place (HISEF)	Julia Kim	Larissa Brown	Arizona College Prep - Oakland Campus
The Effect of the Amount of Drought-Resistant Plants on the Amount of Water Usage	HISEF - Junior Division (7th - 8th Grade)	Earth & Planetary Science	1st Place (HISEF) Water Wise Award	Lauryn Pallas	Michelle Daly	Arizona College Prep - Oakland Campus
Science of Bridge Tension and Compression	HISEF - Junior Division (7th - 8th Grade)	Engineering	2nd Place (HISEF)	Ethan Vela	Rosemary Schlechty	Payne Junior High School

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How the Shape of a Barrier's Slope Affects the Result of a Wave's Force on the Given Barrier	HISEF - Junior Division (7th - 8th Grade)	Engineering	3rd Place (HISEF)	Adeline Compton	Jason Prichard	Willis Junior High School
CAP Wheelchair Ramp	HISEF - Junior Division (7th - 8th Grade)	Engineering	Honorable Mention (HISEF)	Daniel Johnson	Jason Prichard	Willis Junior High School
Stempunk Energy	HISEF - Junior Division (7th - 8th Grade)	Engineering	1st Place (HISEF)	Isaac Mottern	Larissa Brown	Arizona College Prep - Oakland Campus
Designing a Football Helmet Lining and Coating for Maximum Rotational and Linear Impact Force Reduction	HISEF - Junior Division (7th - 8th Grade)	Engineering	2nd Place (HISEF)	John Mulhivill	Larissa Brown	Arizona College Prep - Oakland Campus
Pneumatic Lifting	HISEF - Junior Division (7th - 8th Grade)	Engineering	1st Place (HISEF)	Matthew Nakai	Clair Gustafson	Arizona College Prep - Oakland Campus
ACP Maps	HISEF - Junior Division (7th - 8th Grade)	Engineering	Honorable Mention (HISEF)	Elizabeth Brown	Clair Gustafson	Arizona College Prep - Oakland Campus
Self-Cleaning Solar Panels	HISEF - Junior Division (7th - 8th Grade)	Engineering	3rd Place (HISEF)	Prisha Shroff	Kate Nall	Basha High School
Desalinating Water	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	Water Wise Award	Mitsu Navarro	Katrina Lago	Payne Junior High School
Bioplastic Spoons	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	2nd Place (HISEF)	Michael Rosendahl	Jason Prichard	Willis Junior High School
The Effects of Carbon Soot on the Surface of Ice	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	Honorable Mention (HISEF)	lan Zeiger	Jason Prichard	Willis Junior High School
Preventing Lateral Erosion on River Banks	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	2nd Place (HISEF)	Andrew Lee	Christina Morrison	Bogle Junior High School
Water Vapor	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	Water Wise Award	Tyler Mesias Ashton McClinton Isaac Franco	Valerie Sherrill	Santan Junior High School
Renewable Energy Alternatives	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	Honorable Mention (HISEF)	Elizabeth Ovelil Christelle Ta	Kate Nall	Basha High School
Fun Plastic	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	3rd Place (HISEF)	Zahara Khan Sophia Finkel Julianna Henderson	Kate Nall	Basha High School
The Effect of the Amount of Glycerin on the Durability of the Bioplastic Used Alternatively to Plastic Bags	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	3rd Place (HISEF)	Ekta Puri	Kim Meyer	Arizona College Prep - Oakland Campus
Plant Ethanol: Saving the Environment One Step at a Time	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	1st Place (HISEF)	Gargee Tamboli	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of Different Oxybenzone Free Sunscreens on the Health of Corals	HISEF - Junior Division (7th - 8th Grade)	Environmental Sciences	1st Place (HISEF)	Jyotishman Nath	Michelle Daly	Arizona College Prep - Oakland Campus
Which Brand of Popcorn Pops the Most for Your Money?	HISEF - Junior Division (7th - 8th Grade)	Mathematical Sciences	3rd Place (HISEF)	Ashley Cogburn	Penny Kalscheur	Casteel High School
A Fibonacci Focus	HISEF - Junior Division (7th - 8th Grade)	Mathematical Sciences	1st Place (HISEF)	Talia Keen	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of Various Types of Metals on the Amount of Time It Will Take to Heat It to 93.33 Celsius	HISEF - Junior Division (7th - 8th Grade)	Mathematical Sciences	2nd Place (HISEF)	Nicholas Hutchins	Kim Meyer	Arizona College Prep - Oakland Campus

Project Title	Division	Category	Award(s)	Students	Teacher	School
The Effect of Number of Symbols on Spot It! Cards on the Maximum Possible Number of Cards	HISEF - Junior Division (7th - 8th Grade)	Mathematical Sciences	1st Place (HISEF)	Yoobin Cha	Michelle Daly	Arizona College Prep - Oakland Campus
Building an Artificial Pancreas	HISEF - Junior Division (7th - 8th Grade)	Medicine & Health Sciences	Honorable Mention (HISEF)	Jacob Husul Brenden Dales	Jason Prichard	Willis Junior High School
Albedo, Electrolytes, and Potatoes	HISEF - Junior Division (7th - 8th Grade)	Medicine & Health Sciences	2nd Place (HISEF)	Alana Toigo	Jason Prichard	Willis Junior High School
The Effect of the Amount of Turmeric on Planarian Regeneration	HISEF - Junior Division (7th - 8th Grade)	Medicine & Health Sciences	1st Place (HISEF)	Varun Raman	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of Eye Color on Batting Averages for MLB Players	HISEF - Junior Division (7th - 8th Grade)	Medicine & Health Sciences	3rd Place (HISEF)	Noah Gallagher	Michelle Daly	Arizona College Prep - Oakland Campus
Brush it All Away (The Effect of Hairbrush Designs on the Creation of Poof and Damaged Hair)	HISEF - Junior Division (7th - 8th Grade)	Medicine & Health Sciences	1st Place (HISEF)	Morgan Lavin	Clair Gustafson	Arizona College Prep - Oakland Campus
A Transdermal Treatment	HISEF - Junior Division (7th - 8th Grade)	Medicine & Health Sciences	2nd Place (HISEF)	Emmy Anderson Emma Weiss	Jason Prichard	Willis Junior High School
The Effect of the Surface Type on the Distance the Soccer Ball Travels	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	3rd Place (HISEF)	Kayla Scanlon Jillian Mack	Victoria Loftis	Payne Junior High School
Rockets	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	3rd Place (HISEF)	Ella Wicoff	Katrina Lago	Payne Junior High School
Thermal Spectrum	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	Honorable Mention (HISEF)	Elizabeth Vernon	Katrina Lago	Payne Junior High School
How Temperature Affects Elasticity of Rubber Bands	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	2nd Place (HISEF)	Carson Devore	Rosemary Schlechty	Payne Junior High School
Does Insulation Affect Sound?	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	1st Place (HISEF)	Collin Hale Kallan Speider	Katrina Eager	Santan Junior High School
Does the Scorpion Provide a Hard and Flexible Material? (The Effect of the Material Type on the Hardness and Modulus)	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	2nd Place (HISEF)	Kunal Chawla	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of Infill Type on the Specimen Weight and Tensile Strength	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	1st Place (HISEF)	Daniel Lin	Kim Meyer	Arizona College Prep - Oakland Campus
The Effect of Spin on the Movement of a Pitched Baseball	HISEF - Junior Division (7th - 8th Grade)	Physics & Astronomy	Honorable Mention (HISEF)	Eimhin Seemeyer	Michelle Daly	Arizona College Prep - Oakland Campus
Cross Pollination	HISEF - Junior Division (7th - 8th Grade)	Plant Sciences	2nd Place (HISEF)	Sierra Powers Nola Smith	Kristina Plona	Santan Junior High School
Effective Bio Products on Plant Growth	HISEF - Junior Division (7th - 8th Grade)	Plant Sciences	2nd Place (HISEF)	Sanjana Tripuraneni	Meghan Dunigan	Basha High School
Light Upon a Marigold	HISEF - Junior Division (7th - 8th Grade)	Plant Sciences	1st Place (HISEF)	Adriana Sarabia-Cardenas Sarah Valdez	Kate Nall	Basha High School
Effects of Soap and Water on Plants	HISEF - Junior Division (7th - 8th Grade)	Plant Sciences	Honorable Mention (HISEF)	Rishan Talukdar Anthony Bushard Joseph Bushard	Kate Nall	Basha High School
Hydroponics vs Aquaponics	HISEF - Junior Division (7th - 8th Grade)	Plant Sciences	3rd Place (HISEF)	Jasmine Ho Rebecca Yamada	Kate Nall	Basha High School

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The Effect of Vegetation Density on Sediment Degradation and Water Runoff Amount	HISEF - Junior Division (7th - 8th Grade)	Plant Sciences	1st Place (HISEF)	Sophia Noriega	Larissa Brown	Arizona College Prep - Oakland Campus
Root to Success	HISEF - Junior Division (7th - 8th Grade)	Plant Sciences	3rd Place (HISEF)	Isabelle Stubbs	Ryan Kneeling	Santan Junior High School
The Effect of Social Isolation of Honey Bees on Caffeine Addiction	HISEF - Senior Division (9th - 12th Grade)	Animal Sciences	1st Place (HISEF)	Kaitlyn Lai Omina Nematova	Rachna Nath	Arizona College Prep - Erie Campus
Blue Whale Phylogeny Based on Mitochondrial Protein Sequences	HISEF - Senior Division (9th - 12th Grade)	Animal Sciences	3rd Place (HISEF)	Kate Leinenweber Ethan Ngo	Cristi Sims	Arizona College Prep - Erie Campus
The Effect of Temperature on Porpoise Whale Presence	HISEF - Senior Division (9th - 12th Grade)	Animal Sciences	Honorable Mention (HISEF)	Gabe Huffman	Cristi Sims	Arizona College Prep - Erie Campus
The Effect of Zinc Oxide Avobenzone and Octinoxate on Marine Life	HISEF - Senior Division (9th - 12th Grade)	Animal Sciences	2nd Place (HISEF)	Maggie Feng Emma Boragina	Karen Hutchinson	Perry High School
Comparison of privacy perception on voice assistants in countries with different Human Development Index	HISEF - Senior Division (9th - 12th Grade)	Behavioral and Social Sciences	1st Place (HISEF)	Jana Dragovic	Debbie Nipar	Hamilton High School
The Effect of Music on Reaction Time	HISEF - Senior Division (9th - 12th Grade)	Behavioral and Social Sciences	3rd Place (HISEF)	Alex Kroumov	Rachna Nath	Arizona College Prep - Erie Campus
Where Did the Dolphin Go? Determining Influential Factors in Multiple Object Awareness Capacity	HISEF - Senior Division (9th - 12th Grade)	Behavioral and Social Sciences	2nd Place (HISEF)	Devrath lyer	Debbie Nipar	Hamilton High School
Flavonoids and Wound Healing	HISEF - Senior Division (9th - 12th Grade)	Biochemistry	1st Place (HISEF)	Michelle Z Sheikh	Rachna Nath	Arizona College Prep - Erie Campus
What Do You Get When You Combine Strawberries, Detergent, and Heat?	HISEF - Senior Division (9th - 12th Grade)	Biochemistry	3rd Place (HISEF)	Daniel LaBaer	Brooke Knighton-Toon	Chandler High School
Use of Two Generations of mTOR Inhibitors on Saccharomyces Cerevisiae for the Inhibition of Anabolic Processes in Cells	HISEF - Senior Division (9th - 12th Grade)	Biochemistry	2nd Place (HISEF)	Kaitlyn Tam	Debbie Nipar	Hamilton High School
Investigation of Alpha Synuclein as an Inducer of Premature Astrocytic Senescence for Early Identification of Abnormal Neuronal Cells	HISEF - Senior Division (9th - 12th Grade)	Biomedical and Health	3rd Place (HISEF)	Sreyha Nandakumar	Lori Miller	Basha High School
Secondary Metabolites and Bioplastics?	HISEF - Senior Division (9th - 12th Grade)	Biomedical and Health	2nd Place (HISEF)	Sohani Sandhu	Rachna Nath	Arizona College Prep - Erie Campus
The Effect of the Internal Temperature of Vegetables on its Cellulose Breakdown, Enzyme Activity and Vitamin C Content	HISEF - Senior Division (9th - 12th Grade)	Biomedical and Health	1st Place (HISEF)	Mihira Karnik	Cristi Sims	Arizona College Prep - Erie Campus
A Novel Approach to Reducing GBM's Resistance to Radiation Therapy	HISEF - Senior Division (9th - 12th Grade)	Cellular and Molecular Biology	2nd Place (HISEF)	Saisrinidhi Ganta	Mina Bhagdev	Hamilton High School
Direct Reprogramming to Create Heart Tissue	HISEF - Senior Division (9th - 12th Grade)	Cellular and Molecular Biology	1st Place (HISEF)	Chloe Scanlan	Cristi Sims	Arizona College Prep - Erie Campus
Attacking Melanoma Utilizing a Novel Gene and Drug Delivery Combination	HISEF - Senior Division (9th - 12th Grade)	Cellular and Molecular Biology	3rd Place (HISEF)	Rohan Sathe	Debbie Nipar	Hamilton High School
Spinach to Scaffold	HISEF - Senior Division (9th - 12th Grade)	Cellular and Molecular Biology	Honorable Mention (HISEF)	Maggie Han	Debbie Nipar	Hamilton High School
The Effect of Different Organic Solvents on the Extraction of Caffeine from Coffee	HISEF - Senior Division (9th - 12th Grade)	Chemistry	Honorable Mention (HISEF)	Emerson Kelly	Brooke Knighton-Toon	Chandler High School

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The Effect of Nano-ZnO Particle Size on Shear Thickening Behavior	HISEF - Senior Division (9th - 12th Grade)	Chemistry	1st Place (HISEF)	Katherine Chou	Brooke Knighton-Toon	Chandler High School
Manufacturing Marker Ink	HISEF - Senior Division (9th - 12th Grade)	Chemistry	2nd Place (HISEF)	Monique Smith Khoi Tran	Shannon Prince	Hamilton High School
The Effect Tums Have on Naturally Acidic Liquids	HISEF - Senior Division (9th - 12th Grade)	Chemistry	3rd Place (HISEF)	Emily Andersen	Shannon Prince	Hamilton High School
Using Support Vector Machines to Classify COPD Biomarkers for Improvement of Patient-Specific Treatment	HISEF - Senior Division (9th - 12th Grade)	Computational Biology and Bioinformatics	1st Place (HISEF)	Dravid Navale Omkar Arasaiah Aditya Mehta	Mina Bhagdev	Hamilton High School
Evaluation and Validation of Inhibitors to Treat Cancer Metastasis	HISEF - Senior Division (9th - 12th Grade)	Computational Biology and Bioinformatics	2nd Place (HISEF)	Rishabh Guttal	Mina Bhagdev	Hamilton High School
Predicting Stage Progression of Alzheimer's Disease Through the Analysis of Patient-Specific Data Using Neural Networks	HISEF - Senior Division (9th - 12th Grade)	Computational Biology and Bioinformatics	3rd Place (HISEF)	Shri Sanjay Kumar Selvakumar Arjun Singh	Mina Bhagdev	Hamilton High School
Is Fecal Processing a Viable Option for Obtaining Pure Drinking Water?	HISEF - Senior Division (9th - 12th Grade)	Earth and Environmental Sciences	2nd Place (HISEF) Water Wise Award	Rish G Nayak Grayson C Rogers Griffin J Slivka	Rachna Nath	Arizona College Prep - Erie Campus
Effect of Temperature on Algae Production of Biofuel!	HISEF - Senior Division (9th - 12th Grade)	Earth and Environmental Sciences	3rd Place (HISEF)	Ria Kulhari	Shannon Prince	Hamilton High School
The Effect of Different Soil Types on Soil Layer Shift	HISEF - Senior Division (9th - 12th Grade)	Earth and Environmental Sciences	Honorable Mention (HISEF)	Joohyun Lee	Jyoti Nair	Hamilton High School
The Optimization of Lead Absorption in Contaminated Water through Anhydro Galacturonic Acids in Various Citrus Peels	HISEF - Senior Division (9th - 12th Grade)	Earth and Environmental Sciences	1st Place (HISEF) Best of Fair: Biological	Shreya Tripathi Amy Wang Viveka Chinnasamy	Debbie Nipar	Hamilton High School
The Effect of Clock Speed on Computer Speed	HISEF - Senior Division (9th - 12th Grade)	Embedded Systems	2nd Place (HISEF)	David Demarco	Cristi Sims	Arizona College Prep - Erie Campus
High-Q Variable Metal Width and Space Spiral Inductors on Gallium Arsenide Substrates	HISEF - Senior Division (9th - 12th Grade)	Embedded Systems	1st Place (HISEF)	Michael Randolph	Dawn Dawson	Hamilton High School
Effective Exploitation of Nuclear Energy Resources	HISEF - Senior Division (9th - 12th Grade)	Energy: Chemical	1st Place (HISEF) Best of Fair: Physical	Andreea Bujor	Debbie Nipar	Hamilton High School
Optimizing Extracellular Electron Uptake in Heliobacterium for Hydrogen Production	HISEF - Senior Division (9th - 12th Grade)	Energy: Chemical	3rd Place (HISEF)	Arthur Yang Arjun Gadiyar	Debbie Nipar	Hamilton High School
The Effect of the Type of Biomass Sample on the Amount of Glucose Produced	HISEF - Senior Division (9th - 12th Grade)	Energy: Chemical	2nd Place (HISEF)	Humza M Choudhry	Kaesha Neil	Arizona College Prep - Erie Campus
Tire Pressure on a Dirt Bike	HISEF - Senior Division (9th - 12th Grade)	Energy: Physical	1st Place (HISEF)	Liam Daumke	Jordan Blakesley	Casteel High School
The Effect of Varied Blade Lengths on the Energy Ouput of a Hydroelectric Turbine	HISEF - Senior Division (9th - 12th Grade)	Energy: Physical	3rd Place (HISEF)	Sneha Lakamsani	Kayla Canfield	Hamilton High School
Magnifying Solar Radiation with a Fresnel Lens	HISEF - Senior Division (9th - 12th Grade)	Energy: Physical	2nd Place (HISEF)	Dario D'Addamio	Dawn Dawson	Hamilton High School
Smart Home Security	HISEF - Senior Division (9th - 12th Grade)	Engineering Mechanics	1st Place (HISEF)	Carol Chen	Mina Bhagdev	Hamilton High School
The Effect of HeatSink Type on Cooling Efficiency	HISEF - Senior Division (9th - 12th Grade)	Engineering Mechanics	3rd Place (HISEF)	Jordan B Hill	Kaesha Neil	Arizona College Prep - Erie Campus

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The Effect of Added Circuit Resistance on Heat Allowed to the Outlet Side in Non-Transfer Orientation	HISEF - Senior Division (9th - 12th Grade)	Engineering Mechanics	Honorable Mention (HISEF)	Sean Connolly	Cristi Sims	Arizona College Prep - Erie Campus
The Smart Camera Baby Saver	HISEF - Senior Division (9th - 12th Grade)	Engineering Mechanics	2nd Place (HISEF)	Kristopher Luo	Jyoti Nair	Hamilton High School
Synthesis of porous carbons for high performance gas adsorption derived from algae	HISEF - Senior Division (9th - 12th Grade)	Environmental Engineering	3rd Place (HISEF)	Jeffrey Zou	Debbie Nipar	Hamilton High School
The Degradation of Polystyrene (Styrofoam) by Tenebrio Beetles and Their Larvae	HISEF - Senior Division (9th - 12th Grade)	Environmental Engineering	2nd Place (HISEF)	Nevan J Hanford Blake C Enwiller Aahana Dugar	Rachna Nath	Arizona College Prep - Erie Campus
loT Based Smart Irrigation System	HISEF - Senior Division (9th - 12th Grade)	Environmental Engineering	1st Place (HISEF)	Pranav Mantri Thilina Balasooriya	Debbie Nipar	Hamilton High School
The Effect of Different Types of Plastics on the Consumption of Plastic by Galleria Mellonella	HISEF - Senior Division (9th - 12th Grade)	Environmental Engineering	Honorable Mention (HISEF)	Sai Anwita Chintala Arianne Law	Cristi Sims	Arizona College Prep - Erie Campus
The Effect of Phase Change Material (PCM) on Thermal Inertia and Fatigue Stress of Cementitious Infrastructure	HISEF - Senior Division (9th - 12th Grade)	Materials Science	2nd Place (HISEF)	Ayesha Raman	Mina Bhagdev	Hamilton High School
Finding Ideal Bandgap of 2D Photocatalysts for Efficient Energy Conversion	HISEF - Senior Division (9th - 12th Grade)	Materials Science	3rd Place (HISEF)	Rujuta Sane	Mina Bhagdev	Hamilton High School
Limiting the Abilities of Sound Movement	HISEF - Senior Division (9th - 12th Grade)	Materials Science	Honorable Mention (HISEF)	Brandon Pham	Cristi Sims	Arizona College Prep - Erie Campus
Increasing the Efficiency Chemical Vapor Deposition of Graphene through Specific Seeding Placement	HISEF - Senior Division (9th - 12th Grade)	Materials Science	1st Place (HISEF)	Krish Narotam	Mina Bhagdev	Hamilton High School
The Spacio-Temporal Properties of the Cable Equation with Passive Transistor Channels	HISEF - Senior Division (9th - 12th Grade)	Mathematics	3rd Place (HISEF)	Vincent Baer	Sara Loutzenheiser	Hamilton High School
Diagonal Compression of a Polygon	HISEF - Senior Division (9th - 12th Grade)	Mathematics	1st Place (HISEF)	Taman V Truong Deangelo S Brasen	Rachna Nath	Arizona College Prep - Erie Campus
The Effect of Different Income Tax Rates on Revenue	HISEF - Senior Division (9th - 12th Grade)	Mathematics	Honorable Mention (HISEF)	William Napolitano	Dawn Dawson	Hamilton High School
Developing Actuarial Insights for Agricultural Losses with Big Data Analytics	HISEF - Senior Division (9th - 12th Grade)	Mathematics	2nd Place (HISEF)	Karina Yang	Debbie Nipar	Hamilton High School
Optimization of Substrate Ratios for Fungal Biofabrication with Pleurotus Ostreatus	HISEF - Senior Division (9th - 12th Grade)	Microbiology	1st Place (HISEF)	Jordan Coulam	Lori Miller	Basha High School
Characterization of Novel Antimicrobial Agent for Endodontic nfections	HISEF - Senior Division (9th - 12th Grade)	Microbiology	3rd Place (HISEF)	Aris Zhu	Debbie Nipar	Hamilton High School
Microbiome and Your Gut	HISEF - Senior Division (9th - 12th Grade)	Microbiology	Honorable Mention (HISEF)	Diya Nath	Cristi Sims	Arizona College Prep - Erie Campus
Sequential Insertion Coliphage Therapy with Deuterium Oxide (D2O) Suspension: A Viable Approach to Circumvent Antibiotic Resistance		Microbiology	2nd Place (HISEF)	Nathan Lam Francesca Macaraeg Aryzema Urrutia	Karen Hutchinson	Perry High School
The Effect of Type of Arrowhead on Penetration Depth	HISEF - Senior Division (9th - 12th Grade)	Physics and Astronomy	Honorable Mention (HISEF)	Dylan J Banhart	Rachna Nath	Arizona College Prep - Erie Campus
investigating User Interface Mechanisms for Visualizing Integrated Datasets on Mars	HISEF - Senior Division (9th - 12th Grade)	Physics and Astronomy	2nd Place (HISEF)	Alexander Gonzalez	Kevin Welch	Hamilton High School

Chandler Innovation Fair Awards - 2020

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Instrument Imperfections - The Effect of Different Appurtenances on Instruments' Pitch and Tone	HISEF - Senior Division (9th - 12th Grade)	Physics and Astronomy	3rd Place (HISEF)	Briana Quintero Graham Russell Srika Talanki	Jyoti Nair	Hamilton High School
dentification of Wide Separated Gravitationally Lensed Quasars	HISEF - Senior Division (9th - 12th Grade)	Physics and Astronomy	1st Place (HISEF)	Deval Manish Deliwala	Dawn Dawson	Hamilton High School
he Effect of pH Soil on Seed Germination	HISEF - Senior Division (9th - 12th Grade)	Plant Sciences	Honorable Mention (HISEF)	Breiddy Guerrero	Katie Nash	Chandler High School
What Level pH Speeds Up Seed Germination?	HISEF - Senior Division (9th - 12th Grade)	Plant Sciences	3rd Place (HISEF)	Madeline Flitton	Jordan Blakesley	Casteel High School
Vhat's the Dirt on Dirt?	HISEF - Senior Division (9th - 12th Grade)	Plant Sciences	2nd Place (HISEF)	Elliot Hakkal	Shannon Prince	Hamilton High School
he Effect of Vitamins on Soybean Germination in the Presence of ntentionally Introduced Free Radicals	HISEF - Senior Division (9th - 12th Grade)	Plant Sciences	1st Place (HISEF)	Michelle Hu	Jyoti Nair	Hamilton High School
etecting Microbial Contaminants in Water Using Al (Artificial ntelligence) and Deep Learning Algorithms in Order to Prevent the pread of Waterborne Illnesses	HISEF - Senior Division (9th - 12th Grade)	Robotics and Intelligent Machines	1st Place (HISEF)	Anshul Verma	Sara Loutzenheiser	Hamilton High School
Gestype: A Novel Solution to Ergonomically Inefficient Keyboards using Real-Time Deep Learning Based Gesture Recognition	HISEF - Senior Division (9th - 12th Grade)	Robotics and Intelligent Machines	3rd Place (HISEF) Intel Innovator Award	Yaniv V Briker	Rachna Nath	Arizona College Prep - Erie Campus
he Effect of a Training Model's Sample Size on the Accuracy of a Sender Identification Software	HISEF - Senior Division (9th - 12th Grade)	Robotics and Intelligent Machines	2nd Place (HISEF)	Mathew Griffin	Jyoti Nair	Hamilton High School
nowledge on Transformation Invariance Improves Adversarial raining Under Limited Data	HISEF - Senior Division (9th - 12th Grade)	Systems Software	1st Place (HISEF)	Travis Zhang	Mina Bhagdev	Hamilton High School
Developing an Intelligent Tutoring System to Increase Cybersecurity iducation in the Healthcare Sector	HISEF - Senior Division (9th - 12th Grade)	Systems Software	2nd Place (HISEF)	Bianca Ashar	Mina Bhagdev	Hamilton High School
Ising Randomly Generated Cryptographic Hash Functions to inforce Passwords	HISEF - Senior Division (9th - 12th Grade)	Systems Software	3rd Place (HISEF)	Joshua Shunk	Gerald Bell	Perry High School
A Platforming Video Game for the Visually Impaired	HISEF - Senior Division (9th - 12th Grade)	Systems Software	Honorable Mention (HISEF)	Jacob Kaufman Warner Eric Wright	Rachna Nath	Arizona College Prep - Erie Campus