





Welcome to the 12th Annual STEMCON.

We believe every student has the potential to shine in the subjects of science, technology, math, and engineering and therefore encourage students to share their abilities and talents with other schools through this unique platform.

This year, STEMCON is hosting more than 800 projects, demonstrations, and shows from various schools in Ohio, Illinois, Indiana, Michigan, Missouri, Minnesota, and Wisconsin.

Student events are open to all schools in the Midwest as a way

to promote STEM education.
We look forward to honoring every student with one of many awards ranging from Honorable Mention to Best of Categories.

As we all know, we rely more on science every day. As a member of the STEMCON Organizational Committee, I believe that the science fair project is one of the best learning experiences a student can undertake. The STEM subjects allow students to become more knowledgeable about how the world around them works. Enjoy a wonderful learning experience at STEMCON 2015, and please join us for future annual STEMCON's.

Sedat Duman, President & CEO of Concept Schools



8:00 am - Staff Sign-in

9:30 am - Registration-Exhibit Hall C

10:00 am - Judges' Meeting - Ballroom B

11:00 am – CONSEF PROJECT SESSION, STEM EXPO, and RoboCON- Exhibit Hall C

1:00 pm - Lunch & Scoring

2:00 pm -Awards Ceremony- Grand Ballroom C

Recognize Event Sponsors
Guest Speakers
Presentation of Individual Awards
Presentation "Best of the Categories" Awards
Presentation "Best of the Schools" Awards

Junior Division: Grades 5-8
Senior Division: Grades 9-12



Conference Highlights - April 17, 2015

Keynote Speakers



Dr. Carolyn Hayes President-Elect, National Science Teachers Association (NSTA)



Kirsten Ellenbogen Ph.D. President & CEO, Great Lakes Science Center

Panelists





James Bader, Executive Director, Leonard Gelfand STEM Center, Case Western Reserve University, OH

Panelist



Dr. Helen Soule, Executive Director, Partnership for 21st Century Skills, DC

Panelist



Anne Tweed, Director, STEM Learning, McRELInternational, CO

Panelist



Dr. Marie Anette Karlsson, Dean, Washkewicz College of Engineering, Cleveland State University, OH



Expert Panel Guests From NASA Glenn Research Center

Lance Foster, Aerospace Engineer (Panelist & Moderator)



Born and raised on the south side of Chicago, Lancert Foster graduated Kenwood Academy HS in 1994. He then attended Florida A&M University, from which he attained both his BS in Mechanical Engineering and a MS with a focus on Computational Fluid Mechanics. During his college career, he interned at a number of NASA centers - Glenn, Langley, Ames, and JPL. In 2002, he began work at NASA Glenn Research Center as an Aerospace Engineer in the Inlets and Nozzles Branch. Today, Mr. Foster works on a variety of projects related to aero-propulsion, including a Turbine-Based Combined Cycle Engine. Mr. Foster is National President of the National Technical Association (NTA) and frequently speaks to urban youth in Cleveland area schools.

Lauren Demirjian, Human Resource Specialist



As an HR Specialist at NASA Glenn Research Center, Lauren is responsible for managing the Recruitment Program as well as supporting the Workforce Planning and Strategic Solutions division. Lauren started at NASA Glenn in June of 2010 as a co-op student. She earned her Bachelor's Degree from Kent State University in International Business and her Master's Degree in Labor Relations and Human Resources from Cleveland State University.

Zachary Lucas, Resource Manager



Zachary Lucas, is a 2011 graduate of Tuskegee University in Tuskegee, Alabama, with a degree in accounting. Zach began as a co-op at the NASA Glenn Research Center in the summer of 2010 and became a full time employee in the Office of the Chief Financial Officer, in January of 2012. For 3 years, Zach held the role as a budget analyst and the center payroll administrator. In January of 2015, he switched careers to become the Resources Manager and Community Relations Specialist for the Office of Communications

Ashlie Flegel, Aerospace Engineer



Ashlie Flegel is an aerospace research engineer at NASA Glenn Research Center. She is currently the Engine Icing Research lead conducting experiments with industry partners to understand the ice crystal icing phenomenon that can occur inside an engine. Ashlie has eight years of Turbomachinery experience. Ashlie began her NASA journey in 2002 as a high school intern and went on to participate in two LERCIP internships at NASA Glenn. She earned her Bachelor's degree in Mechanical Engineering from the University of Toledo in 2007, where she was heavily involved in the Society of Automotive Engineers (SAE) and was a four year Ohio Space Grant Consortium Scholar. In 2013 she earned her Master's in Mechanical Engineering from Cleveland State University.

5



Categories

Pr#	Abb	Category
1000	ВЕН	Behavioral Science
1100	BIO	Biochemistry
1200	ВОТ	Botany
1300	CHEM	Chemistry
1400	COMP	Computer Science
1500	EARTH	Earth & Space Sciences
1600	ENG	Engineering/Electronics
1700	ENV	Environmental Science
1800	HEALTH	Health Science
1900	MAT	Material Science
2000	MATH	Mathematics
2100	MICRO	Microbiology
2200	PHY	Physics
2300		



Projects

Chicago Math and Science Academy Bizimungu Obedi

1720 Environmental Science Carbon Dioxide Contribution to Global Warming

Denzel Akosa

1305 Chemistry Conductivity of Solutions

Haris Qazi

1371 Chemistry
Producing Metals from Solutions

Hernan Razo

1375 Chemistry Isomerization of Maleic Acid to Fumaric Acid

Jocelyn Perez

2310 Zoology Molarity of Sucrose and Fruit Fly Behavior

Makaila Smith

1223 Botany Photosynthesis & Temperature

River Atwood-Winninger

1604 Electronics/Engineering Metal Conductivity

Sana Slote

1730 Environmental Science
Does Sediment Affect Aquatic Organisms?

Tania Njiwah

1125 Biochemistry
Osmosis and Diffusion

Yusra Aftab

1303 Chemistry
Deoxyribonucleic Strawberricid

Elyria Community Middle

Julianno Cross 2213 Physics

Roller Coaster Marbles

Logan Gray

2220 Physics

How Does Temperature Affect the Stretch of a Rubber Band?

Gateway Science Academy -

Elementary

Alexander Roland

1631 Electronics/Engineering
Can You Drive a Rescue Robot Faster by
Standing Behind It or by Screen?

Alexandria Soifer

1032 Behavioral Science
Can Gustatory Perception Be Masked?

Andrea Finner

1824 Health

How Greasy Are Your Potato Chips?

Brandon Remming

1376 Chemistry How Do Antacids Affect Stomach Acid Levels?

Jefferson Putnam

1630 Electronics/Engineering
What Blade Shape Creates the Most
R.P.M.?

Vahdet Karatas

2227 Physics How Does The Length of Wind Turbine Blades Affect Its Efficiency?

Gateway Science Academy - Fyler

Abigail Nagl

2239 Physics
The Weighting Games

Charumati Deeliore

1010 Behavioral Science Twirls, Whirls, and Spins

Corey Rauss

1915 Material Science Watts Hot

Daniel Bohn

2302 Zoology What's In Your Water? A Bioassay

Deshawna Flesch

1710 Environmental Science Nitrate Leaching by Organic and Inorganic Fertilizers

Eda Sagnak

2246 Physics Biodiesel to Energy 8

Fatima Celik

1321 Chemistry Evaporation Rates of Liquids

Gracie Pinnell

1629 Electronics/Engineering Electric Generator

Jayashree Deeljore

1608 Electronics/Engineering Solar Powered Charger

Jordan Sedberry

1728 Environmental Science Disappearing Paper

Katherine Campbell

1204 Botany Algae Growth in Inorganic and Organic Fertilizers

Katheryn Elliott

1822 Health Artificially Scienced: How Do Artificial Sweeteners Affect Metabolism?

Kyra Collins

1811 Health How Sweet It Is: Measuring Glucose in Your Food

Mia Fiordimondo

1113 Biochemistry Blood Clotting to the Rescue

Miles Bradford

1606 Electronics/Engineering Modifying a Camera to Capture Near-Infrared Spectrum

Miriam Solis

1508 Earth and Space Science Capillarity

Nedret Sagnak

2247 Physics
Does Temperature Affect Magnetic Fields
Strength?

Neziha Aktas

1102 Biochemistry
The Effects of Anti Inflammatory Medicines
(NSAID) on Liver Cells/Tissue

Nikko Chirco

1708 Environmental Science Is There Lead in Local Soil?

Omer Ozkaya

2106 Microbiology Which Oil Is More Effective in Killing Bacteria?

Rana Karatas

1117 Biochemistry
Real or Fake Sugar: Does It Really Matter?

Rowan Elliott

1823 Health
Dirty Science: Which Gender Is Cleaner?

Seamus Kinealy

1619 Electronics/Engineering Nanotechnology-A New Solution to Clean Up Oil Spills

Sequoia Maybearry

1017 Behavioral Science Music to Your Ears

Sinjin Duncan

1709 Environmental Science Greenhouses

Sophie Bell

1704 Environmental Science Throw Away Your Trash Can

Hawken School

Dhweeja Dasarathy

1816 Health

Novel Approach to Identify Skeletal Muscle Mitochondrial Disorders

Hilliard Tharp

Eslem Kucuker

1119 Biochemistry
Determination of Protein Molecular Weight and Its Biochemical Characterization

<u> Horizon Science Academy – Belmont</u>

Isabel Abarca

1101 Biochemistry Gas Station Soil

Khiyla Pittman

2107 Microbiology Everywhere Water

Mia Matos

1214 Botany Methane

Noelani Barrientos

1202 Botany Vitamin C

Tianny Batista

1308 Chemistry Cold Starts

<u> Horizon Science Academy - Cincinnati</u>

Eliza Jackson

1505 Earth and Space Science Dirty Snowballs

Giovonni Williams

1036 Behavioral Science

Smell and Taste

Jovan Fuller

1335 Chemistry
The Extraordinary Foam

Kayvona Houston

1907 Material Science
Does Candle Color Matter?

Nariyah Mcclain

1361 Chemistry Minds of Their Own

Rasan Arnold

1105 Biochemistry
DNA Identifying Analysis

Tylee Jones

1013 Behavioral Science Molding Food

<u> Horizon Science Academy - Cleveland</u>

<u> High School</u>

Batuhan Aslan

1804 Health

Which Anti-Fungal Medicine Effects Better Against the Fungus Disease?

Christian Carlisle

1320 Chemistry Spray Rocket

Corey Rogers

1839 Health

Yeast Busters : Stopping Fungus in Its Tracks With Antifungal Medicines

Del-Marcus Goolsby

2306 Zoology

Heart Rate Sensitivity: The Effects of Drugs on Daphnia

Dewaine Billingsley

2212 Physics

How Does the Shape of a Parachute Affect the Drop Velocity?

Heaven Martin

1358 Chemistry

Crime Scene Chemistry-The Cool Blue Light of Luminol

Jeniesha Mckinney

1362 Chemistry

Measuring the Speed of Light with Microwave Oven

Julie Leon

1357 Chemistry Burning Calories

Kayla Morton

1366 Chemistry

Rusting Out: Lemon Juice vs. Coffee

Kevin Goolsby

1341 Chemistry

Electrolytes Challenge: Orange Juice vs.

Sports Drink

Laud Ashong

1803 Health

Changes of the Teeth

Markiyah Steel

1033 Behavioral Science

How Does Vocabulary Affect Emotions?

Matthew Shepherd

2248 Physics

Do Distractions Affect Video Game Driving

Scores?

Omar Qureshi

2008 Mathematics

Symmetry Line in Prime Numbers

Shantalena Kirkland

1351 Chemistry

Briggs-Rauscher Oscillating Reaction

Tobi Aderibigbe

1302 Chemistry

The Effect of Salt and Sugar on the Freezing

Point of Water

Udeh Ndukwe

1625 Electronics/Engineering

Line Follower: A Zippy Robot That Senses

Where to Go

Yoly Rodriguez

1838 Health

Is Our Food Poisoning Us?

<u> Horizon Science Academy - Cleveland</u>

Middle School

Acaisa Brown

1108 Biochemistry

The Effectiveness of Cleaning Products

Aleiya Sawyer

1380 Chemistry

Understanding Lactose Intolerance

Cherise Diamond

1332 Chemistry

I Scream, We Scream, We All Scream for

Chemistry!!!!!

Dasia Johnson

1347 Chemistry

Which Type of Lotion, Ointment, and Cream

(Crème) Is the Best for Dry Skin?

Destiny Jennings

1714 Environmental Science

Solar Power Water Desalination

Diesel Tanner

1403 Computer Science

Can Gaming Help You Score Better in

School?

Heaven Brown

1315 Chemistry

The Burning Question

Jovontae Williams

1390 Chemistry

Got Gas?

Kellie Keaton

1715 Environmental Science

Gas Producer

Miricle Harris

2222 Physics

Levitating Magnets

Sarai Capps

1008 Behavioral Science

Brains or Shame

Shatara Jordan

1617 Electronics/Engineering

Human Battery

Vanezza Alvayero

2002 Mathematics

Solving the Rubik's Cube

Horizon Science Academy - Columbus

Elementary School

Amira Ibrahim

1830 Health

Is Soda an Enemy to Your Teeth?

Asantewa Bonna

1107 Biochemistry

Do Parents and Their Children Share the

Same Fingerprint Components?

Elysa Kwaw

1120 Biochemistry

Color Your Mood

Hussein Dirie

1820 Health

Orange Juice Madness

Ilhaan Hashi

2006 Mathematics

Golden Ratio

Marian Ali

1306 Chemistry

Candy vs. Pills

Miganeh Drame

1610 Electronics/Engineering

A Safer Elevator

Ruth Ajiboye

2301 Zoology

Who Wants to Be Beta Fish's Tank-Mate?

Tristan Esteph

1904 Material Science

Get What You Pay For

Horizon Science Academy - Columbus High

School

Amanda Larocco

2007 Mathematics

Flipping a Coin: Is It Really Fair?

Amenah Mohammad

1020 Behavioral Science

Which Genre of Music Helps People Study

More?

Belinda Ababio

1801 Health

Hyperpigmentation And Dark Spot Removers

Doua Mohammad

1364 Chemistry

Does Fabric Softener Make Fabric More Flam-

mable?

Emmanuel Agyeman

1401 Computer Science

Ebola App

Fatuma Ahmed

1304 Chemistry

Vitamin C

Halima Abshir

1602 Electronics/Engineering Sentinel - A Two-Sided Phone

Ifeanyi Adizua - Williams

2201 Physics

How the Type of Paper Affects the Aerodynamics of Paper Airplanes

Indiana Mccarthy

1215 Botany

Rose Lifespans in Food Coloring

Jamelah Daboubi

1328 Chemistry

TRM Thermoreceptor Modifier

Joseph Amoako

2203 Physics

Do Some Colors of M&Ms Crack Faster Than the Other?

Josh Fingerhut

1611 Electronics/Engineering Bike-Powered Light Bulb

Nadifo Hashi

1614 Electronics/Engineering How to Prevent Your iPhone Screen from Breaking

Nana Anim-Boateng

2204 Physics

Can the Amount of Water Make the Pitch of Sound Change?

Olivia Mellett

1622 Electronics/Engineering DIY Paper Holder

Samira Hassan

1504 Earth and Space Science

Airplane Seats That Do Not Invade Other's

Space

Sudi Yussuf

1639 Electronics/Engineering

On Airplane Efficiency: The Butterfly Wing

<u> Horizon Science Academy - Columbus</u>

Middle School

Asia Mohamud

1021 Behavioral Science

Does Your Sight Affect Your Taste?

Dikchhya Khatiwoda

1832 Health

Does Eye Color Affect A Person's Ability to Identify Color in Low Light?

Esther Quaye

1372 Chemistry

Shaking for Studs: Which Type of Water Is

the Hardest?

Jehannah Granger

2307 Zoology

Planaria and Magnetism

Katharin Sigaran

1221 Botany

Does Osmosis Affect the Mass of a Raw

Potato?

Lebaba Kure

2232 Physics

Parachutes: Does Size Matter?

Regina Mick

1623 Electronics/Engineering
What Makes the Best Conductor?

Yusuf Matan

1123 Biochemistry
The Effect of Substrate Concentration
on the Activity of the Enzyme Catalase

Horizon Science Academy - Dayton

Asante' Anderson

1603 Electronics/Engineering Infinite Energy Tech

Brain Varga

2253 Physics Build a Gauss Rifle!

Cihan Bagcioglu

2207 Physics How Fast Can the Last Ball Go?

Fatimah Gula

1826 Health Location Oo Seizures in the Human Brain and the Effects on the Body

Fehmi Zengince

1393 Chemistry Food Chemistry

Gulnara Sunnatcheva

1384 Chemistry Vitamin C Raw and Boiled

Josalynn Thomas

1035 Behavioral Science Memory Mnemonics

Matthew Bolden

1006 Behavioral Science Response Time of an Animal When Encountering a Human

Maya Akhmedova

2101 Microbiology
What Music Does Bacteria Enjoy the Most?

Murad Aliyev

1103 Biochemistry Denaturing Proteins

Senea Byrd

1007 Behavioral Science Face Recognition and Race

Songul Mursalova

1367 Chemistry Crime Scene Chemistry-The Cool Blue of Luminal

Tianna Black

1005 Behavioral Science It's Written All Over Your Face: The Science of Facial Expressions

Vaughn Wyche

1404 Computer Science
Writing a JavaScript Program to Measure
Text

<u>Horizon Science Academy - Dayton</u>

<u>Downtown</u>

Farida Aslanova

1901 Material Science Mysterious Water Rising

Feruza Mamedova

1912 Material Science How to Make a Homemade Metal Detector

Sultan Iskandarova

1908 Material Science Cooling Soda

Zeynab Pashayeva

1627 Electronics/Engineering Drawing Michelangelo

<u>Horizon Science Academy – Dayton</u> Elementary School

Amir Riggins

1028 Behavioral Science How Does the Brain Shift from Telling the Truth to Telling a Lie?

Anthony Gladney

1339 Chemistry
Why Do Police Track Fingerprints?

Landon Harden

2221 Physics
How Much Height to Loop the Loop?

Michael King

1909 Material Science
Which Chocolate Will Melt Faster?

Samir King

2231 Physics
Can Water Float on Water?

Shaheed Thompson

1225 Botany How Do Roots Grow When the Direction of Gravity Changes?

<u> Horizon Science Academy - Denison</u>

Elementary School Brandon Taylor 2250 Physics Home Run

Destiny Vass

1387 Chemistry The Hair Facts

Hailey Mauldin

2235 Physics Mauldin's Music

Lilly Davis - Meadows

1330 Chemistry Lip Crayon

Nia Valentine

1386 Chemistry The Calories

Xailla Shultz

2249 Physics Magic or Science

Horizon Science Academy - Denison

Middle School Ashlyn Mcgonagle 1913 Material Science

How Much Can Eggs Hold?

Kenaji Blevins

1312 Chemistry

Electrolysis of Water Experiment

Skye Bostic

1203 Botany

Which Vitamin Makes Plants Grow Faster?

Horizon Science Academy - Lorain

Alexis Otero

1025 Behavioral Science Does Not Going to College Affect Your Ability To Test?

Alisa Larges

1355 Chemistry What Effect Does Freezing Batteries Have on the Life-Span?

Ariana Whiteman

1844 Health What Is the Influence of Color on Blood Pressure?

Arianna Martinez

1834 Health Deterioration of Teeth

Arianna Butcher

1903 Material Science
What Fabric Wicks the Best?

Austin Perez

1628 Electronics/Engineering Ultra Sonic Cleaning Robot

Aylisa Grenald

1114 Biochemistry
Is Soap Scrubbing Away Too Much???

Beyza Ada

1201 Botany Beauty and the Beast

Chantel Shannon

1220 Botany

Does the Presence of Sunlight Affect the Amount of Carbon Dioxide Produced in a Plant During Respiration?

De ` Andre Clayton

1322 Chemistry
Does Mint Actually Cool or Just Give a
Sensation?

Destinee Medina

1018 Behavioral Science Kids in Mind

Elba Bracy

1707 Environmental Science
Does Magnetism Affect Plant Growth?

Elias Figueroa

1112 Biochemistry
Photosynthesis And Respiration

Emma Cornwell

1325 Chemistry
Do All Liquids Evaporate at the Same Rate?

Isabel Bonilla

1106 Biochemistry The Analysis of Albino Corn

Jalicia Smalley

1635 Electronics/Engineering Open Sensorme

Jaylene Santana

1378 Chemistry Antacid Potency

Julissa Hernandez

1345 Chemistry
Does Tea Stain Your Teeth?

Justin Rosario

1840 Health Peanut Allergy

Kierra Wilcoxson

1128 Biochemistry
Do All Proteins Denature at the Same
Temperature?

Krystian Garcia

2103 Microbiology Hold On... Can You Hear the Bacteria?

Kylie Huskey

1713 Environmental Science
Are Gas Stations Polluting Our Soil?

Matthew Deus

1502 Earth and Space Science The Deicing Effect

Michael Watchorn

1736 Environmental Science Wind vs. Solar Energy

Noah Bennett

1805 Health Effect of Garlic on Bacterial Growth

Oleana Zepeda

1226 Botany Nutritious Banana Peels

Olivia Alvarado

1307 Chemistry Glow Stick Project

Omer Keles

1716 Environmental Science Global Warming or Global Warning

Steven Hanna

1613 Electronics/Engineering
The Power to Move

Sydney Contreras

1324 Chemistry
What Makes Ice Melt Faster?

Tayidem Blaylock

1807 Health

Are Dark Green Leafy Veggies Higher in Vitamin C Content Than Their Lighter Colored Counter Parts

Taylor Weppler

1388 Chemistry Egg Deterioration

Victoria Massa

1122 Biochemistry Cloudy with a Chance of Aspirin

Viviana Ramos

1374 Chemistry
Dialysis of a Solution in a Hypotonic
Medium

Horizon Science Academy - McKinley

Park Park

Andrea Roldan

1632 Electronics/Engineering Simple Motor

Andrew Taylor

1636 Electronics/Engineering Pneumatics

Andrew Reves

1837 Health Spectrophotometric Determination of Iron in Municipal Water

Austin Reilly

2244 Physics Speed of Light in Jell-O?!

Christian Ruiz

1726 Environmental Science Spectrophotometric Determination of Phosphate In Lake Michigan

17

Dadviel Salas

1634 Electronics/Engineering Can You Build Circuits?

David Garibay

1825 Health Indoor Air Quality

Edgar De La Rosa

1817 Health What Activity Will Produce the Highest Heart Rate?

Guadalupe Manriquez

1121 Biochemistry Longer Lasting Avocados

Gustavo Perez

1723 Environmental Science Spectrophotometric Determination of Phosphate in Chicago River

Ivan Cortez

1814 Health Spectrophotometric Determination of Copper in Tap Water

Jaime Lara

1354 Chemistry
Spectrophotometric Determination of Iron in Lake Michigan

Mimi White

1389 Chemistry Burning Bubbles

Rafael Gonzalez

1011 Behavioral Science
Do Humans Move Straighter with or Without Sight?

Yavuz Cengiz

1109 Biochemistry
Does Exercise Effect Blood Glucose?

Horizon Science Academy - Southwest

Berenice Sotelo

1732 Environmental Science Accelerate Rusting

Carla Ballesteros

1702 Environmental Science
The Investigation of Water Quality

Carlos Quintero Escott

1373 Chemistry
Removing Heavy Metals from Water

Christian Roldan

1633 Electronics/Engineering Building a Solar-Powered Car

Kelly Martinez

1359 Chemistry
The Chemistry Behind Olive Oil Soap

Leslie Garcia

2217 Physics Coins and Vinegar

Oscar Perez

1126 Biochemistry
Radiation Germination

Salia Matheny

1124 Biochemistry
Will Water or Vinegar Make Plants Grow
Better?

Horizon Science Academy - Springfield

Abigail Paul

2241 Physics

Paper Towel Strength

Alantis Brock

1314 Chemistry

What Makes Ice Melt Fastest?

Chrissandra Price

1724 Environmental Science

Go Green By Growing Green (How to Extract

Energy from Plants)

Deante Crockett

1815 Health

Eggsperiment

Dezarah Gonzales

1340 Chemistry

How Do Different Types of Impurities in Water Affect How Fast the Water Evaporates?

Faydra Price

1218 Botany

Genetically Modified Plants

Jaleyana Reese

1219 Botany

Will a Bean Plant Survive in Salt Water?

Jasmine De Bolt

1331 Chemistry

The Effect of Surface Temperature on

Fingerprints

Kiara Harris

1344 Chemistry

Chemistry of Food

Mariana Barbour

2208 Physics

Static Electricity with Wool Sweater

Michael Clayborne

1809 Health

Eating Iron for Breakfast

Seth Paul

1722 Environmental Science

Solar-Powered Water Desalination

Shay'onna Fuller

1336 Chemistry

What Liquid Makes Metal Rust Fastest?

Tanajah Betts

1806 Health

Mold on Bread

Tiffany Draper

1206 Botany

Effects of Energy Drinks on Plant Growth

Zachariah Burch-Hyde

1318 Chemistry

Electrolyte Challenge

Horizon Science Academy - Toledo

Alea Curtis

1327 Chemistry

Durability of Acetone Solutions

Amanda Gillen-Ford

1612 Electronics/Engineering

Search and Rescue Team

Andre Mccoy

2236 Physics

Building a Gauss Rifle

Bashshar Haris

1210 Botany

Effects of Ultraviolet Light Exposure on Pond

Water Algae

Cache Mckitric

1835 Health

How Wrappings Spoil Foods

Cameron Lamb

1353 Chemistry

From Dull to Dazzling

Corien Harvey

2223 Physics

Measuring the Speed of Light

Dontae Williams

1391 Chemistry

The Power of Electrons

Fateh Aameera Haris

1828 Health

Effect of Music on Post Recovery Exercise

Gulsu Eldek

1821 Health

Effects of Caffeine on Daphnia's Heart Rate

Keith Skinner

1222 Botany

Craving Caffeine

Mercan Yalvac

2109 Microbiology

Germs on Your Cellphone

Patrick Pettaway

1836 Health

How Does Peripheral Vision Work and How

Well Is Yours?

Rochelle Bauer

1309 Chemistry

Oscillating Reactions

Sherron Gillespie

1711 Environmental Science

Heat, Keep, Cool-How Evaporation Affects

Heating and Cooling?

Tamara Gillen

1337 Chemistry

Tasty Evaporation

<u> Horizon Science Academy - Youngstown</u>

Antwon Slocum

1729 Environmental Science

Wind Turbine

Benjamin Harris

1211 Botany

Will Compost Make Grass Stay Alive Longer

Than Fertilizer?

Benjamin Torres Jr.

1841 Health

Do Student Athletes Have Better Lung

Capacity Than Non-Student Athletes?

Carolina Otero

1368 Chemistry

Which Material Does Acetone Affect More

Wood, Carpet, or Tile?

Civon Rowe

1030 Behavioral Science

Are Dogs Colored Blind?

Cordell Gregory

1209 Botany

Will A Spider Or Philodendron Grow Better

Under Natural or Artificial Light?

Derasjah Brown

1316 Chemistry
What Substance Is Most Effectively for
Cleaning Teeth?

Dynasti Boykin

1313 Chemistry
What Acids Affect the Rate of Corrosion?

Elizabeth Weisinger

1843 Health Getting Taller

Hope Crawley

1326 Chemistry
Does the Flavor of Ice Cream Affect
How Fast the Ice Cream Melts?

Jack Armstrong

2004 Mathematics Which 3-D Geometrical Shape Reflects the Most Light?

Javott Dawson

2304 Zoology
What Materials Melt Ice Fastest?

Kira Grimes

2309 Zoology What Egg Type Is the Strongest?

Naudia Beck

1310 Chemistry Which Frozen Dessert Melts Slowest Ice Cream, Frozen Yogurt, rr Sorbet?

Paris Wilson

1845 Health
Do Different Types of Music Affect a
Person's Heart Rate?

Quinntrell Jenkins

1506 Earth and Space Science
Can Flies Grow from Decaying Bananas?

Shayla Berger

1311 Chemistry
Does the Amount and Type Affect How Fast a
Volcano Will Erupt?

Tyshawn Skinner

1382 Chemistry Naked Egg

<u>Indiana Math and Science Academy – North</u> Aniah Holland

1615 Electronics/Engineering
Which Diameter of Lead Will Have the Greatest
Reaction When Making a Light Bulb?

Christopher Williams

1637 Electronics/Engineering Solar Energy Supercapcitor

Diamond Berryhill

1004 Behavioral Science Left or Write

Jerimyah Mundy

1023 Behavioral Science Can People Memorize Numbers While Being Distracted?

Jumanah Muhammad

1022 Behavioral Science Which Gender Has a Better Memory?

Kevin Zeigler

2255 Physics Speed of Light

Levi Stubbs

1510 Earth and Space Science Measure Atmospheric Reflection, or "Farth Shine"

Madison Guyse

1827 Health

Whose Mouth Is Cleaner: Dogs or

Humans?

Makaila Shay

1917 Material Science Sun Art

Marcella Arguello

1701 Environmental Science Plant Growth

Maria Diaz Gomez

1819 Health Cardiovascular Disease

Noah Cooper

1812 Health

Antibacterial Hand Soap vs. Hand Sanitizer: What Should You Use?

Rajeni Jones

1348 Chemistry Light It Up

Samuel Iwu

2225 Physics

Cellphone Spectrophotometer

Solei Jones

1014 Behavioral Science Lip Gloss Boss

Stephen Iwu

1616 Electronics/Engineering
The Effect of Extreme Temperature on Battery
Life

Ziair Davis

1329 Chemistry pH of Water

Indiana Math and Science Academy -

South

Aaron Sosbe

1731 Environmental Science Sink or Float

Jason Strain

1034 Behavioral Science
Does Chewing Gum Make You Smarter?

Jazmine Lee

1911 Material Science Which Burns Faster?

Nyree Carpenter

1009 Behavioral Science Do the Eyes Have It?

Saquella London

1016 Behavioral Science Taste the Rainbow

Indiana Math and Science Academy -

West

Adrianne Marquam

2234 Physics Duct Tape

Aleena Soomro

2311 Zoology

Preference of Food Colors

Alyssa Riley

1377 Chemistry

Expensive Orange Juice

Carmentina Vidal

1735 Environmental Science

Which Paper Towel Absorbs the Most?

Erianaj Roach

1725 Environmental Science

What Is the Effect of Temperature as Water

Freezes?

Franklin Pineda

2243 Physics

What Brand of Battery Lasts the Longest?

Jaleya Edwards

1111 Biochemistry

Apple a La Carte

Jaqueline Beltran

1705 Environmental Science

What Is the Effect of the Size of a Bottle on

the Formation of a Cloud?

Micah Jeter

1346 Chemistry

The Effect of the Temperature of Water on

Dry Ice

Omar Terrazas

2252 Physics

Homo-Polar Motor

Reynaldo Serrano

1381 Chemistry

Which Liquid Stains the Most?

Sarah Muro

2238 Physics

What Hairspray Holds Best?

Savanna Neikirk

2240 Physics

Strength Over Magnets

Victoria Hill

1115 Biochemistry

In Which Wrapping Will a Sliced Apple Stay Fresh the Longest While in the Refrigerator?

Lorain Community Middle

Londyn Grieve

1342 Chemistry

Matchbox Rocket Heads

Lorain Prep Academy

Destiny Ramos

1027 Behavioral Science

What Happens When Animals Are Given

Similar and Different Treatments?

Jordyn Moye-Sledge

1624 Electronics/Engineering

What Makes Ferris Wheel Move?

June Mckinney

1507 Earth and Space Science

Why Does the Moon Crate the Tides?

Katelin Jones

1213 Botany

How Plants React to the Sun

Nichole Cooper

1813 Health

The Kidney

Tianna Spraggins

1509 Earth and Space Science How Do the Stars And Planets Help the Earth and How Do They Form?

Triniti Hohn

1829 Health

How Do Drugs Affect an Unborn Baby?

Madison Community Elementary

Arianna Soldan

1383 Chemistry Soda And Soda Menlo Park Academy

Alexander Masgras

1360 Chemistry

Which Acid Will Create the Largest Reaction in a Baking Soda Volcano?

Alexander Khoretonenko

1833 Health

Does Stretching Affect Grip Strength?

Alexia Siehl

1918 Material Science Which Type of Solution Will Grow the Largest Alum Crystal?

Boris Khoretonenko

1350 Chemistry

What Is the Best Ratio of Water, Ice, and Salt to Lower Temperature?

Drew Gibson

2219 Physics

Which Type of Scooter Wheel Has the Greatest Effect on Speed?

Katie Munro

1217 Botany Does the Orientation of a Plant Affect the Plant's Growth? 24

Lillian Ross

1029 Behavioral Science Which Vegetable Is the Most Satisfying for a Guinea Pig?

Megan O'Donnell

1721 Environmental Science Cleaning Oil from Feathers

Valerie Laurianti

2233 Physics

Which Angle of Push-Off Best Propels a Swimmer to a Furthest Distance?

Michigan Math and Science Academy

Alexander Hardwell

2005 Mathematics

Coin Exchange Problem: Chicken Nugget Theorem

Arvanna Grav

2308 Zoology

Does Light Affect the Coloration of Fish?

Bianca Torcuator

2314 Zoology

Egg Shell Project

Bryan Banaylo

1002 Behavioral Science

Incentives: Do They Influence Test Scores?

Dakota Kindred

2230 Physics

Persist to Resist

Elias Kashat

1618 Electronics/Engineering

Power of Food

Gabrielle Bagtas

1001 Behavioral Science Does Age Affect Memory?

Grace Tate

1224 Botany

Does Radiation Affect Plant Growth?

lleana Bell

1003 Behavioral Science The Smile Test

Joseph Woodall

1392 Chemistry

Big or Small Pieces: Which React Faster?

Justin Wilton

2010 Mathematics Circular Reasoning

Mason Brudzinski

1607 Electronics/Engineering
Development of a Low-Cost Aggregate
Imaging System

Omar Khanfar

1349 Chemistry
Which Hard Candy Will Provide the
Largest Diet Coke Explosion?

Pamela Smith

2009 Mathematics 6 Color Theory

Ouintin Andrews

2003 Mathematics
Can Parallel Lines Diverge?

Ridwan Hayder

1012 Behavioral Science
Does Music Affect Concentration?

Tim Deleo

1609 Electronics/Engineering
What Light Bulbs Can Lit Up By A Plasma Ball
Current Going Through The Human Body?

Tori Palka

1026 Behavioral Science Bystander Effect

Vincent Wilton

1638 Electronics/Engineering A Swinging Personality

Milwaukee Math and Science Academy

Diamond Coleman

1810 Health Tooth Decay

Gnolya Duncan

1110 Biochemistry Onion DNA

Jaylen Ammons

2202 Physics

Gauss Rifle - Linear Magnetic Accelerator

Lachante Sanford

1727 Environmental Science Levels of Lead in Water from New and Old Buildings

Nadia Blockton

1706 Environmental Science pH Levels in Water

Patricia Adams

1301 Chemistry Column Chromatography

Sahara Ali

1802 Health How Does Mold Form

Vera Gaines

1208 Botany Hydroponics

Minnesota Math and Science Academy

Hamdi Bare

1703 Environmental Science I'm Trying to Breathe Here! Dissolved Oxygen vs. Temperature

Ko Meh

1717 Environmental Science
How Does Soil Affect the pH of Water?

Nuh Misirli

1363 Chemistry Which Substances Will Save Your Water Damaged Phone?

Noble Academy - Cleveland

Beyza Efe

2215 Physics Rock Candy Crystals

Daniel Clemmons

1323 Chemistry

Does Tea Stain Your Teeth?

Emon Brown

1902 Material Science
Can Natural Hair Dye Come Out in 5 Washes?

Ivana Palmer

1369 Chemistry

Testing the pH And Alkalinity of Personal Care Products

Kaden Hales

1503 Earth and Space Science Frozen in Time

Mahrreon Greer

1712 Environmental Science Composition Chamber

Michael-Jade Greene

1905 Material Science Paper Towel Absorbency

Nadia Cook

1205 Botany

Caffeine's Effect on Plant Growth

Savannah Gilliham

1338 Chemistry

The Effect Of Temperature On Reaction Time

Taiyana Elzy

1334 Chemistry

Homemade Soap vs. Store Brand Soap

Noble Academy - Columbus

Abderrazzak Habroune

1343 Chemistry

Water Depth and Pollution

Ali Latif

1356 Chemistry

Testing Ground Level Ozone in Indoor

Environments

Ayah Mesbah

1216 Botany

The Effect of Sugar and Salt on Lentil Bean Growth Rate

Davon Fair

2305 Zoology

Forensic Hair and Fiber Analysis of Different Species

Hasan Kucuker

1621 Electronics/Engineering
Effects of the Number and Size of Blades of
a Wind Turbine on Electrical Output

Jimmy Nguyen

1719 Environmental Science Investigate How Adding Salt to a Microbial Fuel Cell Changes Its Power Output

Kelvin Konadu

1620 Electronics/Engineering Battery Power

Mariam Mohamed

1019 Behavioral Science
Which Hand Is More Sensitive?

Mohamed Jama

1212 Botany The Effect of Soda on Lima Bean Plant Growth

Naima Jama

1116 Biochemistry
The Determination of Similar DNA
Sequences through Agarose Gel Electrophoresis

Nancy Freeman

1207 Botany Coffee or Water?

Nastexo Abdullahi,

1601 Electronics/Engineering
Characterization of the Solar PV Panels
for Maximum Power Output Capture

Omar Ibraheem

2104 Microbiology
The Effect of Crude Oil on the Biodiversity
of an Aquatic Environment; Simulate an
Environmental Change

Tajah Alkhalifa

1104 Biochemistry
Separation of Hemoglobin from Vitamin
B12 By Gel-Filtration Chromatography

Zaid Bader

2206 Physics Measuring Light Speed

Old Brooklyn Community Elementary

Cleopattra Osborne

1626 Electronics/Engineering How to Make a Simple Motor

Old Brooklyn Community Middle

Amadalise Davis

2214 Physics Ice Age Melt Down

Anthony Bencina

2211 Physics Hoops

Arieliz Figueroa

2216 Physics The Amazing Egg Drop

Hailey Woodall

2254 Physics
Does Size Matter?

Jeremy Senal

1916 Material Science How Durable Are Paper Towels

Kayla Earnhart

1333 Chemistry Fiery Fabrics

Ruthie Sasso

1379 Chemistry Electrophoresis

Parma Community High

Jessica Billick

1605 Electronics/Engineering
Trusses: The Effect Of Supports

Parma Community Middle

Andrew Lampa

1910 Material Science

Metal Reactivity

Daniel Przybysz

1402 Computer Science

Making Stalactites with Different Chemicals

Kyle Pekar

2242 Physics

Which Armor Is the Best?

Molly Pekar

1370 Chemistry

Browning Apples

Nathan Taras

1385 Chemistry

Electrolytes

Nicholas Kindrat

2229 Physics

Does the Mass of an Item Effect the Distance It Travels When Launched from A

Catapult

Puritas Community Middle

Kristen Oestreich

1024 Behavioral Science

Is Sensitivity Heightened on Your Domi-

nant Side?

Quest Charter Academy - Peoria

Chynna Bell

2210 Physics

Does Temperature Impact Density?

Ciara Campbell

1319 Chemistry

Which Type of Soap Is Best for Skin?

Joshua Romain

2245 Physics

Does Particle Size Impact the Flow Rate?

Kayla Mendoza

2105 Microbiology

Which Onion Will Show the Best DNA?

Kaylee Munter

2237 Physics

Which Brand Is Truest to Its Colors?

Mariah Hopson

2224 Physics

Does Temperature Impact the Bounce of a Ball?

Maryjane Spangler

1733 Environmental Science

Removing Water from Oil

Mohammed Alashqar

2001 Mathematics

Which Formula Is the Most Accurate for Estimating the Volume of an M&M Candy?

Rico Garcia

2218 Physics

So Many Trusses!

Ryan Johnson

2226 Physics

What Materials Block Radio Waves?

Xavier Vital

1127 Biochemistry

Which Drink Has the Most Electrolytes?

Zoe Kirksey

1352 Chemistry How Do Acids Affect the Rate of Corrosion?

Science Academy of Chicago

Arif Soydan

2312 Zoology
The Effect of Temperatures on Crickets
Oxygen Usage?

Ayse Cavus

1808 Health

Measuring the Amount of Tar in Cigarettes

Aysesule Gulsen

1906 Material Science Keep Your Body Warm

Bugra Canbolat

2303 Zoology The Effect of Temperature on Crickets Carbon Dioxide Usage?

Daniel Mitev

1718 Environmental Science
Heavy Metals and Aquatic Environments

Esra Taysever

2251 Physics
Radiation in Different Types of Electronic
Devices

Hatice Canbolat

2102 Microbiology
Do Synthetic or Natural Pain Relievers
Affect Bacteria More?

Ibrahim Arifi

2205 Physics

Comparing Thermal Insulation

Kubra Sude Taysever

2313 Zoology

Testing Daphnia Heartbeat with Different Types of Water

Layan Dhaher

1818 Health

How Age Affects Heart Rate During Exercise

Neslihan Kahraman

1831 Health

How Much Caffeine Is Inside Your Coffee or Tea?

Sadi Keskes

2228 Physics

Does Temperature Affect Magnetic Field?

Safa Mohammed

1914 Material Science Making a Conductive Gel from Organic Materials

Veli Serbet

2108 Microbiology Which Toothpaste Is the Most Effective in Blocking Bacterial Growth?

Yusuf Turhanogullari

1734 Environmental Science How Does Dissolved Oxygen Differ in Different Locations of Lake Michigan?

Zaid Usman

1842 Health How Do Different Drinks Affect Tooth Enamel?

Westpark Community Middle

Caleb Moore

1365 Chemistry Chip Bag Inferno

Devlin Sheehan

1031 Behavioral Science Video Games vs. Memory

Eriana Browning

1317 Chemistry Colorful Flames

Kaitlyn Buncher

1501 Earth and Space Science
Do All Liquids Evaporate at the Same Rate

Kate Barrett

2209 Physics How Does the Wind Speed Affect the Lift of a Plane?

Maggie Kundla

1015 Behavioral Science
Did You Hear That?



<u>Chicago Math and Science Academy</u> Eric Catalan, Kelvin Sherman

138-Printing at Its Finest

Kingley Chukwudi, 21-Binomials With Pascal

Lance Velez, Gabe Ojeda

17-How Much Does the Ball Travel?

Roshaan Siddiqui, Abenazer Mekete

80-Sport for the Mind

Gateway Science Academy - Fyler

Brandon Sidenstricker,

92-Magnetic Linear Accelerator

Rhiannon Hausel,

107-Singing Glasses

Horizon Science Academy - Cleveland

<u>High School</u>

Alexandra Watley,

56-Smashing Thermit Reaction

Aneesah Hill,

117-Wooden Blocks

Arika Hayes,

90-Surface Tension

Asia Murchison,

84-Daphnia Necklace

Carl Rivers.

125-Snap Circuits

Corey Rogers,

54-Newton's Beads

Damien Turner,

119-K'nex

Del-Marcus Goolsby,

141-Maglev Train

Dewaine Billingsley,

94-Cartesian Diver

Dezmon Wade,

45-Oh No Not Foil!

Edward Deleon,

122-Bed Of Nails

Erick Osorio, Michaela Durrette

86-Windbag - Bernoulli Principle

Essynce Mitchell,

123-Building Bricks

Fareed Abdullah,

62-Safe Swimming with Sodium

Gabriel Clemmons,

64-Hand Boiler

Gregory Beauchamp Rodriguez,

121-Magformers

Hudaifah Pennington,

110-Battery Train

Kevin Goolsby,

81-T-Bot li Robotic Arm

Keyana Leonard,

69-Fun Dry Ice Crystal Ball Bubble

Keyana Leonard,

22-Nine Men Morris Game

Liam Rafferty,

71-Fun Crazy Cool Reaction

Rashell Anderson,

72-Indicator Sponge

Robert Rogers,

143-Hovercraft

Selena Bostick,

144-Spillnot

Tai'veon Lindsey,

148-Sound Hose

Tyjuan Black,

149-3D Mirascope

Tyree Lee Gonzales,

150-Newton's Nightmare - Lenz's Law

<u>Horizon Science Academy - Cleveland</u> Middle School

Aleja Archie,

87-Color Changing Milk

Alexya Foster,

57-Bubbling Lava Lamp

Jaylin Jackson,

68-Bouncing Bubbles

32

Makaila Hauser, Barrick Wilson

14-Mathemagicians

Maricela Anderson, Jalia Tyner-Gas-

ton

12-Draw Without Raising Your Hand.

Mekdes Shiferaw,

105-Walking On Broken Glass Barefoot

Rysheen Sharp, Miranda Crump

108-Inertia

<u> Horizon Science Academy - Columbus</u>

Elementary School

Idil Ali,

38-Matchstick Games

Kofoworola Sholesi,

20-How Many Times Can We Fold A

Paper?

Zakia Essa, Ahlam Ahmed

77-Fun Crazy Boo Bubbles - Dry Ice

Smoke Bubbles

Horizon Science Academy - Columbus

High School

Ali Daboubi, Zakaria Abdi

52-Water Proof Of Pythagorean Theorem

Brady Sayre,

59-Red Cabbage Indicator

Christina Amnathphonthip, Xafsa

Aden

128-Puzzle Cube

Don Cing, Nimco Mohammed

97-Air Cannon

Fartun Mahamud, Abeba Fesseha

63-Particle Movement In Milk

Karim Aguado,

24-Algebra Tiles

Tyler Webb, Kevin Ansong

83-Energy Bike

<u>Horizon Science Academy – Columbus</u> Middle School

Alusine Bayorh, Michelle Arhin

112-Playground Project

Fatuma Abdullahi, Kedawit Shishay

111-Playground Project

Immanuelle Nixon,

113-Playground Project

Horizon Science Academy – Dayton Asante` Anderson.

49-Freer Tile Puzzle

Ashley Greg,

48-Building Bridge

Jasmine Middleton,

101-Newtonian Demonstrator

Jasmine Middleton,

32-Solar Hot Dog Cooker

<u>Horizon Science Academy – Dayton</u>

<u>Downtown</u>

Ilyaz Iskandar,

36-Irreducible Trees of Size N Equals 10

Kamren Smith,

25-Demonstrate And Prove That 1=2

Lorenzo Mcwhorter,

15-Geometry & Billiards

Sebastion Hitchcock,

137-Tornado

Horizon Science Academy - Dayton

Elemantary

Amir Riggins, Samir King

51-Origami

Kylah Edwards, Anthony Gladney

19-Patterns For Multiplication

Horizon Science Academy - Lorain

Ivan Zepeda,

67-Dissolving Paper

Kaitlyn Boyd,

26-Hanoi Towers

Leaisha Shannon,

140-Magical Movement

Olivia Bratulic, Camarea Snipes-Thom-

as

10-Pythagoras Tree

Stacey Barron,

147-How Does Laser Light Bounce Off of the Surface of the Water Marbles

Stephanie Barbour, Sydney Contreras

5-Math Shows and Tricks

Vanessa Dugas, Oleana Zepeda

152-Water Benders

<u> Horizon Science Academy – Southwest</u>

Cristobal Calderon,

85-Giant Alcohol Cannon

Gabriel Gonzales,

65-Polyurethane Foam

Ivan Barajas,

134-Can Crusher

Jasuah Vaughn,

135-Flying Ping Pong Ball

<u> Horizon Science Academy - Springfield</u>

Juliana Barbaur,

28-Finger Multiplication

Kylah Spencer, Nayr Henry

70-Cloud in a Bottle

Shataira Davis-Young,

145-Leak Proof Bag

Tyrelle Devault,

151-Marshmallow Masher

<u> Horizon Science Academy - Toledo</u>

Alyssa Mays,

58-Disappearing Water

Arianna Muniz, Orchid Mckinney

115-The Design Process-Puzzle Cube

Challenge

Dushaun Mothershed,

88-Eating Nails For Breakfast

Hayden Champnoise,

66-CO2 Fire Extinguisher

Javier Buenavista,

124-Ferrofluid

Miara Carpenter,

78-Best Way to Clean an Oil Spill

Sonny Molten,

73-Dry Ice Color Show

Terrell Green,

75-Genie In A Bottle

Zachary Wilson, Austin Landin

114-PLTW Inventor

Horizon Science Academy McKinley Park

Emilio Mendez, Kevin Franco

42-Mathematics and Chess

Julisa Rodriguez, Cynthia Luna

27-Amazing Magic Trick

Horizon Science Academy Southwest

<u>Chicago</u>

Ashley Lazaro,

47-Tangram

Kayla Allen,

23-Math Magic

Horizon Science Academy-Belmont

Jasmine Jones, Dylan Figueredo

31-Soma Cubes

Ladi Figueredo, Dakari Thomas

18-Bubble Shapes from 3D to 4D

Horizon Science Academy-Cincinnati

Jenika Macias, Kayla Geralds

30-Pascal's Triangle Number Patterns

Rashawn Lee, Kushi Abraham

8-Interesting Matchstick Puzzles

<u>Indiana Math and Science Academy – North</u>

Amariah Hurt,

139-Van Degraaf Generator

Chedan Moore,

60-Yellow Blue Switcheroo

Dulce Zagal- Garcia, Allania Picket

44-Building A Geodesic Dome, Maya Math

lan Jiles, Saulo Sauza

98-Pressure Puller

Latia King,

104-Hand Generator

<u>Indiana Math and Science Academy – South</u>

Daryka Johnson,

61-Cleaning Pennies

Devauna Washington,

133-Creation Of Foam

Jaden Jamison, Carlos Servin

34-Solutions to Rubik's Cube:

Sterling Smith Jr.,

74-Electrochemical Cell Conversion

<u> Indiana Math and Science Academy – West</u>

Devin Bryant,

55-Anti-Gravity Mirror

Edward Schneider,

120-Plasma Globe

Isaiah Anderson,

100-Apple Drop

Jonathon Bethancourth, Micah Jeter

29-Ames Room

Raul Augustin,

89-Smoke Ring

Tamarra Fuentes, Karma Chappell

4-50 States Game

Michigan Math and Science Academy

Adam Khanfar,

53-Card Tricks

Ayanna Lawson,

91-Rotational Inertia Set (Disc)

Ciara Mitchell,

93-Standing Wave

Diamond Henderson,

95-Super-Flex I-Beam

Dommique Diamond,

96-Asterism - Hypnotic Pendulum

Imtihan Chowdkury,

35-Sum of Powers of 2

Kennedi Harris,

102-Polarizer Demonstrator

Lataijah Ford,

103-Rotational Inertia Wands

Mable Hearn, 118-Solar Robots

Messiahtress Johnson, 106-Levitating Board

Michigan Math and Science Academy Horizon Science Academy – Cleveland High School Zariah Bridges, Cameron Bray

136-Candle Car- Reversible Thermoelectric
Generator

Milwaukee Math and Science
Fredrick Smith,
40-1 Can Guess the Number in Your Head

Jaramogis Denton, 33-Prove That "1 = 2"

Minnesota Math and Science Academy
Abdikhaliq Aden,
116-Simple Electric Motor

Mohamud Bule, 82-Fuel Cell Car

Shukri Jama, Asiya Abdi 146-Mixing Color Apparatus

Thea Gilsrud, Hamdi Ali 76-Elephant Toothpaste

Noble Academy - Cleveland China Williams, Reagan George 79-Hydraulic arm

Imari Warfield, Devin Reed-Bennings 131-Arduino project Mehmet Fesli, Nathanael Ahiagbedey 129-Arduino-Kinect Project

Desiree Hunter, Taje Jones 46-Where Does Pi Come From?

Malica Washington, Qaasim Abbas 13-Are You A Golden Person?

Noble Academy Columbus
Omar Umayma, Davon Fair
9-3d Paper Engineering

Zaid Bader, Hasan Kucuker 1-Origami-Paper Architecture

<u>Quest Charter Academy – Peoria</u> <u>Lindsay Spiegelmeyer,</u> 16-The Locker Problem or Magic Number

Austin Worley, Jaime Sivongsay 126-Laser Manufacturing

Caleb Gaston, 132-Animated Peg Board

Nolan Taylor, Alexa Uriostegui 127-Robotic Toys

Steontae Linwood, Keanna Stokes 130-3D Modeling

Science Academy of Chicago Ari Fiskin, 50-Pick's Theorem

Efe Caputlu, Saif Athca 43-Napier's Bones (World's First Calculator)

Erkam Isbilir, 41-Metal Puzzels

Gulnur Bora, Dilara Soydan

99-Makey Makey

Hassan Ali,

39-Wooden Multiplication

llayda Bilgin,

37-Hypsometer

Mehmet Ates, Ehat Duman

11-Topological Ropes

Meliha Aycicek,

142-Flying Nemo

Salma Sajjad,

7-Absolute Value Using Number Line

Saniye Uslu, Hatice Ucan

109-Wimshurst Machine - Franklin's Bell

Selma Ucan,

6-Math and Chess

Tuba Korkmaz,

3-Stick Stool That Can Hold Up to 5 Pounds!

Vera Kartal, Sakina Kanji

2-Abacus (Add, Subt, Mult&Div)



1002 - Gateway Science Academy of St.

Louis

Refik Celik Vahdet Karatas JD Putnam

1003 - Horizon Science Academy

Southwest

Julian Cardiel Efrain Cuevas Leslie Garcia

1004 - Horizon Science Academy

Youngstown

Jason Vargas Shirmon Hicks Benjamin Harris

1005 - Science Academy of Chicago

Neslihan Kahraman Layan Dhaher Hatice Ucan

1006 - Science Academy of Chicago

Mehmet Ates Zain Akbar Burak Cetinkaya

1007 - Noble Academy Columbus

Walden Hart Wulf Mech Ali Latif

1008 - Horizon Science Academy Columbus Elementary

Hassan Hassan Kofi Barima

1009 - Horizon Science Academy

Columbus Elementary

Anwar Aguado Quzeyma Mohamed

1010 - Quest Charter Academy Middle

School

Waldo Reyes Madison Mendoza

1011 - Quest Charter Academy Middle

School

Sarah Alashqar Kevin Uriostegui

1012 - Quest Charter Academy Middle

School

Braxton Evans Camden Porter

1013 - Horizon Science Academy Belmont

Julian Soto Jadakis Barajas

1014 - Horizon Science Academy

Mckinley Park

Crisbear Perez Tariq Mohammad Omer Cengiz

1015 - Horizon Science Academy Mckin-

lev Park

Iris Acosta Carleagle Perez Issys Russell

1016 - Horizon Science Academy Youngstown

Jinnon Gibbs Jack Armstrong Jordan Martin

1017 - Horizon Science Academy Columbus Middle School

Tyler Fowsantia Dylan Notoma

1018 - Horizon Science Academy Columbus Middle School

Jeremy Acheampong Christian Ramos

1019 - Horizon Science Academy Columbus Middle School

Jason Nguyen Justin Nguyen

1020 - Horizon Science Academy Columbus Middle School

Alan Sanchez-Salgado Jesus Salgado-Sanchez

1021 - Indiana Math and Science Academy North

Dorian Pimpton Stephen Iwu Noah Boggs

1022 - Horizon Science Academy Belmont

Jonathan Correa Shaniya Shittu Stacey Layne

1023 - Horizon Science Academy Denison Middle

KIA JORDAN Michaela Gillispie Khamari DUNN

1024 - Horizon Science Academy Denison Middle

Rafat FARAH JR Jonathan GILLISPIE Keyshawn HACKNEY

1025 - Horizon Science Academy Springfield

Alan Dyer-Essig Aaron Green Robert Sandridge

1026 - Chicago Math And Science Academy

Hunain Siddiqui Fuad Odutola Shadiyat Batula

1027 - Chicago Math And Science Academy

Raphael Chora Jesus Bucio Thannia Hernandez

1028 - Chicago Math and Science Academy

Hashim Hanif Samson Okunola Mohammed Raheem

1029 - Milwaukee Math and Science Academy

Jkwon Denton Skinner Derion

1030 - Milwaukee Math and Science Academy

Jeden Logan Ameer Gray

1031 - Horizon Science Academy Lorain Omer Keles

Joshua Massa Carlos Fernandez

1032 - Horizon Science Academy Lorain

Joshua Renta Jessie Gonzalez Syncere Rogers

1033 - Horizon Science Academy Southwest

Mark Barczak Awan Jones Irubiel Martinez

1037 - Horizon Science Academy Dayton Elementary

Aundree Smith Martin Alexzander Tamarrius Johnson

1038 - Indiana Math and Science Academy West

Juan Cordoba Omar Terrazas

1039 - Horizon Science Academy Toledo

Orlando Williams Camaron Thomas Jared Baldwin

1040 - Horizon Science Academy Cleveland Middle

Justin Williams D'Aundre Frazier Anthony Byrd

1041 - Horizon Science Academy-Cincinnati

Jessy Aremontie Maynor

1042 - Indiana Math And Sience

Academy Quinton Gray Jerry Williams

Ali Coulibaly

2001 - Horizon Science Academy Toledo

Patrick Pettaway
Josue Quinones

2002 - Michigan Math and Science

Academy Joel Shull Willie Selph

2003 - Michigan Math and Science

Academy
Rizwan Hayder
Melvin Ramic
Alfonso Torcuator

2004 - Horizon Science Academy Lorain

Krystian Garcia

2005 - Horizon Science Academy Lorain

Joseph Vaughn

2006 - Indiana Math and Science

Academy North

Micheal Cushingberry

Kevin Zielger Brandon Williams

2007 - Indiana Math and Science Academy North

Samuel Iwu Timothy Spearman Kevin Verdugo

2008 - Indiana Math and Science Academy North

Kila Davis Ruben Verdugo Saulo Sauza

2009 - Indiana Math and Science

Academy North Benji Cordoba Norberto Moran Ronald Srygler



Thank you to all of our judges!

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Barry Cummings - Fisher Scientific

Basem William - University Hospitals Case Medical Center Bethany Dille - Concept Schools Bill Nelson - DCT Telecom Group Carl Allamby - CSU/NEOMED Carolina Marguez - CSU/NEOMED Partnership Chandra Krishnan - CMSD & TRI-C Charles Tillie - Cleveland State University Charlie Androjna - Cleveland Clinic Chintha Bastian - Cleveland Clinic Foundation Chris Flask - Case Western Reserve University Chrishaun Smith - Concept Schools Christine Lee - Cleveland Clinic/CWRU Cindy Zanin - Case Western Reserve Univeristy Clifford Packer - Cleveland VA Hospital Clyde Dorsey - Cleveland Metropolitan School District Cole Nemanic - Concept Schools Corbin Brangham - Concept Schools Cortney Weisert - Constellation Schools Courtney Turner - Concept Schools **Crystal Fries - Concept Schools** Dan Leu - Concept Schools Dana Ali - Cleveland State University Daniel Tisch - Case Western Reserve

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Francis Afram-Gyening - Care Alliance Health

Gabriela Voskerician - Case Western Reserve

Frank Musarra - Concept Schools

Ganapati Mahabaleshwar - Case Western Reserve University Genny Diaz - Concept Schools George Kikano - Case Western Reserve University Gwendolyn Kinebrew - Cuyahoga Community College Hailey Vest - Concept Schools Hamza Balci - Kent State University Hannah Bond - Renhill Group Hua Lou - Case Western Reserve Univeristy Ian Rice - Concept Schools Jagjit Singh - Cleveland State University Janette Gallup - Concept Schools Jean Eastman - Case Western Reserve University Jeff Logan - Constellation Schools Jeffrey Jaroscak - ESC of Lake Erie West Jenise Snyder - Ursuline College Jenn Boucher - Concept Schools Jenna Bachmayer - Concept Schools Jennifer May - Constellation Schools Jerry Silver - Case Western Reserve Univeristy Jessica Cooke Bailey - Case Western Reserve University Jey Ebron - Cleveland State University Jim Mackey - Hyde Marine, Inc. Jingle Jiang - Cleveland Clinic Jirair Bedoyan - University Hospitals Case Medical Center Joanna Demarco - Cleveland State University

Center

University

Jocelyn Byrd - Concept Schools Lan Zhou - Case Western Reserve University Lana Pollock - Case Western Reserve Univer-Joe Calinger - Buckeye Community Hope Foundation sity John Gale - Cleveland Clinic Laurel Tombazzi - Eastern European Congress John Harkness - ASMI of Ohio Jonatha Gott - Case Western Reserve Leah Wolfert - Concept Schools University Lena Grafton - Cleveland State University Lisa Zollos - Constellation Schools Joseph Baar - Seidman Cancer Center Lukas Pfannenstiel - Cleveland Clinic Joseph Bianchini - Cuyahoga Community College Lynn Ulatowski - Case Western Reserve Joyce Lewis - Concept Schools University Judith Johnston - Imani Graphics Mabruk Quabili - University of Kentucky Judy Varn - Self Employed Mahazarin Ginwalla - University Hospitals of Kailash Gulshan - Cleveland Clinic Cleveland Karen Mulloy - Case Western Reserve Man-Sun Sy - Department of Pathology, School University of Medicine Marcela Diaz - Cleveland Clinic Foundation Kate Glenn - Concept Schools Kath Bogie - Case Western Reserve Marilyn Lotas - Case Western Reserve Univer-University sity Kathleen Sebastian - Constellation Maritza Rosales - Concept Schools Schools Mark Cohen - University Hospitals Katie Mcneill - Paulo Products Mark Lucera - Case Western Reserve Univer-Katie Meder - Concept Schools sity Kaushik Ghosal - Rexceptor Marta Couce - UH Hospitals Case Western Kelly Christian - Lawrence School **MEdical Center** Assessment Center & Daily Behavioral Matt Roode - The Boeing Company Health Matthew Citron - Washington High School Kelly Miller - Concept Schools Matthew Cooney - University Hospitals Seid-Kimberly Elliott - Advanced Solutions for man Cancer Center Education Matthew Iorio - Neuros Medical Md Golam Sharoar - Cleveland Clinic Founda-Kirby Meacham - Meacham Company Kittu Garg - Cleveland Clinic Foundation tion Kyle Fluegge - Case Western Reserve Meghan Cremean - Concept Schools University Mekki Bayachou - Cleveland State University L. Felipe Martins - Cleveland State Melike Koc - Concept Schools Melissa Beland - Concept Schools University

Mette Johansen - Case Western Reserve University Michael Bruckman - Case Western Reserve University Michael Elliott - Saint Louis University College for Public Health and Social Justice Michael Feldman - Constellation Schools Michael Fu - Case Western Reserve University Michael Wolfert - Graftech Michele Portelli - Concept Schools Mikhail Khoretonenko - Lakeland Community College Miklos Gratzl - Case Western Reserve University Mohsen Seifi - Case Western Reserve University Molly Schroeder - University Hospitals Musa Audu - Case Western Reserve University Nagarajavel Vivekananthan - Cleveland Clinic Natalya Makarova - Cleveland Clinic Nathaniel Bond - Concept Schools Nazha Abughali - MetroHealth Medical Center Neelesh Sharma - University Hospitals, Case Western Reserve UNiversity Nicole Brock - Buckeye Community Hope Foundation Nicole Kratz - Concept Schools Nissreen Elfadawy - The Cleveland Clinic Oguzhan Yildiz - Concept Schools Omar De La Cruz Cabrera - Case Western Reserve University Paul Herdeg - Volunteer Pieter Dehaseth - Case Western Reserve University

Pingfu Feng - Case Western Reserve University Polly Phillips-Mason - Case Western Reserve University Prateek Mendiratta - Cleveland Clinic Qingzhong Kong - Case Western Reserve University Qiuyun Chen - Cleveland Clinic Raed Dweik - Cleveland Climic Ramy Masroujeh - Louis Stokes VA Medical Center Rehan Waheed - CHRP/BHP/VA/CWRU Renee Villaire - NRCS Reyhan Demirci - Concept Schools Robin Jump - Cleveland Veterans Affairs **Medical Center** Rosa Madison - Constellation Schools Rosemary Mcguckin - Concept Schools Sabura Rashad - Concept Schools Samantha Stromquist - Concept Schools Sanjay Anand - Cleveland Clinic Sarah Poling - Concept Schools Shannon Mitchell - Concept Schools Sharon Mcgraw - Concept Schools Sharon Washington - Virtual Schoolhouse Sherry Simon - Concept Schools Shivani Patel - Case Western Reserve University- Case Comprehensive Cancer Center Sinziana Seicean - Heart and Vascular Instituite Sophia Nelson - Concept Schools Sreedevi Goparaju - Cleveland Clinic foundation Stefanie Ostkar - Concept Schools

Stephen Mack - Cleveland Clinic Steven Eppell - Case Western Reserve University Susan Burden-Gulley - Case Western Reserve University Susmita Chakrabarti - Cleveland Clinic Lerner Research Svetlana Pundik - Cleveland VA Medical Ceneter Tammy Randall - Case Western Reserve Univeristy Tera Lackofi - Constellation Schools Teresa Carman - Case Medical Center Timothy Hatfield - HPAC Timothy Nilsen - Case Western Reserve University Umut Gurkan - Case Western Reserve University Vasu Kommireddy - The Cleveland Clinic Foundation

Veronica Getsy - Concept Schools
Victoria Nowak - Constellation Schools
Victoria Reed - Concept Schools
Vincent Pauline Perez - Case Western

Warren Alilain - MetroHealth Medical Center and Case Western Reserve University

Wenguan Zou - Case Western Reserve

Xiaoyong Fu - Case Western Reserve

Xin Yu - Case Western Reserve University
Ya Chen - Case Western Reserve Univer-

Yana Sandlers - Cleveland State University

Reserve University

SOM

University

University

sity

Yazan Dweiri - Case Western Reserve
University
Youwei Zhang - Case Western Reserve
University
Zhihong (Z) Chen - Cleveland Clinic
Alyssa Charrier - Case Western Reserve
University
Sherwat Abdelrahman - Ain Shams
University, dept of neurology, Egypt
Piyush Walia - Cleveland Clinic
Gagandeep Singh - Case Western Reserve
University
Matthew Kowalski - Industrial5
Mir Ali - The Wireless Center



Thanks to all participants for sharing the creative entries; we truly value the time, effort and imagination the students put into each design.

1st Place Daniel Miranda – HSA Cleveland High School

2nd Place Alexis Ortega - HSA McKinley Park

3rd Place Nelly Reyes – HSA McKinley Park

Finalists- in alphabetical Order

Bryanna Ibarra - HSA McKinley Park

Chaz Sardin - Quest Charter Academy

Elias Figueroa- HSA Lorain

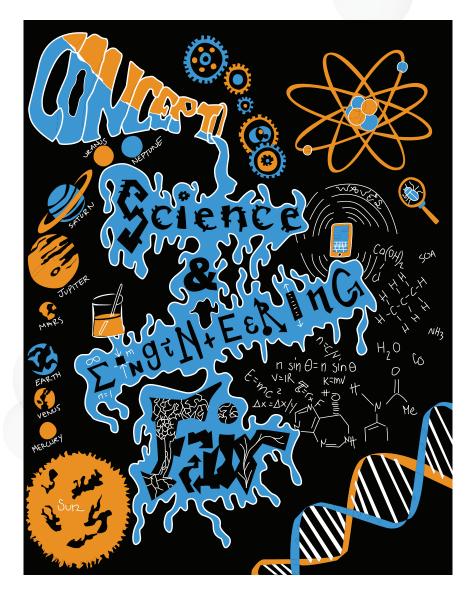
Leonard Cruz - HSA McKinley Park

Prince Cross - HSA Lorain

Shelby Powell - Michigan Math and Science Academy

Taya Johnson - Michigan Math and Science Academy





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