

## 2018 Des Moines Public Schools Science Fair Results

Des Moines Public Schools held its 10<sup>th</sup> annual district science fair on February 8<sup>th</sup> at the Science Center of Iowa. 260 students in grades 6-12 displayed their science and engineering project posters to volunteer judges representing corporations, higher education, and Des Moines Public Science Faculty.

Notable changes:

- High School projects increase from zero projects in 2013 to 72 projects in 2018
- Overall number of participating students has increased 51% from last year
- Many of our high school students are partnering with research institutions
- Approximately 800 people visited the fair.

Judges:

- Doctors, Professors, and Students from Des Moines University
- Professors and Graduate Students from Iowa State University
- Professors and Students from Grand View University
- Researchers from Dow-Dupont Pioneer
- Agronomist from Accelerated Ag Technologies
- Scientists from the USDA
- DMPS Secondary Science Teachers and School Board Member.

## RESULTS

### 6<sup>th</sup> Grade

School	Name	Project Title	Division	Place
Merrill	Alec Fialkov	Does brand type matter?	Consumer Science	1 <sup>st</sup>
Merrill	A'Taurea Dunlap	How much sugar is in that?	Consumer Science	2 <sup>nd</sup>
Merrill	Angel Toluwalase	What popcorn pops best?	Consumer Science	3 <sup>rd</sup>
Cowles	Shreeya Yarlagadda	The Effect of Bio-sand Filters on Nitrate and Nitrite Levels in Drinking Water	Earth/Environmental Science	1 <sup>st</sup>
Merrill	Ian Campbell	Nitrate Level-Creek vs River	Earth/Environmental Science	2 <sup>nd</sup>
Merrill	Cain Campbell	Water purification	Earth/Environmental Science	3 <sup>rd</sup>
Weeks	Zachariah Perry	Egg Drop	Engineering	1 <sup>st</sup>
Merrill	Kathleen Loder	Does Music Interfere with How Well 6th Grade Students Learn?	Life Science	1 <sup>st</sup>

Merrill	Daniel Fialkov	Does caffeine affect test taking?	Life Science	2 <sup>nd</sup>
Cowles	Emma Krambeck	How do pepper and salt effect plants?	Life Science	3 <sup>rd</sup>
Merrill	Maia Kissell	Too much of a good thing? (algae growth)	Microbiology	1 <sup>st</sup>
Merrill	Lydia Smith	What household object is the most contaminated with germs?	Microbiology	2 <sup>nd</sup>
Cowles	Levi Kimsey	Death Jump	Physical Science	1 <sup>st</sup>
Cowles	Bela Perkins	Corrosion	Physical Science	2 <sup>nd</sup>
Callanan	Michael Hodges	Acid Corrosion Explosion!	Physical Science	3 <sup>rd</sup>

## 7<sup>th</sup> Grade

School	Name	Project Title	Division	Place
Weeks	Andrew Bates	What type of oil works best to pop popcorn?	Consumer Science	1 <sup>st</sup>
Merrill	Maya Lint	What brand of toothpaste reduce bacteria?	Consumer Science	2 <sup>nd</sup>
Weeks	Alyssa Fisher & Kendalynn Locke	Tough Stains	Consumer Science	3 <sup>rd</sup>
Merrill	Megan Heilskov	Will plants help filter harmful nitrates water run off?	Earth/Environmental Science	1 <sup>st</sup>
Weeks	Callie Wicker	Water Purification	Earth/Environmental Science	2 <sup>nd</sup>
Weeks	Alexander Pond	Does Heat Affect the Speed of Currents?	Earth/Environmental Science	3 <sup>rd</sup>
Merrill	Temple Landry	Biodegradable Water Capsule	Engineering	1 <sup>st</sup>
Brody	Adysen Miller & Madison Ruby	Fuel Cells	Engineering	2 <sup>nd</sup>
Merrill	Cooper Michael	Effective Storm Drains	Engineering	3 <sup>rd</sup>
Merrill	Luke Garcia	How does exercise and healthy eating affect blood?	Life Science	1 <sup>st</sup>
Cowles	Zadie Hoff	Automatic Word Recognition	Life Science	2 <sup>nd</sup>
Merrill	Ethan Button	Does light affect how many eggs chickens lay?	Life Science	3 <sup>rd</sup>
Merrill	Celia James	What cleaning product kills the most E.coli bacteria?	Microbiology	1 <sup>st</sup>
Merrill	Arianna Jackson	Germs, Germs, Germs	Microbiology	2 <sup>nd</sup>
Merrill	Ke'Ayla Madison	Which food creates the most bacteria in your mouth?	Microbiology	3 <sup>rd</sup>
Merrill	Carlisle Tubbs	Taking the Sting from the Swing	Physical Science	1 <sup>st</sup>
Merrill	Prior Van Heukelom	Chemiluminescence	Physical Science	2 <sup>nd</sup>
Weeks	Aayailah Huff	What shape of car works best?	Physical Science	2 <sup>nd</sup>
Cowles	Julia Moody	Inclined Plane Acceleration	Physical Science	3 <sup>rd</sup>

**8<sup>th</sup> Grade**

School	Name	Project Title	Division	Place
Weeks	Esveidy Soto-Soto	Liquid vs Powder	Consumer Science	1 <sup>st</sup>
Weeks	Emma King & Carolina Castillo	What Form of Soap Cleans the Best?	Consumer Science	2 <sup>nd</sup>
McCombs	Katelyn O'Brien	Which Nail Polish Lasts the Longest?	Consumer Science	3 <sup>rd</sup>
Weeks	Priscilla Gallegos	Water Filtration	Earth/Environmental Science	1 <sup>st</sup>
Merrill	Charlotte Byers	Which material reduces sound the most?	Engineering	1 <sup>st</sup>
Merrill	Isaac "Ziggy" Page	The Radish and the Radiation	Life Science	1 <sup>st</sup>
McCombs	Jordan Toelle	Music and Its Effects	Life Science	2 <sup>nd</sup>
Weeks	Genesis Henriquez	Which Beverage Increases Your Energy?	Life Science	3 <sup>rd</sup>
Merrill	Nadia Palmer	Got Germs?	Microbiology	1 <sup>st</sup>
Merrill	Jackson Grant	Can you transmit data from a Computer that isn't connected to the internet?	Physical Science	1 <sup>st</sup>
Merrill	Ashton Belknap	How does car design affect drag?	Physical Science	2 <sup>nd</sup>
Merrill	Roaa Kordeir	Delta Waves Effect on Sleep Cycle	Physical Science	3 <sup>rd</sup>

**High School**

School	Name	Project Title	Division	Place
East	Ena Marie Guerra Caballero	Bubble it up	Consumer Science	1 <sup>st</sup>
North	Akpobari Godpower	Time and Compression	Consumer Science	2 <sup>nd</sup>
Central Campus/North	Jayda Anaya-Negrete	Determining Effectiveness of Chemical vs. Natural Cleaning Products to Rid Staphylococcus aureus bacterium	Consumer Science	3 <sup>rd</sup>
North	Nayely Velazquez	Erosion in Motion	Earth/Environmental Science	1 <sup>st</sup>
North	Juan Carlos Oropeza	Colored Water Temperature in Light	Earth/Environmental Science	2 <sup>nd</sup>
Central Campus/Hoover	Skylar Davis	Preservation of Fossils from Natural Trap Cave, Wyoming	Earth/Environmental Science	3 <sup>rd</sup>
Central Academy/East	David Turner	An Evaluation of Algorithms for Stylometric Analysis of Popular Science Articles	Engineering	1 <sup>st</sup>
Roosevelt	Ben Stone	Computer-Generated Geometry	Engineering	2 <sup>nd</sup>
Central Academy/Hoover	Kevin Li	Making a Better Wikipedia	Engineering	3 <sup>rd</sup>
Central Academy/	Rabsa Naseer	A proteinaceous comparison of common	Life Science	1 <sup>st</sup>

Roosevelt		research model organisms and Homo sapiens		
Central Campus	Cecilia Hodson	A taphonomic analysis of carnivoran fossils from Natural Trap Cave, Wyoming	Life Science	2 <sup>nd</sup>
Hoover	Rhiannon Brown & Olivia Proctor	The Connection Between Academic Performance and Depression for High School and College Students	Life Science	3 <sup>rd</sup>
Central Campus	Aditi Jithendra	Bacterial Rate of Resistance to Household Cleaning Products	Microbiology	1 <sup>st</sup>
Central Campus	Chase Johnston	Comparing the Effectiveness of Alcoholic Mouthwash and Non-Alcoholic Mouthwash When Applied to Staphylococcus aureus	Microbiology	2 <sup>nd</sup>
Central Campus/ North	Jennifer Nguyen	The effects of mouthwashes on oral bacteria	Microbiology	2 <sup>nd</sup>
Central Campus/ East	Sandy Le	Antibacterial Properties of Tea and Coffee	Microbiology	3 <sup>rd</sup>
Hoover	Ezra Halter, Jose Rodriguez, Rebekah Bourland, & Elizabeth Mora Huber	How Urban and Rural Areas Affect the Des Moines River	Physical Science	1 <sup>st</sup>
North	Aime Mukiza	Coke Cola vs. Water vs. Rust	Physical Science	2 <sup>nd</sup>
North	Cazia Stallings	Different liquids effect on Alka Seltzer	Physical Science	3 <sup>rd</sup>