



**RBSEF, Inc. Presents the  
67th Reading-Berks Science And  
Engineering Fair**

Albright College - Reading, PA

Bollman Center

March 18 – 21, 2019

# READING-BERKS SCIENCE AND ENGINEERING FAIR

ORGANIZED-1952  
Incorporated as RBSEF, Inc. - January 2003

Hosted By:  
**ALBRIGHT COLLEGE**

FOUNDED BY:  
**THE READING CHEMISTS' CLUB**  
In 1952

SUPPORTING ORGANIZATIONS:  
**THE SCIENCE TEACHERS OF READING AND BERKS  
COUNTY**  
From 1957

AND

**THE READING CHAPTER  
PENNSYLVANIA SOCIETY OF PROFESSIONAL ENGINEERS**  
From 1972

Special Thanks To:

Broadcom Foundation  
Dr. Carol Mapes, Kutztown University  
Harrisburg University  
Reading Eagle  
The King's Academy  
Witzel Sound Solutions  
WorleyParsons

## **SCHEDULE OF EVENTS**

Monday, March 18, 2019

5:00 PM – 8:00 PM PROJECT DISPLAY SETUP

Tuesday, March 19, 2019

8:00 AM - 3:00 PM JUDGING OF EXHIBITS  
STUDENT INTERVIEWS

Wednesday, March 20, 2019

9:00 AM - 4:00 PM TEACHER-CONDUCTED TOURS FOR SCHOOLS

9:00 AM - 6:00 PM FAIR OPEN TO PUBLIC

7:30 PM AWARDS PROGRAM  
Albright Chapel

### Introductory Remarks

Gregory Przyjemski, President, RBSEF, Inc.

Karen A. Campbell, Ph.D.  
Acting Provost and Vice President of Academic Affairs  
Dean of the Faculty  
P. Kenneth Nase Chair of Biology

### Presentation of Awards

Deanna Witzel, RBSEF Fair Director

Thursday, March 21, 2019

12:00 PM - 8:00 PM PUBLIC VIEWING  
REMOVE **ALL** PROJECTS

**ALL EXHIBITS MUST BE REMOVED BY 8:00 PM**

**Note: Any unclaimed projects will be disposed of.**

**FINANCIAL CONTRIBUTORS 2019**

**\$5,000 Contributor – Principal Sponsor**



**\$1,500 Contributors - Gold Sponsors**

American Geotech Inc.

**\$1,000 Contributors - Division Sponsors**

Schatz Electric, Inc  
Tompkins / VIST Bank  
UGI Utilities, Inc.

**\$500 Contributors-Division Co-Sponsors**

East Penn Manufacturing  
Michael and Rose Gerhart  
Steven Bright  
WorleyParsons

**\$250 Contributors-RBSEF Supporters**

JPMS Manufacturing LLC  
Traffic Planning and Design, Inc.

Any corporation or individual wishing to join in supporting the Reading-Berks Science and Engineering Fair may send a contribution to:

RBSEF, Inc.,  
PO Box 13314  
Reading, PA 19612

RBSEF, Inc. is a non-profit corporation whose sole purpose is the operation of the science fair. The Reading-Berks Science and Engineering Fair is incorporated as RBSEF, Inc. RBSEF, Inc. has an IRS 501 C3 tax exemption. Your charitable contribution may be eligible for a full tax deduction under the rules of the Internal Revenue Service.

## **CATEGORY AWARDS**

The decisions of the judges reflect their desire to recognize exhibitors who have displayed outstanding science and engineering projects. The award guidelines may be changed at the discretion of the award donor or the judges in order that deserving students may be recognized.

### **Senior Division - 9th through 12th grades.**

Honorable mentions in each of the nine classifications will receive badges and ribbons. First through fourth place winners will receive medals. The Grand Champion, the Champion and the Reserve Champion will each receive a plaque and a rosette. The Grand Champion and the Champion will be eligible to participate in the INTEL International Science and Engineering Fair to be held in Phoenix, AZ May 12 – May 17, 2019.

The Grand Champion, Champion and the Reserve Champion will be selected from the top projects in the Senior Division. The Assistant Fair Directors will determine the winners.

### **Junior Division - 6th through 8th grades**

Each grade, 6<sup>th</sup> through 8<sup>th</sup>, will have a Natural Science Category and a Physical Science Category and will receive the following:

Honorable mentions will be awarded badges and ribbons.

First through fifth place winners will receive medals.

Champion selected between the top Natural and Physical division and will receive a plaque.

Junior Division students in 1st to 5th place will receive Broadcom Masters awards and invitations to compete in the 2019 Broadcom Masters national competition.

All exhibitors whose entries were accepted by the registration deadline will receive certificates for their participation in the Reading-Berks Science and Engineering Fair.

## **SPECIAL AWARDS**

The special awards are judged and presented by the following professional, technical and civic organizations, corporations and the U.S. Armed Forces.

### **ACV Enviro**

Two \$75 awards to science fair competitors who best show interest in environmental stewardship and sustainability.

### **Alliance to the Berks County Dental Society**

Awards up to \$150, one each in the Junior and Senior Divisions, for outstanding exhibits in the field of dentistry.

### **Altrusa International of Reading**

A \$50 award to one girl and one boy in the Junior Division who have accrued the second highest number of points in natural or physical science.

**American Association of University Women, Reading Branch**

A \$200 award in the Senior Division, and a \$100 award in the Junior Division, to high ranking girls.

**American Geotech**

A \$200 award to the winner of the Engineering Division. The Award will be presented after the Senior Division Category Awards are presented. In addition, \$100 each for outstanding projects in Geology, Environment, and Materials.

**American Meteorological Society**

Certificates of outstanding achievement for two exhibits in the field of meteorology.

**American Psychological Association**

A certificate recognizing outstanding research in psychological science under the category of behavioral and social sciences or any category related to psychology.

**American Society of Civil Engineers**

Two \$100 awards in the Senior Division for outstanding projects in Civil, Structural, Environmental, or Geothermal Engineering or related sciences.

**Apparatus**

A \$100 award for the project which best utilizes student built apparatus and methodology. Sponsored by Dr. William Heffner

**ASM Lehigh Valley Chapter**

Three \$100 awards, Junior Division; and a \$200 award, Senior Division, plus Certificates of Achievement will be given for best projects exhibiting understanding and knowledge of the physical sciences, materials and metallurgy.

**ASM Materials Education Foundation**

A ribbon and certificate recognizing the winner of the best materials engineering project.

**Assistive Technology Committee**

\$50 for the best Junior or Senior Division project related to a disability.

**Association for Women Geoscientists**

An award certificate is presented to a female student whose project exemplifies the high standards of innovativeness and scientific excellence in the geosciences.

**Atlantic Energy Concepts**

Awards of \$50 to Junior and Senior projects which best demonstrate exceptional commitment to reducing the use of natural resources by business through conservation and the use of energy efficient technology.

**Berks County Conservation District**

A \$500 award for the project which best represents the organization's mission: "Encouragement and instruction of the wise stewardship of the soils and waters of Berks County so that present and future generations may have healthy land on which to live and clean water for drinking and recreation."

**Berks County Dental Society**

Awards of \$100, one each in the Junior and Senior Divisions, for outstanding exhibits in the field of dentistry.

**Berks County Medical Society**

Awards of \$100, \$75, \$50 in the Senior Division and \$75 in the Junior Division for outstanding projects in the medical and health field.

**Berks Nature Society**

A \$100 award in the Junior Division, and a \$100 award in the Senior Division for best projects exhibiting understanding and knowledge of the importance of clean water in our streams and drinking water supplies.

**Berks Western Telecom, Inc.**

Two Awards of \$50 to a project that contains a technology aspect.

**Berk-Tek**

Joe Boscov Award. A \$250 award each in the Senior and Junior Divisions for projects demonstrating outstanding achievement in the fields of Electrical, Mechanical or Chemical Engineering and for advancing these engineering disciplines.

**Brenntag Northeast, Inc.**

A \$300 and a \$200 award in the Senior Division for outstanding achievement in the field of chemistry and for advancing the chemical profession through connecting chemistry.

**Brian Wentling Memorial**

A \$100 award to the highest-ranking boy or girl in Junior Division Natural Science. The award will be presented after the Junior Division Category awards.

**Code Relief LLC**

Two \$25 awards to Muhlenberg School District students for the most engaging and creative model or backboard that convey a clear understanding of their chosen topics.

**Conrad Wiser Lions Club**

\$25 each to two Conrad Weiser High School and two Conrad Weiser Middle School students whose projects best show application to Lions Club vision of helping others.

**Diocese of Allentown**

A \$30 award to the highest ranking girl from a parochial school in the Junior division, and an environmental science and technology Award of \$30 will be given in the Junior Division or Senior Divisions to a student from a parochial school.

**East Penn Manufacturing Co.**

Awards of \$100, one each in the Junior and Senior Divisions, for outstanding projects dealing with batteries or energy storage.

**Element Environmental Solutions**

The following four awards are for projects that conveyed a clear understanding of the chosen topics, were enlightening, used good scientific method and were just plain FUN to judge.

\$50 Award for the Junior Division – Natural Science

\$50 Award for the Junior Division – Physical Science

\$100 Award for the Senior Division – Botany, Zoology and any topic in the other classes that apply to more Natural Sciences

\$100 Award for the Senior Division – Chemistry, Earth/Space Sciences, Engineering, Medicine/Health and any topic in the other classes that apply to more Physical Sciences

**Entech Engineering**

Three awards of \$50 in the Junior Division and one \$100 award in the Senior Division for projects which display creative concepts and could lead to useful inventions.

**Frank Herron Memorial Award**

In memory of the long-time director of the Reading-Berks Science and Engineering Fair, two awards of \$50 each for the most unusual projects exhibited.

**Fraternal Order of Police, Lodge #9, of the City of Reading**

The Sgt. Donald Matz award of \$1000 to the most outstanding project in forensics or chemistry.

### **Genius Olympiad (Oswego State University of New York)**

Two awards to students in grades 8-12 who identify a problem and a solution in either: 1) ecology and biodiversity 2) environmental quality 3) resources and energy 4) human ecology 5) innovation. The students advance to the international competition at SUNY Oswego.

### **Hamburg Grange #2103**

A \$100 Award and Certificate for an outstanding Junior or Senior Division project related to agriculture.

### **Intel Excellence in Computer Science**

Award certificate and \$200 to the most outstanding computer science project in the Math & Computers Division.

### **Lehigh Valley Chapter of the American Chemical Society**

A \$100 award to the winner of the Chemistry Division. The award will be presented after the Senior Division category awards are presented.

### **Lemelson Early Inventor Prize**

Awarded to one project of a middle school student that meets the following requirements:

- 1- Identifies problem-solving by identifying a critical problem.
- 2- Applies empathy and STEM knowledge to find a practical solution.
- 3- Displays entrepreneurial thinking by developing a tangible invention.
- 4- Develops an invention to solve a critical societal problem and improve the lives of others.
- 5- Ideally exemplifies environmentally-responsible thinking in their research and creation of the product.

### **Mu Alpha Theta**

A certificate for the best investigation of a problem involving high school mathematics.

### **Mohnton - Cumru Lions Club**

A \$100 award to a Governor Mifflin student in the Senior Division and a \$100 award to a Governor Mifflin student in the Junior Division whose project best show application to supporting community.

### **NASA Earth System Science**

Certificate presented to the student whose project offers the greatest insight into the earth's interconnected systems.

### **National Oceanic and Atmospheric Administration (NOAA)**

"Taking the Pulse of the Planet" Award; A certificate awarded to one Senior Division and one Junior Division project whose research emphasizes NOAA's mission of Science, Service, and Stewardship: "To understand and predict changes in climate, weather, oceans, and coasts; to share that knowledge and information with others; and to conserve and manage coastal and marine ecosystems and resources."

### **Office of Naval Research**

A certificate of achievement and a medallion to students with outstanding exhibits. Senior division projects will also receive a certificate to redeem for a \$50 gift card.



### **Penn State Berks Continuing Education, Summer Camps**

Penn State Berks, STEM Summer Camps

Middle School Camp, for students entering 5th - 8th grades fall of 2019.

One week of camp will be awarded for the following camps, note there is no cash value and no substitutions:

- Movie Making-Storylines & iMovies, June 17-21
- Science of Technology Camp, June 24-28
- Robo Camp, Where Minds Meet Technology, June 24-28
- Engineering for Generation Z Camp, July 15-19
- Jr. Nittany Criminal Investigative Service Camp, July 15-19
- Full STEAM Ahead: Building An Idea into an Invention Camp, July 22-26
- Problem Solvers of Tomorrow Camp, July 22-26
- Body Systems Escape Room Camp, July 29-August 2

High school Camp, for students entering 9th- 12th grades, in the fall of 2019.

One week of camp will be awarded for the following commuter camps, note there is no cash value, no substitutions.

- Computer and Cyber Security Camp
- Engineering Camp
- Forensic Science Camp
- Science of Location Camp
- Special Investigations Camp

### **Penn State Berks, Science Division**

Three awards of \$100 for the best projects in agricultural science, biological science and physical science. One award of \$50 for the best use of data and statistics.

### **Project Excellence - Przyjemski Family**

\$100 award to Senior and \$50 award to Junior Division students for exhibits that demonstrate project excellence through appropriate use of project notebook, well written project report, thought out project display, and proper use of the scientific process.

### **Reading Chapter, Pennsylvania Society of Professional Engineers**

Awards of \$300 to the Grand Champion and \$200 to the Champion. The Grand Champion award is funded by the Scott G. Daelhousen Engineer's Award endowment and distributed by the Berks County Community Foundation.

### **Reading Education Association**

Awards up to \$150 to students in the RSD with projects demonstrating an understanding of the scientific method.

### **Reading Fightin Phils**

Award of 6 General Admission Tickets for any 2019 regular season home game to the project that best incorporates sports.

### **Ricoh Americas Corporation**

Certificate presented to the student whose research has demonstrated the principles and technical innovations that offer the greatest potential for sustainable development.

### **Schatz Electric**

An award of \$250 presented in memory of Harold Bucks for projects that display practical use of electrical or electromechanical devices. An award of \$250 presented in honor of Al Happ, Instructor, Berks Career & Technology Center, for projects that display practical use of electrical or electromechanical devices.

### **Scoboria Family**

A \$200 award to the winner of the Physics Division. Also a \$100 award in the Junior Division for the best Physics Project.

**Senator Judy Schwank**

Awards of \$50, one each in the Senior and Junior Divisions, for outstanding exhibits in agriculture, horticulture, plant science, or related fields.

**Stockholm Junior Water Prize**

Three Regional Certificates to those high school students with the best water-related projects.

**Tower Health System**

Awards of \$125 each to a Senior Division project and a Junior Division project which best demonstrates Advancing Health, Transforming Lives.

**United States Air Force**

Awards to Senior and Junior Division students for best exhibits in mathematics, science and engineering.

**United States Metric Association**

A certificate to the student whose project involves a significant amount of quantitative measurement and which best uses the SI metric system for these measurements.

**Witzel Sound Solutions**

One (1) \$75 Junior Division prize and one (1) \$75 Senior Division prize for the most unique project applying sound/audio concepts (e.g. sound waves, sound pressure, sound production, sound engineering).

**Yale Science and Engineering Association**

Certificate and Medallion to the most outstanding exhibit in Computer Science, Engineering, Physics, or Chemistry.

## **Special Thank You to Albright College**

Albright College has been home to the Reading-Berks Science and Engineering fair for most, if not all, of our 67-year history. For one week in March, Albright provides the facilities at the Bollman Center and allows us to transform the building from a sports center to a science center. Albright College has been our strongest supporter and we owe the college many thanks.

Thank you, Albright College, Staff and Students.

RBSEF Board of Directors

## 2019 SPECIAL AWARDS' JUDGES

ACV Enviro

Sharon Thomas

Alliance to Berks County Dental Society

Jenny Zehner

Debbie Auchter

American Association of University

Women, Reading Branch

Margaret Fuoco

Apparatus

Dr. William Heffner

Assistive Technology Committee

Henry Ansell

Berks County Conservation District

Brian Shields and Jeff Overstreet

Berks County Dental Society

Dr. Laura Snyder

Berks County Medical Society

Dr. Eve Kimbal

Berks Western Telecom

Gary Moulder

Conrad Weiser Lions Club

Michael Gerhart

East Penn Manufacturing

Jesse Murphy

Element Environmental Solutions

Robert A. Pfromm

Entech Engineering

Pending

Fraternal Order of Police, Lodge #9, of  
the City of Reading

RPD Crime Scene Unit Members

Hamburg Grange #2103

Wayne Campbell

Lynn Dietrich

Mohnton - Cumru Lions Club

Greg Przyjemski

Project Excellence

Greg & Cathy Przyjemski

Reading Education Association

Michele Ehrhart

Fred Schlick

Scoboria Family Awards

Dr. Preston Scoboria

Stockholm Junior Water Prize

AJ Wilson

June Bodnar

James Brady

Jerry Haimowitz

### **RBSEF Volunteer Special Award**

#### **Judges:**

Joe Brendlen

Brian Buerke

Peggy Condon-Vance

Bert Eardly

Sgt Keith Frantz

Elizabeth Kennedy

Tom Gavigan

Rose Gerhart

Michael Gerhart

Jerry Haimowitz

Suhana Jagadesan

Dr. Tom Kruksick

Dean Miller

Craig Nagler

Lisa Peterson

Karl Peterson

Robert A Pfromm

Off. Wilfredo Ramirez

Lt. Kyle Rentschler

Mark Smith

Dr. Praveen Veerabhadrapa

AJ Wilson

## CATEGORY EXHIBITS

<u>DIVISION</u>	<u>CLASSIFICATION</u>	<u>CODE</u>
SENIOR - 9th - 12th Grades	Behavioral and Social Sciences	BS
	Botany	BO
	Chemistry	CH
	Earth and Environment	EE
	Engineering	EN
	Mathematics/Computers	MC
	Medicine/Health	MH
	Physics and Astronomy	PA
	Zoology	ZO
	JUNIOR - 6th - 8th Grades	Natural Science
Physical Science		6P, 7P, 8P

## CATEGORY EXHIBITS LISTED BY SCHOOL

### Antietam Middle-Senior High School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Coller, Nathaniel	Cabbage Chemistry	7P512
Haas, Autumn	What Drink Stains Human Teeth the Most?	7P515
Hopkins, Naomi	Protecting Hair with Argan Oil and Heat Protectant	7P511
Miller, Austin	Metal, Rust, Soda?	7P516
Storms, Caelyn	Temper, Temper, Temper	7P514

### Berks Catholic High School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Atkins, Abigail	Concentration of Silver Nanoparticles Most Effective at Inhibiting Bacterial Growth	MH155
Avadanian, Jillian	Dirty Devices	MH383
Buerke, Katherine	Which Form of Biomass Produces More Biogas?	EE080
Emrich, Russell	Treatment of Saccharomyces Cerevisiae with Antifungal Medication	MH105
Femino, Gabby	Botany Battle: Hydroponics Vs. Soil	BO456
Fontana, Gabriella	The Effect of The Ph Of Water on The Height of Plants	BO469
Fries, Eliza	How Clean Are the Streams?	EE158
Frisina, Mariella	Germes on the Run	MH398
Gabriel, Kathryn	Accuracy of Statistical Samples	MC085
Gundersen, Connor	Can Mealworms Dispose of Plastic?	EE348
Hatcher, Megan	Is Algae the Energy Source of The Future?	EE061
Helstrom, Mollie	Comparing Soil Fertility Levels Collected from Different Orchards and Vineyards	EE372
Hyneman, Lucas	Vinegar-Based Herbicides vs. Roundup	EE500
Irey, Drew	Music Taste and You're Personality	BS166
Jung, Hyein	Surface Tension of Different Liquids	CH462
Kraycik, Andela	Hydroponics Versus Soil	BO375
Kurtas, Gabriella	Is All Drinking Water the Same?	CH168
Mirabella, Annaka	Does White Noise Affect Memory?	BS160
Moody, Emma	What Laundry Detergent Has the Strongest Enzymes?	CH074

Partsch, MacKenzie	The Last Straw	EN397
Pickard, Kierra	Blood Sugar Values in Mcadd Subject Vs. Controls	MH165
Piersol, Madeleine	The Effect of Meditation on Heart Rate and Emotional Intelligence	BS442
Piskorski, Thea	Developing a New, Improved Cold/Heat Pack	CH371
Silver, Robert	Plant It! Co2 or Not?	BO118
Vance, Megan	How Does the Locomotive System of The Horse Affect the Estimated Stride Length?	ZO451
Walker, Joseph	Using a Robot to Simulate How Topography Impacts Tornado Intensity	PA487

## Conrad Weiser HS

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Borrell, Brea	Comparison of Tau Protein Expression by Gender: A Drosophila Model	MH004
Brosious, Isabella	Analysis of Cardiomyocytes Coupled with Polymer Constructs And Bioactive Glass	MH012
Carneal, Allison	A Study of the Effects of Chemicals on Algae	EE482
Chibirka, Ellie	Comparison of Withania somnifera and Fluoxetine on C. elegans Behavior	MH505
Clemens, Cameron	Ihc Staining for Identifying Degenerative Cerebral Proteins	MH403
Coleman, Therese	Impacting Water and Soil Retention in Pots with Draining Device	BO486
Donatelli, Mackenzie	Caloric Intake and Output with Fitbit	MH513
Finogle, Hayley	Making EquusHelmets More Effective In Reducing Concussive Forces By Using Closed	EN008
Fox, Madeline	Adolescent Heart Rate Data Analysis: Fitbit Applications	MH377
Guevara, Sarah	Drug and Alcohol Use in Berks County: A Bioinformatic Meta-analysis	BS082
Haynes, Journee	Reducing Skin Infections using Sharklet	MH490
Horack, Erin	Plant Concentrations Influencing Lycorma Delicatula Feeding Habitats	BO420
Johnson, Emily	Adolescent Sleep Data Analysis	MH418
Keeney, Ireland	Prevalence of Lyme Disease Pathogen Borrelia Burgdorferi	MH468
Kefeni, Emnet	An Analysis of the Proliferation of Macrophage Cells when Induced with Sbg	MH010
Kesselring, Rachel	Screening Outcomes of Adolescents Requiring Cardiovascular Follow-Up Testing	MH002
Kimmel, Victoria	Volume and Height Specific Blood Splatter Analysis; Advancing Traditional Methods	BS005
Lall, Sofia	Plastic Microfibers in Our Drinking Water	EE075
Lam, Kimberly	Utilizing Aloe Vera As Antimicrobial Agent Against Escherichia Coli	BO477
Lasher, Ethan	Developing a Biodegradable Smartphone and Accessories	EN001
Lewis, Janay	Therapeutic Animal Behavior Analysis	BS426
Madsen, Julia	Bioactive Glass on Drosophila Melanogaster Appendage Injury	ZO491
McClellan, Joel	Epileptic Seizure Detection from Menthone In Volatile Organic Compounds	CH007
Mendez, Mariah	Analysis of Neural Regeneration When Integrated with Bioactive Glass	MH013
Monroe, Hayeigh	Plastic Microfiber Degradation From 3D Printed Horticulture Devices	EE390
Moyer, Brady	Stem and Primary Cell Line Culture of Lycorma Delicatula	ZO441
Pauley, Efstratia	Fabrication of Organically-based Glass for Pennsylvania Poultry Waste Crisis	EN517
Remp, Gavin	"Gulf War Syndrome" and Its Causes	MH047
Richards, Natalie	Quercus Rubra Extract Inhibits Bacterial Proliferation	EE102
Savoy, William	Exposure of Drosophila to Nitrogenous Atmospheric Conditions Mimicking Exoplanetary	PA006
Schultz, Hannah	Autonomic Dysfunction During Migraine Aura with Fitbit Technology	MH003
Seidel, Madison	New Line Identification Discovered Through Knee Inking System; In-Field Forensic	BS009
Truong, Thomas	Virtual Reality Application Design for Medical Education	MC014
Vida, Laurel	Crispr Cas9 Technology in C2 Complement Deficiency Treatment: A Preliminary Study	MH011
Wagner, Christiana	A Study of Drosophila Imaginal Disc Cells and Bioactive Glass	ZO492
Werth, Selia	The Ability of Manuka Honey and Sodium Bicarbonate to Reduce Cancer Cells	MH466
Wright, Hannah	Bone Morphogenetic Protein 2 Expression In Equus Caballus Osteocytes	EN015

# Conrad Weiser Middle School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Althouse, Alaina	Can Aloe Juice Save Berries from Mold?	8N126
Arnold, Samuel	Effects of Liquids on Plant Growth	6N321
Arnold, James	How to Shoot the Best Foul Shot Hand Form	6N382
Beuca, Jeremiah	Testing Temperature of Batteries	6P364
Bond, Emily	Which Type of Soil Will Grow Plants the Best and Healthiest?	8N127
Bridgman, Kash	Paper Burning Rate: Regular vs. Recycled	7P484
Britton, Courtney	Do Organic Oranges Have More Vitamin C Than Non-Organic Oranges?	7N336
Callahan, Sage	The Effect of Yeast Type on the Rising of Bread	7P229
Chestnut, Emily	The Effect of Air Pressure the Distance a Soccer Ball Travels	6P356
Clabaugh, Colin	Will a Mini Fan Run Longer on Solar or Battery Power?	8P485
Dalesandro, Anna	What Cleaning Product Takes Away the Most Bacteria?	8N053
DeRose, Ryan	Duration for Color Transfer in a White Flower	6N367
Dianna, Trey	Testing the 5 Second Rule	8N088
Dreibelbis, Brandon	How Do Sound Waves Affect a Fire?	8P139
Fabien, Cedric	Powdered Soap or Liquid Soap: What to Use?	6P416
Feliciano, Gisselle	Effects of Liquids on Plant Growth	6N363
Fernandez, Giannah	What Type of Fruit Attracts the Most Fruit Flies?	7N394
Frantz, Abigail	The Effect of Bat Speed on Hitting Distance	7P376
Fraser, Hannah	Get the Stain Out!	6P412
Gechter, Mason	The Ice Cube Melting Lab	6N473
Giffing, Alaina	What's the Pointe?	6P341
Gilfert, Breanna	What Bag Disintegrates the Fastest Paper, Plastic or Reusable Bags?	8N131
Gilmer, Ethan	Tensile Strength of Tapes	6P413
Given, Aislin	How Does Caffeine Effect the Heart Rate of Daphnia?	7N396
Goodwin, Alayna	Which Soda Keeps Its Carbonation the Longest	6P358
Gorney, Raymond	Does Music Evoke Different Feelings?	7P400
Gorski, Aidyn	The Best Basketball Free Throw Stance	6P313
Grabosky, Lauren	What's in Water?	6N415
Gravitt, Emily	What Effect Do Magnets Have on The Growth of A Plant?	8N378
Hancik, Talula	Kool-Aid And You	6P309
Heidel, Xander	How Does the Temperature of a Cell Affect Its Growth	7N391
Hoffa, Alyson	Is Burning Trash an Effective Alternative to Landfills?	8P133
Houck, Emma	What Type of Mouthwash Helps Prevent the Growth of Bacteria the Best?	8N056
Hoyt, Jacob	Discovering Which Soil Plants Grow Best In	8N435
Katzaman, Rachel	What's Poppin'	6P410
Kauffman, James	How Does Voltage Affect the Rpm's of a Brushless Dc Motor?	8P157
Kesselring, Lisa	The Relations Between Organic and Non-Organic Sugar Content	7N407
Kiebach, Ashton	Does the Weight of a Paper Airplane Affect Its Distance Traveled?	6P408
Klopp, Jarryd	The Effect of Ball Size on Kicked Ball Velocity	7P350
Knepper, Molly	How Do Ph Levels Affect the Growth of Mold?	8N051
Kreiser, Abriana	Which Paper Towel Brand Is the Strongest?	8P373
Kuennen, Renee	Apples to Apples	8N120
Leopold, Jack	Decreasing Bacteria with Gum	6N409
Leopold, Luke	Which Flavor of Gum Lasts the Longest?	8N055
Line, Evan	Which Cup Keeps Your Drinks Cool the Longest?	8P121
Malik, Armaan	Which Soda Has the Longest Lasting Carbonation?	6P360

Malone, Alex	Does the Mass of An Arrow Affect the Distance It Travels?	6P311
Malone, Leah	What Herb Kills the Most Bacteria?	8N050
Marquez, Franchesca	Weeding Out the Lanternfly	6N335
Mason, Kyra	What Drink Stains Teeth Most?	6P312
Matthew, Kayla	How Do Cells Change When Antioxidants Are Added?	8N137
McCollum, Brylee	The Effect of Senses on Accuracy in Soccer When Shooting	7P332
McFadden, Jocelyn	Will Hydroponics Improve Growth of Plants Rather Than Soil?	8N054
McGonigle, Emily	The Effect of Ph On Plant Growth.	7N164
McGonigle, Amber	Which Brand of Candle Burns the Slowest?	8P141
McMahon, Gracie	The Effect of Soda on Tooth Decay	7N226
McNutt, Ryan	Burning Best for BTUs	8N148
Metzger, Ariel	What Drink Stains Your Teeth the Darkest; Coffee, Tea, Or Coca-Cola?	6P349
Miller, Noah	Determining Protein Concentration in Reptile Feeder Insects Using Spectrophotometry	7N259
Miller, Hailey	The Use of Electricity on Plants	8N060
Mock, Elliot	The Process of Molding with Hamburger Buns	7N405
Murphy, Katelyn	Are Green Apples More Acidic Than Red Apples?	8N084
Noll, Adam	How Do Energy Drinks Affect Plant Growth?	8N058
Nye, Kathryn	The Effect of Baking Soda Brand on Cookie Size	7P228
Oliver, Nevahn	What Liquid Rusts Metal the Quickest?	6P315
Paff, Mirabela	The Effects of Lubrication on Various Axle Types	7P406
Pedraza, Kayla	Which Food Consistencies Collect More Bacteria?	8N339
Peers, Leslieann	The Effect of Bioactive Glass Used to Heal Interferon Gamma.	8P128
Perrine, Kayleigh	How Does Temperature Affect the Height a Tennis Ball Bounce?	6P423
Preston, Lindsey	Its Better to Be Safe Than Sorry	8N140
Ramberger, Shaelyn	The Effect of Apple Juice on the Absorbency of Paper Towels	6P414
Raynes, Kathryn	Stains, Stains Go Away	6P433
Reeser, Emma	Effect of Liquid Nicotine on Dictyostelium Discoideum	8N087
Ressler, Sam	How Does Strength and Grain Structure Change in High Carbon Steel?	8P136
Rex, Ethan	What Is the Best Method for Growing Plants Efficiently?	8N343
Rice, Holden	Re-Inventing the Wheel	8P052
Rivera, Tristan	Magnetic Levitation	8P057
Robinson, Abby	How Does Temperature Affect Battery Life	8P129
Rothermel, Adyson	Testing What Antibacterial Soaps Clean the Best	6P357
Ruth, Evan	Does Artificial Light Affect Plant Growth?	8N142
Ruth, Aidan	Does the Salinity Amount Effect the Freezing Point of Liquids?	8P134
Sabold, Owen	Which Type of Vacuum Insulated Cup Is Best at Keeping Ice from Melting?	8P123
Savage, Jada	Do Different Types of Fertilizer Affect the Growth of Tomato Plants?	8N143
Schiding, Tessa	Greener Than Grass	8N059
Schoener, Mackenzie	Which Ice Melting Product Melts Ice in The Shortest Amount of Time?	8P144
Seidel, Julia	Does Ultra Violet Rays Effect Bacterial Growth?	8N048
Sena, Kaiden	How Soil Types Effect Fossilization?	7N402
Shade, Madeline	The Effect of Different Colored Lights on Plant Height	6N337
Shannon, Paige	Changes in Protein Levels in a Drosophila When Concussed	8P138
Shimp, Charlie	Lady Bug Vs Fruit-Based Liquid Lab	6N316
Skipper, Blake	The Effect of Temperature on Bpm	7P399
Smith, Reed	Antacid Science Fair	8P132
Snyder, Brady	Ballistic Penetration	8P016
Snyder, Alex	Hydraulic Lift Lab	8P017



Sowers, Riley	Food Decay Rates in Different Storage Materials	6N330
Stein, Andrew	The Effect of Rust on Different Metals	7P404
Steiner, Eva	How Does Agrobacterium Tumefaciens Effect the Growth of Tomato Plants?	8N125
Stoltz, Elliana	Which Cheese Grows Mold the Fastest	8N135
Trevena, Alex	Which Baseball Bat Is Worth It's Price?	6P314
Tulli, Alexander	How Do Different Acids Affect the Rate of Corrosion?	8P049
Weber, Abigail	Which Food Storage Method Keeps Produce the Best	8N081
Weik, Jady	Is Brand Name Conditioner Worth the Extra Money?	8P114
Werner, Caleb	Which Type of Wood Is Harder to Break?	8P083
West, Aaron	How a Windmill Works	6P417
Wiggins, Isabel	The Effect of Vinegar, Distilled Purified Water, and Rubbing Alcohol on a Been Seed	7N392
Wiggins, Maritza	Which Desalination Process Removes Salts and Minerals Out of Seawater the Best?	8P124
Yazemboski, Eric	What Are the Ph Effects of Liquid Electrolytes on Voltage in a Wet Cell Voltaic Battery?	7P395
Yonavick, Tyler	Rolling Balls at Different Temperatures Lab	6P340
Yonavick, Andrew	Does the Size of a Parachute Affect Its Time in the Air?	8P122
Zerbe, Kaitlyn	Can Red Cabbage Water Show Which Food Has the Most Acid?	6N422

## Governor Mifflin Middle School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Assemes, Aiden	Testing for Lead in Drinking Water	8N089
Borrilez, Jazmyn	The Study of Skin Tone Bias Throughout Generations	8N086
DeLoretta, Sara	The Effect Different Kinds of Music Has on the Growth of Plants	7N249
Detwiler, Brady	How Placebo and Nocebo Effect Affect People Taste Food	8N113
Friedlander, Ellie	Do Cats Have Dominant Paws?	8N150
Hickey, Clayton	What Is Required for an Image Classifier Ai To Generate A Human-Grade Bitmap?	8P149
Klahr, Emma	Leaky Clues to Dam Design	7P252
Koller, Logan	What Material Blocks Sound the Best?	8P498
Moyer, Paisley	Will You Cheat?	7N342
Rosenbaum, Jillian	The Effect a Swim Cap Has on Your Time	7P286
Stuckert, Carlisle	Drag Racing in Water	7P231

## Governor Mifflin Senior High School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Addis, Andria	The Effect of Golf Club Loft Angles on the Distance the Ball Travels	PA295
Amrani, Elyias	The Effect of Soda on Cut Flowers	BO306
Anders, Caleb	The Effect That Different Pesticides Have on Spinach Plants	BO474
Arevalo, Lilith	Hearing a Human	MH305
Armour, Ian	Can Magnets Be Positioned to Generate Free Energy?	PA236
Beahm, Daniel	The Effects of Road Salt Runoff on the Conductivity of Rabbit Run	CH242
Beilhart, Mia	The Effect of Weight of a Lacrosse Shaft on the Speed of a Shot	PA304
Bentz, Faith	The Effect of Physical Activity on Memory	MH265
Beyer, David	The Effect of Water Depth on Plant Root Growth	BO297
Bickham, Jasmin	The Effect of Chewing Gum on Retention	BS288
Blandford, Caden	The Effect of Temperature on Calories Burned	MH185
Boggs, Maggie	The Effect of Different Electronics and the Amounts of Radiation Emitted	MH183
Boguslawski, Valerie	The Effect of Plant Food on Cut Flowers	BO301
Bonfitto, Lillian	The Study of Aquaponics and Its Effect On Lettuce	BO308

Brunner, Michael	Does Soil Filter Out Rock Salt in Water	CH294
Burgos, Kyli	The Effect of Gender on Short-Term Memory	MH361
Byrd, Emily	The Effect of Dissolved Oxygen on Organisms Living in a Stream	EE182
Carl, Renee	The Effect of Different Sugars Being Injected into Radish Plants	BO291
Carter, Liya	The Effect of Different Materials on Artificial Intelligence	MC264
Coleman, James	The Effects of the Education System on High School Students with Mental Illness	BS192
Collins, Sabryna	The Effect of Different Shades of Honey on Bacterial Growth	MH352
Costello, Cormick	The Effect of Different Plant Cuttings on The Growth of Radish Clones	BO232
Coutz, Caden	The Effect of Weight on I-Beam Integrity	EN225
Coutz, Madeline	The Effect of Gender on Synesthesia Awareness	MH299
Creelman, Karyn	The Effect of Time on Retention on Information	BS194
Cullen, Alexander	The Effect of Different Coverings on Ultraviolet Light	PA239
Cullen, Samuel	The Effect of Insulation on Noise Pollution	PA247
DeLoretta, Paige	The Exploration of Purification and Filtration of Pond Water	CH237
Dorman, Faye	Cultural Eutrophication	CH362
Engle, Jacob	The Effect of Weight Distribution on the Speed of an Object	PA214
Engle, Cory	Effects of Aerodynamics on Different Shapes.	PA293
Enriquez, Eliza	The Effect of Smell on Food Preferences	MH310
Erb, Liliana	The Effect of Wind Turbine Blade Structure on Amount of Voltage Produced	EN210
Ermold, Annika	The Effect of Sleep on Reaction Times	MH234
Ernst, Colin	The Effect of Microwave Radiation on Plant Growth	BO215
Ernst, Zoey	The Effect of Predator on Betta Fish Reaction	ZO221
Fasig, Serenity	The Effect of Enzymes on Stains' Circumference	CH196
Fiore, Elisa	The Effect of Breakfast on Test Scores	MH217
Foster, Grace	The Effect of Nitrogen And Phosphorus on Bodies of Water	EE268
Gallen, Will	The Effect of Yeast on The Increase in Size And Elasticity of Dough Over Time	CH179
Gerhard, Ben	The Effect of Natural Fertilizers on Philodendron Plants	BO175
Gilbert, Gia	The Effect of Age on Distance of Retinal Blind Spots	MH193
Gockley, Emma	The Effect of Language Implementation on Correct Language Attainment	BS355
Goll, Jacquelyn	The Effect of an Array of a Solar Panel on the Amount of Energy Produced	EN220
Gonzalez, Selina	The Effect of Chapstick on Human Lips	MH243
Greusel, Evan	The Effect of Yeast on Wisconsin Fast Plants	BO223
Griffith, Madison	The Effect of Relaxation Methods on Sleeping	MH365
Grosch, Jocelyn	The Effect of Ph Levels on the Calcium in Chicken Bones	MH184
Hazlett, Callum	The Effect of the Delaware Bay on Kelp Growth	BO263
Heiser, Christina	Does Your Gender Affect the Way You Perceive Images?	MH245
Hill, Austin	The Effect of Hockey Stick Materials on How Fast the Puck Is Shot	PA307
Hipszer, Mya	The Effect of Light on Glow in the Dark Paint	CH275
Hivner, Caleb	The Effect of Thermal Imaging Radiation on Different Surfaces	PA224
Holcomb, Abigail	The Effect of Caffeine on Daphnia Heart Rate	ZO206
Huber, Wyatt	The Effect of Charge and Discharge Times on Energy Storage Systems	CH208
Hubric, Ella	The Effect of Flexibility on Athletic and Non-Athletic People	MH292
Kapoor, Aaryan	The Effect of Video Games on Reaction Time	MH276
Ketz, Cassidy	The Effect of Stain Removers on Fabric Stains	CH230
Klein, Ryan	The Effect of Age on Outfit Preference Related to Approach-Ability	MH233
Kohl, Dylan	The Effect of Different Wrestling Moves on Impact Levels	MH290
Kriebel, Griffin	Effects of Carbon in Plant Soil	BO303
Krzyzanowski, Jordyn	The Effect of Light Color on The Quantity of Paper White Flowers	BO296

Kuczala, Nicolas	The Effect of Different Axle Lubricants on the Travel Distance of a Matchbox Car	PA285
Kuriger, Carly	The Detrimental Effects of Acidity and Sugar on Teeth	CH181
Kwiatkowski, Mya	The Effect of Gender on Peripheral Vision Range	MH287
LaBelle, Madison	How Does Diet Affect the Ph Levels in Your Saliva?	MH298
Leaman, Nathan	The Effect of Bat Material on Exit Velocity	PA178
Lockard, Naomi	The Effective of The Human Voice on Time and Direction	BS270
Magdalinski, Mason	The Effect of Different Ph(S) On Gear Efficiency	PA213
Maiers, Mandy	The Effect of Tuning on Heart Rate	MH176
Maples, Alaina	The Effect of Smell on Taste	MH261
May, Reiley	The Effect of The Type of Orange Juice on Vitamin C Concentration	CH173
Melcher, Mackenzie	The Effect of The Concentration of Co2 on the Rate of Photosynthesis	EE174
Michel, Jillian	Using Compostable Materials in Fast Food Restaurants Will Reduce the Impact on Landfills	EE272
Miller, Aubrey	The Effect of Aloe and Vinegar on Strawberries	EE211
Mitchell, Danny	How the Environment Affects Battery Life.	CH289
Mock, Brooke	The Effect of Perception of Taste on Plating Techniques	BS278
Mollica, Stella	The Effect of Stretching on Active Performance	MH190
Morales, Christian	The Effect of Temperature on Conductivity	PA188
Morgalo, Isabella	The Effect of Frequencies on Plant Growth	BO222
Mountz, Logan	The Effect of Upbeat and Slow Rhythms on Memory	MH359
Musser, James	The Effect of Temperature on Tennis Ball Bounce Height	PA273
Myers, Lilly	The Effect of Hugs on Heart Rate	BS216
Opalko, Angela	The Effect of Hydroponics on Spinach Plant Growth	BO279
Oplinger, Hannah	The Effect of Guided Meditation on Heart Rate and Blood Pressure	MH274
Osiris, Suntaya	The Effect of Water on the Absorbency of Paper Towels	CH219
Otu, Sherrise	The Effect of Bismuth Concentration on the Differentiation Between Antacid Products	MH189
Owens, Alexa	The Effect of Aspirin on Plant Growth	BO209
Palange, Hannah	The Effect of Microwave Radiation on Basil Growth	BO260
Patel, Jeel	The Effect of Food Consistency on Blood Glucose Levels	MH212
Pawling, Justin	The Effect of Different Solutions on Colored Markers.	CH240
Petricoin, Joseph	The Effect of Temperature on Perspiration Time	MH186
Portillo, Leslie	The Effect of Music on Concentration	MH218
Quinn, Cassidy	The Effect of Note Taking Techniques on Memorization	MH266
Ramirez, Helena	The Effect of Color on Memory Retention	MH280
Reynolds, Amanda	The Effect of Plant Type on Water Filtration	BO187
Rivera, Kayla	The Effect of Temperature on the Reproduction of Planaria Worms	ZO241
Rodriguez, Alexander	The Effects Of Different Solutions on Stink Bugs	ZO227
Rosenbaum, Reagan	The Effect of Oil on the Fat Content in French Fries	CH267
Rowe, Lauren	The Effect of Wind on Plant Structure.	EE207
Ruth, Kylie	The Effect of Whitening Toothpaste on Stained Tiles	MH235
Santiesteban, Emilio	The Boiling Point of Different Water	CH300
Schultz, Cassidy	Is the Capacity of Your Memory Affected by Your Age?	MH246
Shamus, Shelby	The Effect of Caffeine on People	MH177
Sharicata Hernandez,	The Effect of Plants on Music/Vibration	EE277
Smith, Emily	The Effect of Hours of Sleep On Alertness/Reaction Time	MH351
Stabolepszy, Tedd	The Effect of Tuning Forks On Heart Rate and Blood Pressure	MH411
Stanislawczyk, Sophie	The Effect of Compost on the Growth of Basil	BO271
Stauffer, Eliza	The Effect of Solutions on Fruit Fly Mortality	ZO327
Steckiel, Abby	The Effect of Anti-Fungal Agents on Yeast	MH191

Stocum, Kyle	The Effect of Salt on the Conductivity of Water.	CH238
Swartz, Olivia	The Effect of Drinks on Tooth Decay	MH269
Sweigart, Carter	The Effect of Weight on Bridges	EN180
Tully, Sheyna	The Effect of Potatoes on Energy	PA262
Velez, Isabella	The Effect of Nitrogen on Plant Growth	BO354
Weber, Brendan	The Effect of Temperature on the Strength Of Wooden Beam Bridges	EN388
Wentling, Brian	Temperature of Muscles on Speed of Running	MH244
Woodruff, Chloe	The Effect of Water Turbidity on Water Temperature	EE172
Woolwine, Alena	The Effect of Visualization on Foul Shot Rates	BS195
Woolwine, Mason	The Effect of Height on Wind Speed	PA302

## Holy Guardian Angels

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Askey, Stephen	How Well Do House Plant Work at Purifying the Air?	8N112
Brenner, Luke	Are Spotted Lanternflies Attracted to Certain Colors	8N119
Christ, Helena	What's the Fizz Factor?	7P146
Coccia, Alyssa	Cleaning Products: Environmentally Friendly Vs. Store Bought	8P094
Emrich, Marli	Does Altering a Composite Softball Bat Provide an Increase in Exit Velocity of a Softball?	7P104
Esterly, Madison	Do Storm Drains Really Work?	8P145
Gattone, Sophia	Is Frequency the Voice of the Universe?	8P147
Hall, Sean	How to Reduce Friction	7P101
Holland, Samantha	Chemical Vs. Organic Fertilizer	7N096
Holland, Sara	Which Breads Mold the Fastest?	7N097
Jarombek, Klaudia	Which Water Source Has the Most Acidity and Which Water Has the Most Water?	7N117
Jimenez, Aryelle	Can Aloe Vera Juice Save Your Strawberries from Mold	7N093
Jones, Olivia	Do Blood Droplets Change at Different Heights?	7P103
Kroenig, Brian	Does Temperature Effect the Rate of Water Absorption in Plants?	8N151
Mejia, Jazmin	Does Greywater Have A Positive or Negative Effect on Plant Growth?	8N100
Murphy, Riley	Which Brand of Children's Flame Resistant Pajamas Is Most Effective?	8P169
Nied, Hannah	Are Fingerprint Patterns Inherited?	8N091
PrechtI, Regan	How Shape Affects Aerodynamic Drag	7P095
Reddy, Bryleigh	Exploring the Effects of Ph on Lead Testing	8P099
Rosa, Olivia	Do Suds Matter?	8P156
Rosa, Noah	Keep It Cool	8P167
Sabatucci, Abigail	Are All Red Flower Pigments the Same?	8P092
Sands, Grace	What Kind of Cheese Grows Mold the Fastest?	7N111

## Home School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Yoder, Aubree	The Reduction of Waste Through Vermicomposting	8N098

## Immaculate Conception Academy

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Adams, Rebecca	It's Been A While... Can You Remember?	8n453
Bailey, Caitlyn	Tea Light Heating Challenge: Redefined	7P438
Dolena, Charlotte	Aspirin and Plant Growth	7N450

Forkin, Rachel	Dogs:Yuk or Yum?	7N436
Jordan, Luke	Creative Catapults	6P449
Jordan, Zachary	Concussed Cantaloupes	8P455
Kelly, Avery	Testing Blue	8N488
Kurtas, Andrew	Hydroelectricity	8P445
Petras, R.J.	Plant Growth	6N489
Pike, Paul	A Study on Burning Firewood	6P447
Repko, Anthony	Yahtzee Probability	7P440
Schaffer, Sasha	Sugar in Soda	6P448
Schlegel, Daniel	What Broadhead Penetrates the Farthest?	8P454
Serpico, Angela	Just Your Two Senses	8N452
Springer, Lexie	Gender Differences in Fingerprints	6N443
Weidner, Samantha	What Melts Ice the Fastest!	7P463
Yerger, Lauren	How Much Fat Is in Your Diet?	7P439

## LaSalle Academy

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Belville, Isabella	Hit A Dinger	8P470
Boyd, Sydney	Is Insulin Edible?	8N432
Burkey, Michaela	Better than Plastic?	8N457
Cannon, Madison	The Heart of The Matter	8N353
Carola, Isabella	No Pain Plenty of Game!	6N386
Frisina, Madeline	Bend 'Till You Brake	7P458
Hatcher, Emily	Oil Spills Don't Have Control Over Our Lakes	6N434
Keating, Trey	Step Right Up	6P389
Kirwan, Elise	Dna: Crime Fighting Tool for the New Millennium	8N459
Leininger, Joseph	Rise Up	6N475
Maiers, Dalton	How Does Weight Affect a Soapbox Derby Car	8P430
Mider, Brady	Battle of the Batteries	7P437
Olinger, Gianna	Antifungals: Natural Oils Vs. Pharmaceuticals	8N472
Reali, Isabella	Are Microwaves Safe? An Analysis of Microwave Water on Plant Growth	8N461
Schrenk, Matthew	The Skinny on Moisturizers	7N471
Serrano, John	Save the Soil!	7N481
Shick, Gabriela	Who Did it?	7N476
Taylor, Jack	Rocket Science- Does Mass Affect Altitude	6P385
Witmer, Sara	I Got A Fever	7P444
Witmer, Alexander	Rethink Your Drink	8P446
Ziolkowski, Owen	Cookie Monster	6P387

## Muhlenberg Middle School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Fritz, Logan	How to Know if Your Water Is Safe Using P.H.	CH467
Gantz, Samantha	Volcanoes Create Life	8N460
Geddio, Jaxon	Hemostasis: Saved by the Clot	8N431
Gilbert, Dana	Cool Project	8P205
Kimma, Logan	Electrolyte Challenge: Which Sports Drink Replenishes the Most Electrolytes?	8N379
Landrum, Asher	Slip Slidin' Away	8P115

Love, Sarah	What's the Germiest Surface In Your Home?	8N380
Patton, Sean	The Cutting Edge	8P465
Reinhard, Rachel	Rain Rain Go Away	8N374

## Reading Northeast Middle School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Lopez, Enrique	Pneumatic Arm	6P483
Valenzuela, Reybin	Static Electricity	7N506
Vasquez, Alijah	Electric Resistance	7P493

## Sacred Heart School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Armistead, Marvin	Eating Breakfast Vs Not Eating Breakfast	7N424
Changco, Christian	Wind Vs. Shape	8P464
DeCarlo, Rocco	Scent Vs Taste	7N425
Gasperack, Jackson	Which Laundry Detergent Works the Best?	8P318
Maurer, John	Paper Weight	8P323
McCann, Elizabeth	The Proof Is in the Prints	8N325
Munter, Meghan	Does Ionization Affect Bacteria?	7N329
Pakradooni, Claire	Spinning Dizzy	7N427
Vidal, Adriana	Hair Coloring	7N428
Weiger, Kylie	Can Cooked Beans Grow?	8N324

## Saint Catharine of Siena School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Amey, Dylan	Does Size Matter?	6N072
Barbera, Nicholas	Viscosity of Household Liquids	7P019
Batastini, Jacquelyn	What Holo Holds Up?	7P026
Beaver, Amanda	Music to My Heart.	6N070
Beaver, Jennifer	I'M Sure You're Dying To Know....	8P281
Dangelo, Sarah	C Is for Cookie Is That Good Enough for Me?	7N020
Dempster, Joseph	Rockets and Payloads	7P043
DosSantos Moore,	How Does It Matter? Measure the Spatter!	7P041
Figueroa, Tristan	Pendulum	7P029
Franey, Rachel	Plant Some Plants for the Planet	7N031
Fries, Abbee	It's a Cover Up! Finding the Right Crayon for the Coverage	8P159
Gilbert, Collin	Which Cereal Gets Soggiest in Milk?	6P073
Hearing, Eli	Testing Treats - Which Dog Treat Will a Dog Prefer?	7N035
Hess, William	What Hits It	7P024
Hess, Celia	The Meltdown! - Which Deicer Melts Ice the Fastest?	7P025
Impellizzeri, Luke	Truth in Sports Drink Labeling	7P027
Kintzer, Kyle	Game Time!	7N044
Kraycik, Lucien	Food Vs. Germs	7N033
Lutz, Paisley	Chew on It	7N046
Mace, Maxx	Paw Preference	7N021
McCartin, Nathan	Microscopic Life in Grass	7N038

McDevitt, Mary	"Water" You Waiting For!	7P039
McElderry, Megan	Water You Paying For?	7N018
Miller, Logan	Coastline Chaos - The Effects of Wind On Coastline Erosion	7P023
Nerney, Alex	The Stroop Effect - The Effect of Card Positioning on the Stroop Effect	7N034
Nguyen, Kaitlyn	Which Has More Electrolytes: Orange Juice or Sports Drinks?	8P284
Oscar, Alexandra	Is It Worth It for Water?	7N045
Oscar, Edward	Want to Hear Something Juicy?	8P283
Partsch, Grant	May the Force Be with You	6P069
Pena, Gicarlo	What Melts Ice the Fastest?	7P042
Sargent, Brandon	Getting Ready for Winter...	7P032
Saylor, Timothy	Hard and Softer	7P028
Schodowski, Esteban	Stretchy Bands	7P022
Smith, Arabella	Is the Bunny Really Worth the Money?	6P071
Smith, Rowan	Monster Workout	8N282
Stratton, Martha	Only the "Berry" Best!	7N040
Wagner, Payton	Germs - Stop Them with Hand Washing	7N037
Whittaker, Isaiah	Carbonation in Soda	7P030
Wolfe, Madison	Reaction Rates of Ultraviolet Beads	7P036

## Saint Ignatius Loyola School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Andreyo, Helen	Can Sun Rays Make Water Potable?	8N251
Birmingham, David	How an Ad Affects A Stock	8P255
Bradley, Michael	Zit	7N200
Brant, Annalee	Plant V.S. WIFI Router, What Will Win?	7N202
Brubaker, Mary	What Color Do You See?	7N345
Burkman, Estella	Do Left or Right Handers Have Better Short Term or Episodic Memories?	8N334
Clemens, Arianna	What Do Magnets Do in the World that Make Them So Important?	7P326
Conlon, Maggie	The Quickest Way to Cool a Can of Coke	7P401
Cunningham, Benjamin	The Effect of UV Rays on Plant Growth	7N331
Elliott, Elyssa	Does the Combination of Music and Emotions Affect REM Sleep?	8n479
Fasig, Angelina	What Cleans a Penny the Fastest?	8P256
Gentile, Gabriella	Does Your Plant Have a Headache?	7N203
Hauser, Caylyn	What's in Your Water?	7N346
Herman, Zachary	Which Storage Container Preserves Apples the Longest?	7N344
Krawlzik, Jenna	What Are the Effects of Smoking?	7N322
Langdon, Mackenzie	How Do Water Bottles Stack Up to Our Local Tap Water?	7N198
Lenker, Abigail	Nail Polish Longevity	8P254
Maier, Kaden	What Is the Most Chemical Resistant Coating	7P317
McFadden, Maggie	Say Goodbye to Brown Apples	8N253
McNeil, Abigail	Is the 5 Second Rule True?	7N328
Minier, Cesario	Balloon Powered Cars	7P421
Mirabella, Emmalee	Which Substance Propagates Plant Growth Best?	7N201
Morganti, Nicole	Which Melts Faster?	7P338
Nguyen, Bryan	Can Temperature and Weather Affect A Football	7P333
Ott, Marianna	Do Different Types of Water Affect Plant Growth?	7N319
Painton, Hannah	Does Methyl Cellulose Affect the Melting Rate If Ice Cream?	8P257
Plasha, Shannon	How Do Roller Coasters Work?	8P250

Polinsky, Joseph	Will You Bank the Shot?	7P199
Polinsky, Nicola	Which Substance Is the Best Stain Remover?	7P204
Roberts, Sabrina	Will You Bank the Shot?	7P197
Roberts, Gianna	Does the Amount of Air Inside the Soccer Ball Affect How Far It Goes?	7P320
Thomas, Alexa	Tough Beans - Which Cooking Liquid Slows Softening the Most?	7N381
Ward, Emily	Why Does the Spatter Matter?	8N258

## St. Ignatius

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Lutz, Saxtyn	Ailanthus altissima and Lycorma delicatula	7N509
Reali, Victoria	Growing Gummy Bears	8P507

## The King's Academy

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Jiang, William	Viscosity Vs. Temperature	CH162
Kulp, Noah	Removing Lead from Soil Using Phytoremediation	EE161
Levan, Sierra	Egg Floatation	6P108
McKim, Paige	Antacids at Work	8P076
Meade, Summer	Days of Evaporation	6P110
Mondelli, Isabella	Baking Up A Storm	6P109
Neiswender, Jacob	Weight for It	8P077
Noel, Chance	Slip Sliding Away	8P079
Rowles, Mark	Bounsanity	PA116
Schnatz, Sarah	Falling Foods	6P107
Snyder, Emily	Ice-Olation Sensation	6P106
Westenhoefer, Evan	Measuring Voltage in Electrolytes	8P078
Xu, Perry	Leidenfrost Effect	CH163

## Tulpehocken Junior - Senior High

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Ahner, Ella	Does Moisture Content Affect Carbon Dioxide Production in Compost?	CH067
Barrett, Makayla	Will Seed Germination Be Sped Up after Soaking in Different Substances?	BO064
Bobo, Ashton	Will the Seebeck Effect Be More Effective When the Copper Is Heated or Cooled?	PA066
Boyer, Alyssa	Germination of Ash Tree Seeds	BO065
Ebersole, Kyla	How Does Light Affect the Bioluminescence of a Dinoflagellate?	ZO068
Folk, Amelia	Natural Abiotic Water Filters	CH090
Marous, Madeline	Does Adding Organic Matter to Soil Help It Achieve Adequate Soil Infiltration?	EE062
Sowers, Mackenzi	Can Chlorella Uptake Iron From Water?	CH063
Zielinski, Leah	How Components of Household Cleaning Remedies Effect Escherichia Coli Strain	MH152

## Wilson High School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Goodrich, Jillian	Combating Raw Sewage Spills Using Freshwater Mussels	EE502
Nayak, Krishna	Analyzing the Effect of Ph on Crystal Violet Removal	CH419
Romero, Marjorie	Solar-Powered Water Desalination	EN518



Shah, Amaya	Biochar to Prevent Runoff	EE508
Snyder, Colby	Impact of CFCs on Earth's Ozone Layer	EE370
Xie, Olivia	The Effects of Social Norms on Recycling Behavior in High School	BS499

## Wilson Southern Middle School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Agrawal, Suvrat	Lemon Power	8P368
Aman, Calia	Guinea Pig Food Preferences	6N154
Cramer, Meghan	Radiation: a Constant Presence in Our Everyday Lives	7P347
Santiago, Joshua	The History of Global Warming	6P369
Sridhar, Sindura	DNA Extraction: Strawberries Versus Human	6N248
Tall, Assiatou	Water Purification with Different Soils	8N153
Weber, Joshua	Effects of Electromagnetism	7P170
Xie, Aaron	Investigating Thermal Energy	8P171

## Wilson West Middle School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Hinkle, Paige	Experiments to Determine Factors Affecting Radon Levels and Mitigation Options	6N384
Hinkle, Claire	Predicting Breast Cancer Diagnosis Using Machine Learning	8N366
Nayak, Aditya	A "Salty" Problem	6N478
Patel, Nikita	Endless Food and Electricity	7N393

## Wyomissing Junior Senior High School

<u>Student</u>	<u>Title</u>	<u>Exhibit #</u>
Bornstein, McKenzie	Which Nail Polishes Will Last Longer? Glossy vs Gel	CH504
Chen, Benjamin	An Exploration in Music Through Machine Learning	MC510
Jackson, Seychelle	Comparing Expensive Hair Products vs. Cheap Hair Products	CH503
Makdissi, Louna	Are designer Shampoos Worth the Price?	CH501
Stoudt, Nikole	Biodegradable Material	CH494
Welliver, Morgan	Home Cleaners	CH497

## Category Award Judges

Balla, Mr. Michael	Carpenter Technology
Boyer, Mr. Brian	Boyer Engineering LLC
Brandt, Ms. Elizabeth	Suburban Testing Labs, Inc.
Bright, Mr. Steve	Civil Engineer
Brinker, Mr. Scott	Carpenter Technology, Corp
Campbell, Dr. Richard	Quadrant EPP
Carnes, Mr. Robert	Carpenter Technology (retired)
Cibulsky, Mr. Mark	
Comalli, Dr. Lila	Conrad Weiser Animal Hospital
Condon-Vance, Mrs. Peggy	PDV Associates.& Penn State
Degler, Mr. David	Lockheed Martin (Retired)
DeWald, Ms. Eileen	ALCON
Dietrich, Mr. Arlan	Conrad Weiser SD (retired)
Dolan, Mr. Patrick	Dolan Construction Inc.
Eardly, Dr. Bertrand	Penn State Berks
Ehrhart, Ms. Kelly	Stevens Institute of Tech Student
Escott, Ms. Jeanne	Muhlenburg (Retired)
Fetterman, Mr. Andrew	Liberty Environmental Inc.
Fraley, Dr. Phillip	Engineering Consultant
Franzen, Mr. J. Scott	LSI (Retired)
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Gensemer, Ms. Katie	East Penn Manufacturing
Gieringer, Mr. John	Alvernia University
Gosch, Mr. Mike	Teleflex, Inc
Greene, Ms Amy	Albright University
Hannay, Mr. Mark	Carpenter Technology
Harrison, Ms. Anita	Twin Valley Schools - Retired
Hemmerich, Mr Nick	Reading SD Volunteer
Hoffman, Mr. Justin	Dr. Stephen Mech
Jarsocrak, Ms. Danielle	Teleflex, Inc
Jiang, Dr. Jong-Dii	Microchip Technology
Kauffman, Dr. Shelley	Albright College
Keating, Mr. Ronald	PSPE
Kennedy, Elizabeth	Physical Therapist
Kijak, Mr. Joseph	Keystone Spikes Corporation
Koch, Ms. Pat	St. Catherine's Elementary Sch (Ret.)
Kramer, Ms. Robin	DePuy Synthes
Kuritzky, Mr. Howard	Berks County Intermediate Unit
Laman, Mr. Scott	Teleflex Medical, Inc.

Levkoff, Dr. Jerry	Broadcom Limited
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Marcellus, Mr. Michael	WorleyParsons
Mech, Dr. Stephen	Albright College
Miner, Dr. Roger	AT&T Bell Laboratories, Retired
Mountz, Mr. Eric	Traffic Planning and Design
Murphy, Mr. Jesse	East Penn Manufacturing
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O'Leary, Mrs. Nancy	Reading Area Community College
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Pfromm, Mr. Robert	Element Environmental Solutions
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Raup-Konsavage, Dr. Wesley	Penn State College of Medicine
Ravert, Mr. John	Berk Cnty Conservation District (Ret)
Reagan, Ms. Erin	U of P, PhD Candidate
Rice, Ms. Tracy Monegan	Terraqueous Mgm't & Res Grp
Rickert, Mr. Chris	WorleyParsons
Rochowicz, Jr., Dr. John A.	Alvernia University (Retired)
Sauer, Dr. Edward	Penn State University
Schaeffer, Ms. Andrea	Conrad Weiser SD (retired)
Schwenk, Ms Kelsey	Berks Co Conservation Dist
Shearer, Mr. Jeff	Oneida Research Services
Smeltzer-Schwab, Dr. Audrey	Muhlenburg High School
Smith, Mr. Ryan	
Stephan, Dr. Steve	
Tamayo, Ms. Yonie	WorleyParsons
Terefenko, Mr. George	Microsemi Corp.
Tjoe, Dr. Hartono	Penn State University
Tomes, Dr. Jason	Berks Veterinary Ultrasound
Trovato, Mr Charles	Berks County IU
Wertz, Ms. Elsa	Conrad Weiser SD (Retired)
Winter, Dr. Janet	Penn State Berks
Worrall, Ms. Cindi	
Wozniak, Ms. Cheryl	B. Braun Medical
Zervanos, Dr. Stam	Penn State University, ret
Zimmerman, Ms. Victoria	Self Employed

Thanks to all of the judges, including those whose names were not available in time to be included here.

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### **The King's Academy**

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Weidenheimer, Susan

### **Wilson High School**

Melograna, Joe

### **Wilson Southern Middle School**

Cockrum, Cindy

### **Wilson West Middle School**

Fick, Tim

### **Wyomissing Junior Senior High School**

Liskey, Brian

# Science Fair Participants by Project

## Junior Division

<b>Number</b>	<b>Student Name</b>	<b>School</b>
<u>6th Grade Natural Science</u>		
6N070	Amanda Beaver	Saint Catharine of Siena School
6N072	Dylan Amey	Saint Catharine of Siena School
6N154	Calia Aman	Wilson Southern Middle School
6N248	Sindura Sridhar	Wilson Southern Middle School
6N316	Charlie Shimp	Conrad Weiser Middle School
6N321	Samuel Arnold	Conrad Weiser Middle School
6N330	Riley Sowers	Conrad Weiser Middle School
6N335	Franchesca Marquez	Conrad Weiser Middle School
6N337	Madeline Shade	Conrad Weiser Middle School
6N363	Gisselle Feliciano	Conrad Weiser Middle School
6N367	Ryan DeRose	Conrad Weiser Middle School
6N382	James Arnold	Conrad Weiser Middle School
6N384	Paige Hinkle	Wilson West Middle School
6N386	Isabella Carola	LaSalle Academy
6N409	Jack Leopold	Conrad Weiser Middle School
6N415	Lauren Grabosky	Conrad Weiser Middle School
6N422	Kaitlyn Zerbe	Conrad Weiser Middle School
6N434	Emily Hatcher	LaSalle Academy
6N443	Lexie Springer	Immaculate Conception Academy
6N473	Mason Gechter	Conrad Weiser Middle School
6N475	Joseph Leiningner	LaSalle Academy
6N478	Aditya Nayak	Wilson West Middle School
6N489	R.J. Petras	Immaculate Conception Academy
<u>6th Grade Physical Science</u>		
6P069	Grant Partsch	Saint Catharine of Siena School
6P071	Arabella Smith	Saint Catharine of Siena School
6P073	Collin Gilbert	Saint Catharine of Siena School
6P106	Emily Snyder	The King's Academy
6P107	Sarah Schnatz	The King's Academy
6P108	Sierra Levan	The King's Academy
6P109	Isabella Mondelli	The King's Academy
6P110	Summer Meade	The King's Academy
6P309	Talula Hancik	Conrad Weiser Middle School
6P311	Alex Malone	Conrad Weiser Middle School
6P312	Kyra Mason	Conrad Weiser Middle School
6P313	Aidyn Gorski	Conrad Weiser Middle School
6P314	Alex Trevena	Conrad Weiser Middle School
6P315	Nevahn Oliver	Conrad Weiser Middle School
6P340	Tyler Yonavick	Conrad Weiser Middle School
6P341	Alaina Giffing	Conrad Weiser Middle School
6P349	Ariel Metzger	Conrad Weiser Middle School
6P356	Emily Chestnut	Conrad Weiser Middle School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
6P357	Adyson Rothermel	Conrad Weiser Middle School
6P358	Alayna Goodwin	Conrad Weiser Middle School
6P360	Armaan Malik	Conrad Weiser Middle School
6P364	Jeremiah Beuca	Conrad Weiser Middle School
6P369	Joshua Santiago	Wilson Southern Middle School
6P385	Jack Taylor	LaSalle Academy
6P387	Owen Ziolkowski	LaSalle Academy
6P389	Trey Keating	LaSalle Academy
6P408	Ashton Kiebach	Conrad Weiser Middle School
6P410	Rachel Katzaman	Conrad Weiser Middle School
6P412	Hannah Fraser	Conrad Weiser Middle School
6P413	Ethan Gilmer	Conrad Weiser Middle School
6P414	Shaelyn Ramberger	Conrad Weiser Middle School
6P416	Cedric Fabien	Conrad Weiser Middle School
6P417	Aaron West	Conrad Weiser Middle School
6P423	Kayleigh Perrine	Conrad Weiser Middle School
6P433	Kathryn Raynes	Conrad Weiser Middle School
6P447	Paul Pike	Immaculate Conception Academy
6P448	Sasha Schaffer	Immaculate Conception Academy
6P449	Luke Jordan	Immaculate Conception Academy
6P483	Enrique Lopez	Reading Northeast Middle School

7th Grade Natural Science

7N018	Megan McElderry	Saint Catharine of Siena School
7N020	Sarah Dangelo	Saint Catharine of Siena School
7N021	Maxx Mace	Saint Catharine of Siena School
7N031	Rachel Franey	Saint Catharine of Siena School
7N033	Lucien Kraycik	Saint Catharine of Siena School
7N034	Alex Nerney	Saint Catharine of Siena School
7N035	Eli Hearing	Saint Catharine of Siena School
7N037	Payton Wagner	Saint Catharine of Siena School
7N038	Nathan McCartin	Saint Catharine of Siena School
7N040	Martha Stratton	Saint Catharine of Siena School
7N044	Kyle Kintzer	Saint Catharine of Siena School
7N045	Alexandra Oscar	Saint Catharine of Siena School
7N046	Paisley Lutz	Saint Catharine of Siena School
7N093	Aryelle Jimenez	Holy Guardian Angels
7N096	Samantha Holland	Holy Guardian Angels
7N097	Sara Holland	Holy Guardian Angels
7N111	Grace Sands	Holy Guardian Angels
7N117	Klaudia Jarombek	Holy Guardian Angels
7N164	Emily McGonigle	Conrad Weiser Middle School
7N198	Mackenzie Langdon	Saint Ignatius Loyola School
7N200	Michael Bradley	Saint Ignatius Loyola School
7N201	Emmalee Mirabella	Saint Ignatius Loyola School
7N202	Annalee Brant	Saint Ignatius Loyola School
7N203	Gabriella Gentile	Saint Ignatius Loyola School
7N226	Gracie McMahon	Conrad Weiser Middle School
7N249	Sara DeLoretta	Governor Mifflin Middle School



<b>Number</b>	<b>Student Name</b>	<b>School</b>
7N259	Noah Miller	Conrad Weiser Middle School
7N319	Marianna Ott	Saint Ignatius Loyola School
7N322	Jenna Krawlzik	Saint Ignatius Loyola School
7N328	Abigail McNeil	Saint Ignatius Loyola School
7N329	Meghan Munter	Sacred Heart School
7N331	Benjamin Cunningham	Saint Ignatius Loyola School
7N336	Courtney Britton	Conrad Weiser Middle School
7N342	Paisley Moyer	Governor Mifflin Middle School
7N344	Zachary Herman	Saint Ignatius Loyola School
7N345	Mary Brubaker	Saint Ignatius Loyola School
7N346	Caylyn Hauser	Saint Ignatius Loyola School
7N381	Alexa Thomas	Saint Ignatius Loyola School
7N391	Xander Heidel	Conrad Weiser Middle School
7N392	Isabel Wiggins	Conrad Weiser Middle School
7N393	Nikita Patel	Wilson West Middle School
7N394	Giannah Fernandez	Conrad Weiser Middle School
7N396	Aislin Given	Conrad Weiser Middle School
7N402	Kaiden Sena	Conrad Weiser Middle School
7N405	Elliot Mock	Conrad Weiser Middle School
7N407	Lisa Kesselring	Conrad Weiser Middle School
7N424	Marvin Armistead	Sacred Heart School
7N425	Rocco DeCarlo	Sacred Heart School
7N427	Claire Pakradooni	Sacred Heart School
7N428	Adriana Vidal	Sacred Heart School
7N436	Rachel Forkin	Immaculate Conception Academy
7N450	Charlotte Dolena	Immaculate Conception Academy
7N471	Matthew Schrenk	LaSalle Academy
7N476	Gabriela Shick	LaSalle Academy
7N481	John Serrano	LaSalle Academy
7N506	Reybin Valenzuela	Reading Northeast Middle School
7N509	Saxtyn Lutz	St. Ignatius

#### 7th Grade Physical Science

7P019	Nicholas Barbera	Saint Catharine of Siena School
7P022	Esteban Schodowski	Saint Catharine of Siena School
7P023	Logan Miller	Saint Catharine of Siena School
7P024	William Hess	Saint Catharine of Siena School
7P025	Celia Hess	Saint Catharine of Siena School
7P026	Jacquelyn Batastini	Saint Catharine of Siena School
7P027	Luke Impellizzeri	Saint Catharine of Siena School
7P028	Timothy Saylor	Saint Catharine of Siena School
7P029	Tristan Figueroa	Saint Catharine of Siena School
7P030	Isaiah Whittaker	Saint Catharine of Siena School
7P032	Brandon Sargent	Saint Catharine of Siena School
7P036	Madison Wolfe	Saint Catharine of Siena School
7P039	Mary McDevitt	Saint Catharine of Siena School
7P041	William DosSantos Moore	Saint Catharine of Siena School
7P042	Gicarlo Pena	Saint Catharine of Siena School
7P043	Joseph Dempster	Saint Catharine of Siena School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
7P095	Regan Precht	Holy Guardian Angels
7P101	Sean Hall	Holy Guardian Angels
7P103	Olivia Jones	Holy Guardian Angels
7P104	Marli Emrich	Holy Guardian Angels
7P146	Helena Christ	Holy Guardian Angels
7P170	Joshua Weber	Wilson Southern Middle School
7P197	Sabrina Roberts	Saint Ignatius Loyola School
7P199	Joseph Polinsky	Saint Ignatius Loyola School
7P204	Nicola Polinsky	Saint Ignatius Loyola School
7P228	Kathryn Nye	Conrad Weiser Middle School
7P229	Sage Callahan	Conrad Weiser Middle School
7P231	Carlisle Stuckert	Governor Mifflin Middle School
7P252	Emma Klahr	Governor Mifflin Middle School
7P286	Jillian Rosenbaum	Governor Mifflin Middle School
7P317	Kaden Maier	Saint Ignatius Loyola School
7P320	Gianna Roberts	Saint Ignatius Loyola School
7P326	Arianna Clemens	Saint Ignatius Loyola School
7P332	Brylee McCollum	Conrad Weiser Middle School
7P333	Bryan Nguyen	Saint Ignatius Loyola School
7P338	Nicole Morganti	Saint Ignatius Loyola School
7P347	Meghan Cramer	Wilson Southern Middle School
7P350	Jarryd Klopp	Conrad Weiser Middle School
7P376	Abigail Frantz	Conrad Weiser Middle School
7P395	Eric Yazemboski	Conrad Weiser Middle School
7P399	Blake Skipper	Conrad Weiser Middle School
7P400	Raymond Gorney	Conrad Weiser Middle School
7P401	Maggie Conlon	Saint Ignatius Loyola School
7P404	Andrew Stein	Conrad Weiser Middle School
7P406	Mirabela Paff	Conrad Weiser Middle School
7P421	Cesario Minier	Saint Ignatius Loyola School
7P437	Brady Mider	LaSalle Academy
7P438	Caitlyn Bailey	Immaculate Conception Academy
7P439	Lauren Yerger	Immaculate Conception Academy
7P440	Anthony Repko	Immaculate Conception Academy
7P444	Sara Witmer	LaSalle Academy
7P458	Madeline Frisina	LaSalle Academy
7P463	Samantha Weidner	Immaculate Conception Academy
7P484	Kash Bridgman	Conrad Weiser Middle School
7P493	Alijah Vasquez	Reading Northeast Middle School
7P511	Naomi Hopkins	Antietam Middle-Senior High School
7P512	Nathaniel Coller	Antietam Middle-Senior High School
7P514	Caelyn Storms	Antietam Middle-Senior High School
7P515	Autumn Haas	Antietam Middle-Senior High School
7P516	Austin Miller	Antietam Middle-Senior High School

8th Grade Natural Science

8N048	Julia Seidel	Conrad Weiser Middle School
8N050	Leah Malone	Conrad Weiser Middle School
8N051	Molly Knepper	Conrad Weiser Middle School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
8N053	Anna Dalesandro	Conrad Weiser Middle School
8N054	Jocelyn McFadden	Conrad Weiser Middle School
8N055	Luke Leopold	Conrad Weiser Middle School
8N056	Emma Houck	Conrad Weiser Middle School
8N058	Adam Noll	Conrad Weiser Middle School
8N059	Tessa Schiding	Conrad Weiser Middle School
8N060	Hailey Miller	Conrad Weiser Middle School
8N081	Abigail Weber	Conrad Weiser Middle School
8N084	Katelyn Murphy	Conrad Weiser Middle School
8N086	Jazmyn Borrilez	Governor Mifflin Middle School
8N087	Emma Reeser	Conrad Weiser Middle School
8N088	Trey Dianna	Conrad Weiser Middle School
8N089	Aiden Assemes	Governor Mifflin Middle School
8N091	Hannah Nied	Holy Guardian Angels
8N098	Aubree Yoder	Home School
8N100	Jazmin Mejia	Holy Guardian Angels
8N112	Stephen Askey	Holy Guardian Angels
8N113	Brady Detwiler	Governor Mifflin Middle School
8N119	Luke Brenner	Holy Guardian Angels
8N120	Renee Kuennen	Conrad Weiser Middle School
8N125	Eva Steiner	Conrad Weiser Middle School
8N126	Alaina Althouse	Conrad Weiser Middle School
8N127	Emily Bond	Conrad Weiser Middle School
8N131	Breanna Gilfert	Conrad Weiser Middle School
8N135	Eliana Stoltz	Conrad Weiser Middle School
8N137	Kayla Matthew	Conrad Weiser Middle School
8N140	Lindsey Preston	Conrad Weiser Middle School
8N142	Evan Ruth	Conrad Weiser Middle School
8N143	Jada Savage	Conrad Weiser Middle School
8N148	Ryan McNutt	Conrad Weiser Middle School
8N150	Ellie Friedlander	Governor Mifflin Middle School
8N151	Brian Kroenig	Holy Guardian Angels
8N153	Assiatou Tall	Wilson Southern Middle School
8N251	Helen Andreyo	Saint Ignatius Loyola School
8N253	Maggie McFadden	Saint Ignatius Loyola School
8N258	Emily Ward	Saint Ignatius Loyola School
8N282	Rowan Smith	Saint Catharine of Siena School
8N324	Kylie Weiger	Sacred Heart School
8N325	Elizabeth McCann	Sacred Heart School
8N334	Estella Burkman	Saint Ignatius Loyola School
8N339	Kayla Pedraza	Conrad Weiser Middle School
8N343	Ethan Rex	Conrad Weiser Middle School
8N353	Madison Cannon	LaSalle Academy
8N366	Claire Hinkle	Wilson West Middle School
8N374	Rachel Reinhard	Muhlenberg Middle School
8N378	Emily Gravitt	Conrad Weiser Middle School
8N379	Logan Kimma	Muhlenberg Middle School
8N380	Sarah Love	Muhlenberg Middle School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
8N431	Jaxon Geddio	Muhlenberg Middle School
8N432	Sydney Boyd	LaSalle Academy
8N435	Jacob Hoyt	Conrad Weiser Middle School
8N452	Angela Serpico	Immaculate Conception Academy
8N453	Rebecca Adams	Immaculate Conception Academy
8N457	Michaela Burkey	LaSalle Academy
8N459	Elise Kirwan	LaSalle Academy
8N460	Samantha Gantz	Muhlenberg Middle School
8N461	Isabella Reali	LaSalle Academy
8N472	Gianna Olinger	LaSalle Academy
8N479	Elyssa Elliott	Saint Ignatius Loyola School
8N488	Avery Kelly	Immaculate Conception Academy

#### 8th Grade Physical Science

8P016	Brady Snyder	Conrad Weiser Middle School
8P017	Alex Snyder	Conrad Weiser Middle School
8P049	Alexander Tulli	Conrad Weiser Middle School
8P052	Holden Rice	Conrad Weiser Middle School
8P057	Tristan Rivera	Conrad Weiser Middle School
8P076	Paige McKim	The King's Academy
8P077	Jacob Neiswender	The King's Academy
8P078	Evan Westenhoefer	The King's Academy
8P079	Chance Noel	The King's Academy
8P083	Caleb Werner	Conrad Weiser Middle School
8P092	Abigail Sabatucci	Holy Guardian Angels
8P094	Alyssa Coccia	Holy Guardian Angels
8P099	Bryleigh Reddy	Holy Guardian Angels
8P114	Jadyn Weik	Conrad Weiser Middle School
8P115	Asher Landrum	Muhlenberg Middle School
8P121	Evan Line	Conrad Weiser Middle School
8P122	Andrew Yonavick	Conrad Weiser Middle School
8P123	Owen Sabold	Conrad Weiser Middle School
8P124	Maritza Wiggins	Conrad Weiser Middle School
8P128	Leslieann Peers	Conrad Weiser Middle School
8P129	Abby Robinson	Conrad Weiser Middle School
8P132	Reed Smith	Conrad Weiser Middle School
8P133	Alyson Hoffa	Conrad Weiser Middle School
8P134	Aidan Ruth	Conrad Weiser Middle School
8P136	Sam Ressler	Conrad Weiser Middle School
8P138	Paige Shannon	Conrad Weiser Middle School
8P139	Brandon Dreibelbis	Conrad Weiser Middle School
8P141	Amber McGonigle	Conrad Weiser Middle School
8P144	Mackenzie Schoener	Conrad Weiser Middle School
8P145	Madison Esterly	Holy Guardian Angels
8P147	Sophia Gattone	Holy Guardian Angels
8P149	Clayton Hickey	Governor Mifflin Middle School
8P156	Olivia Rosa	Holy Guardian Angels
8P157	James Kauffman	Conrad Weiser Middle School
8P159	Abbee Fries	Saint Catharine of Siena School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
8P167	Noah Rosa	Holy Guardian Angels
8P169	Riley Murphy	Holy Guardian Angels
8P171	Aaron Xie	Wilson Southern Middle School
8P205	Dana Gilbert	Muhlenberg Middle School
8P250	Shannon Plasha	Saint Ignatius Loyola School
8P254	Abigail Lenker	Saint Ignatius Loyola School
8P255	David Birmingham	Saint Ignatius Loyola School
8P256	Angelina Fasig	Saint Ignatius Loyola School
8P257	Hannah Painton	Saint Ignatius Loyola School
8P281	Jennifer Beaver	Saint Catharine of Siena School
8P283	Edward Oscar	Saint Catharine of Siena School
8P284	Kaitlyn Nguyen	Saint Catharine of Siena School
8P318	Jackson Gasperack	Sacred Heart School
8P323	John Maurer	Sacred Heart School
8P368	Suvrat Agrawal	Wilson Southern Middle School
8P373	Abriana Kreiser	Conrad Weiser Middle School
8P430	Dalton Maiers	LaSalle Academy
8P445	Andrew Kurtas	Immaculate Conception Academy
8P446	Alexander Witmer	LaSalle Academy
8P454	Daniel Schlegel	Immaculate Conception Academy
8P455	Zachary Jordan	Immaculate Conception Academy
8P464	Christian Changco	Sacred Heart School
8P465	Sean Patton	Muhlenberg Middle School
8P470	Isabella Belville	LaSalle Academy
8P485	Colin Clabaugh	Conrad Weiser Middle School
8P498	Logan Koller	Governor Mifflin Middle School
8P507	Victoria Realì	St. Ignatius

## Senior Division

### 9th-12th Grades Behavioral and Social Sciences

BS005	Victoria Kimmel	Conrad Weiser HS
BS009	Madison Seidel	Conrad Weiser HS
BS082	Sarah Guevara	Conrad Weiser HS
BS160	Annaka Mirabella	Berks Catholic High School
BS166	Drew Irey	Berks Catholic High School
BS192	James Coleman	Governor Mifflin Senior High School
BS194	Karyn Creelman	Governor Mifflin Senior High School
BS195	Alena Woolwine	Governor Mifflin Senior High School
BS216	Lilly Myers	Governor Mifflin Senior High School
BS270	Naomi Lockard	Governor Mifflin Senior High School
BS278	Brooke Mock	Governor Mifflin Senior High School
BS288	Jasmin Bickham	Governor Mifflin Senior High School
BS355	Emma Gockley	Governor Mifflin Senior High School
BS426	Janay Lewis	Conrad Weiser HS
BS442	Madeleine Piersol	Berks Catholic High School
BS499	Olivia Xie	Wilson High School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
<u>9th-12th Grades Botany</u>		
BO064	Makayla Barrett	Tulpehocken Junior - Senior High School
BO065	Alyssa Boyer	Tulpehocken Junior - Senior High School
BO118	Robert Silver	Berks Catholic High School
BO175	Ben Gerhard	Governor Mifflin Senior High School
BO187	Amanda Reynolds	Governor Mifflin Senior High School
BO209	Alexa Owens	Governor Mifflin Senior High School
BO215	Colin Ernst	Governor Mifflin Senior High School
BO222	Isabella Morgalo	Governor Mifflin Senior High School
BO223	Evan Greusel	Governor Mifflin Senior High School
BO232	Cormick Costello	Governor Mifflin Senior High School
BO260	Hannah Palange	Governor Mifflin Senior High School
BO263	Callum Hazlett	Governor Mifflin Senior High School
BO271	Sophie Stanislawczyk	Governor Mifflin Senior High School
BO279	Angela Opalko	Governor Mifflin Senior High School
BO291	Renee Carl	Governor Mifflin Senior High School
BO296	Jordyn Krzyzanowski	Governor Mifflin Senior High School
BO297	David Beyer	Governor Mifflin Senior High School
BO301	Valerie Boguslowski	Governor Mifflin Senior High School
BO303	Griffin Kriebel	Governor Mifflin Senior High School
BO306	Elyias Amrani	Governor Mifflin Senior High School
BO308	Lillian Bonfitto	Governor Mifflin Senior High School
BO354	Isabella Velez	Governor Mifflin Senior High School
BO375	Andela Kraycik	Berks Catholic High School
BO420	Erin Horack	Conrad Weiser HS
BO456	Gabby Femino	Berks Catholic High School
BO469	Gabriella Fontana	Berks Catholic High School
BO474	Caleb Anders	Governor Mifflin Senior High School
BO477	Kimberly Lam	Conrad Weiser HS
BO486	Therese Coleman	Conrad Weiser HS
<u>9th-12th Grades Chemistry</u>		
CH007	Joel McClellan	Conrad Weiser HS
CH063	Mackenzi Sowers	Tulpehocken Junior - Senior High School
CH067	Ella Ahner	Tulpehocken Junior - Senior High School
CH074	Emma Moody	Berks Catholic High School
CH090	Amelia Folk	Tulpehocken Junior - Senior High School
CH162	William Jiang	The King's Academy
CH163	Perry Xu	The King's Academy
CH168	Gabriella Kurtas	Berks Catholic High School
CH173	Reiley May	Governor Mifflin Senior High School
CH179	Will Gallen	Governor Mifflin Senior High School
CH181	Carly Kuriger	Governor Mifflin Senior High School
CH196	Serenity Fasig	Governor Mifflin Senior High School
CH208	Wyatt Huber	Governor Mifflin Senior High School
CH219	Suntaya Osiris	Governor Mifflin Senior High School
CH230	Cassidy Ketz	Governor Mifflin Senior High School
CH237	Paige DeLoretta	Governor Mifflin Senior High School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
CH238	Kyle Stocum	Governor Mifflin Senior High School
CH240	Justin Pawling	Governor Mifflin Senior High School
CH242	Daniel Beahm	Governor Mifflin Senior High School
CH267	Reagan Rosenbaum	Governor Mifflin Senior High School
CH275	Mya Hipszer	Governor Mifflin Senior High School
CH289	Danny Mitchell	Governor Mifflin Senior High School
CH294	Michael Brunner	Governor Mifflin Senior High School
CH300	Emilio Santiesteban	Governor Mifflin Senior High School
CH362	Faye Dorman	Governor Mifflin Senior High School
CH371	Thea Piskorski	Berks Catholic High School
CH419	Krishna Nayak	Wilson High School
CH462	Hyein Jung	Berks Catholic High School
CH467	Logan Fritz	Muhlenberg Middle School
CH494	Nikole Stoudt	Wyomissing Junior Senior High School
CH497	Morgan Welliver	Wyomissing Junior Senior High School
CH501	Louna Makdissi	Wyomissing Junior Senior High School
CH503	Seychelle Jackson	Wyomissing Junior Senior High School
CH504	McKenzie Bornstein	Wyomissing Junior Senior High School

9th-12th Grades Earth and Environment

EE061	Megan Hatcher	Berks Catholic High School
EE062	Madeline Marous	Tulpehocken Junior - Senior High School
EE075	Sofia Lall	Conrad Weiser HS
EE080	Katherine Buerke	Berks Catholic High School
EE102	Natalie Richards	Conrad Weiser HS
EE158	Eliza Fries	Berks Catholic High School
EE161	Noah Kulp	The King's Academy
EE172	Chloe Woodruff	Governor Mifflin Senior High School
EE174	Mackenzie Melcher	Governor Mifflin Senior High School
EE182	Emily Byrd	Governor Mifflin Senior High School
EE207	Lauren Rowe	Governor Mifflin Senior High School
EE211	Aubrey Miller	Governor Mifflin Senior High School
EE268	Grace Foster	Governor Mifflin Senior High School
EE272	Jillian Michel	Governor Mifflin Senior High School
EE277	Liliana Sharicata Hernandez	Governor Mifflin Senior High School
EE348	Connor Gundersen	Berks Catholic High School
EE370	Colby Snyder	Wilson High School
EE372	Mollie Helstrom	Berks Catholic High School
EE390	Hayeigh Monroe	Conrad Weiser HS
EE482	Allison Carneal	Conrad Weiser HS
EE500	Lucas Hyneman	Berks Catholic High School
EE502	Jillian Goodrich	Wilson High School
EE508	Amaya Shah	Wilson High School

9th-12th Grades Engineering

EN001	Ethan Lasher	Conrad Weiser HS
EN008	Hayley Finogle	Conrad Weiser HS
EN015	Hannah Wright	Conrad Weiser HS
EN180	Carter Sweigart	Governor Mifflin Senior High School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
EN210	Liliana Erb	Governor Mifflin Senior High School
EN220	Jacquelyn Goll	Governor Mifflin Senior High School
EN225	Caden Coutz	Governor Mifflin Senior High School
EN388	Brendan Weber	Governor Mifflin Senior High School
EN397	MacKenzie Partsch	Berks Catholic High School
EN517	Efstratia Pauley	Conrad Weiser HS
EN518	Marjorie Romero	Wilson High School
<u>9th-12th Grades Mathematics and</u>		
MC014	Thomas Truong	Conrad Weiser HS
MC085	Kathryn Gabriel	Berks Catholic High School
MC264	Liya Carter	Governor Mifflin Senior High School
MC510	Benjamin Chen	Wyomissing Junior Senior High School
<u>9th-12th Grades Medicine and Health</u>		
MH002	Rachel Kesselring	Conrad Weiser HS
MH003	Hannah Schultz	Conrad Weiser HS
MH004	Brea Borrell	Conrad Weiser HS
MH010	Emnet Kefeni	Conrad Weiser HS
MH011	Laurel Vida	Conrad Weiser HS
MH012	Isabella Brosious	Conrad Weiser HS
MH013	Mariah Mendez	Conrad Weiser HS
MH047	Gavin Remp	Conrad Weiser HS
MH105	Russell Emrich	Berks Catholic High School
MH152	Leah Zielinski	Tulpehocken Junior - Senior High School
MH155	Abigail Atkins	Berks Catholic High School
MH165	Kierra Pickard	Berks Catholic High School
MH176	Mandy Maiers	Governor Mifflin Senior High School
MH177	Shelby Shamus	Governor Mifflin Senior High School
MH183	Maggie Boggs	Governor Mifflin Senior High School
MH184	Jocelyn Grosch	Governor Mifflin Senior High School
MH185	Caden Blandford	Governor Mifflin Senior High School
MH186	Joseph Petricoin	Governor Mifflin Senior High School
MH189	Sherrise Otu	Governor Mifflin Senior High School
MH190	Stella Mollica	Governor Mifflin Senior High School
MH191	Abby Steckiel	Governor Mifflin Senior High School
MH193	Gia Gilbert	Governor Mifflin Senior High School
MH212	Jeel Patel	Governor Mifflin Senior High School
MH217	Elisa Fiore	Governor Mifflin Senior High School
MH218	Leslie Portillo	Governor Mifflin Senior High School
MH233	Ryan Klein	Governor Mifflin Senior High School
MH234	Annika Ermold	Governor Mifflin Senior High School
MH235	Kylie Ruth	Governor Mifflin Senior High School
MH243	Selina Gonzalez	Governor Mifflin Senior High School
MH244	Brian Wentling	Governor Mifflin Senior High School
MH245	Christina Heiser	Governor Mifflin Senior High School
MH246	Cassidy Schultz	Governor Mifflin Senior High School
MH261	Alaina Maples	Governor Mifflin Senior High School
MH265	Faith Bentz	Governor Mifflin Senior High School



<b>Number</b>	<b>Student Name</b>	<b>School</b>
MH266	Cassidy Quinn	Governor Mifflin Senior High School
MH269	Olivia Swartz	Governor Mifflin Senior High School
MH274	Hannah Oplinger	Governor Mifflin Senior High School
MH276	Aaryan Kapoor	Governor Mifflin Senior High School
MH280	Helena Ramirez	Governor Mifflin Senior High School
MH287	Mya Kwiatkowski	Governor Mifflin Senior High School
MH290	Dylan Kohl	Governor Mifflin Senior High School
MH292	Ella Hubric	Governor Mifflin Senior High School
MH298	Madison LaBelle	Governor Mifflin Senior High School
MH299	Madeline Coutz	Governor Mifflin Senior High School
MH305	Lilith Arevalo	Governor Mifflin Senior High School
MH310	Eliza Enriquez	Governor Mifflin Senior High School
MH351	Emily Smith	Governor Mifflin Senior High School
MH352	Sabryna Collins	Governor Mifflin Senior High School
MH359	Logan Mountz	Governor Mifflin Senior High School
MH361	Kyli Burgos	Governor Mifflin Senior High School
MH365	Madison Griffith	Governor Mifflin Senior High School
MH377	Madeline Fox	Conrad Weiser HS
MH383	Jillian Avadanian	Berks Catholic High School
MH398	Mariella Frisina	Berks Catholic High School
MH403	Cameron Clemens	Conrad Weiser HS
MH411	Tedd Stabolepszy	Governor Mifflin Senior High School
MH418	Emily Johnson	Conrad Weiser HS
MH466	Selia Werth	Conrad Weiser HS
MH468	Ireland Keeney	Conrad Weiser HS
MH490	Journee Haynes	Conrad Weiser HS
MH505	Ellie Chibirka	Conrad Weiser HS
MH513		Mackenzie Donatelli Conrad Weiser HS

9th-12th Grades Physics and Astronomy

PA006	William Savoy	Conrad Weiser HS
PA066	Ashton Bobo	Tulpehocken Junior - Senior High School
PA116	Mark Rowles	The King's Academy
PA178	Nathan Leaman	Governor Mifflin Senior High School
PA188	Christian Morales	Governor Mifflin Senior High School
PA213	Mason Magdalinski	Governor Mifflin Senior High School
PA214	Jacob Engle	Governor Mifflin Senior High School
PA224	Caleb Hivner	Governor Mifflin Senior High School
PA236	Ian Armour	Governor Mifflin Senior High School
PA239	Alexander Cullen	Governor Mifflin Senior High School
PA247	Samuel Cullen	Governor Mifflin Senior High School
PA262	Sheyna Tully	Governor Mifflin Senior High School
PA273	James Musser	Governor Mifflin Senior High School
PA285	Nicolas Kuczala	Governor Mifflin Senior High School
PA293	Cory Engle	Governor Mifflin Senior High School
PA295	Andria Addis	Governor Mifflin Senior High School
PA302	Mason Woolwine	Governor Mifflin Senior High School
PA304	Mia Beilhart	Governor Mifflin Senior High School
PA307	Austin Hill	Governor Mifflin Senior High School

<b>Number</b>	<b>Student Name</b>	<b>School</b>
PA487	Joseph Walker	Berks Catholic High School
<u>9th-12th Grades Zoology</u>		
ZO068	Kyla Ebersole	Tulpehocken Junior - Senior High School
ZO206	Abigail Holcomb	Governor Mifflin Senior High School
ZO221	Zoey Ernst	Governor Mifflin Senior High School
ZO227	Alexander Rodriguez	Governor Mifflin Senior High School
ZO241	Kayla Rivera	Governor Mifflin Senior High School
ZO327	Eliza Stauffer	Governor Mifflin Senior High School
ZO441	Brady Moyer	Conrad Weiser HS
ZO451	Megan Vance	Berks Catholic High School
ZO491	Julia Madsen	Conrad Weiser HS
ZO492	Christiana Wagner	Conrad Weiser HS

## **SUMMARY OF ENTRIES BY CATEGORY**

6N	23
6P	39
7N	57
7P	60
8N	63
8P	63
BO	29
BS	16
CH	34
EE	23
EN	11
MC	4
MH	62
PA	20
ZO	10
<b>Total Entries</b>	<b>514</b>

## **PAST AWARD WINNERS**

- 1953  
1 - Virgil Ponzoli - Central Catholic - Earth-Space  
2 - Joseph Drylewski - Central Catholic - Zoology  
3 - Harvey Plowfield, Jr. - Wyomissing - Physics
- 1954  
1 - Malcolm Eidle - Kutztown
- 1955  
1 - David L. Klemmer - Reading High - Zoology
- 1956  
1 - John Braun - Central Catholic - Chemistry
- 1957  
1 - Raymond Bowman - Reading High - Physics
- 1958  
1 - Kerry Weinhold - Reading High - Physics  
2 - Priscilla Hendricks - Governor Mifflin  
3 - Dolores A. Napiecek - Central
- 1959  
1 - George F. Post - Central - Zoology  
2 - Catharine Gallagher - Mt. St. Michaels  
3 - Marguerite Costigan - Kutztown
- 1960  
1 - George F. Post - Central Catholic  
2 - Paula Buskey - Central Catholic  
3 - Barry W. Ache - Reading High - Botany
- 1961  
1 - Kermit F. Crossland - Central Catholic - Chemistry  
2 - Jacob Snyder - Oley Valley - Zoology  
3 - Dale Stoltzfus - C.E. Cole
- 1962  
1 - Bruce D. Pomeroy - Central Catholic - Physics  
2 - James Berger - Exeter - Zoology  
3 - Kathleen Bryniaski - Central Catholic
- 1963  
1 - Barbara M. Descoteaux - Mt. St. Michaels - Bio Chemistry  
2 - John Stofko - Central Catholic - Physics  
3 - Janine Phillips - Schuylkill Valley - Physical Science
- 1964  
1 - Ronald Polinski - Central Catholic - Applied Science  
2 - Suzanne Garszcynski - Central Catholic - Chemistry  
3 - Janine Phillips - Schuylkill Valley - Physical Science
- 1965  
1 - Ronald J. Polinski - Central Catholic - Grand Champ Boy - Zoology  
1 - Cheryl L. Leddy - Central Catholic - Grand Champ Girl - Chemistry  
2 - Daniel M. Webber, Jr. - Central Catholic - Physics  
2 - Nancy Noone - Central Catholic - Applied Science
- 1966  
1 - James Simpson - Central Catholic - Zoology  
1 - Antoinette Tyrrell - Central Catholic - Physics  
2 - Daniel Weber - Central Catholic - Physics  
2 - Suzanne Radka - Central Catholic - Applied Science
- 1967  
1 - Bradley Auge - Governor Mifflin - Zoology  
1 - Suzanne Radka - Central Catholic - Applied Science  
2 - David L. Wagner - Holy Name - Physics  
2 - Kathleen Rose - Central Catholic - Physics

- 1968            1 - Bradley Auge - Governor Mifflin - Med./Health  
                   2 - Randall Heffelfinger - Oley - Chemistry  
                   3 - Maryann Zanis - Holy Name - Zoology
- 1969            1 - Richard Harris - Central Catholic - Med/Health  
                   2 - Maryann Zanis - Holy Name - Zoology  
                   3 - Steven Peter - Boyertown - Earth-Space
- 1970            1 - Leonard Smolinski - Central Catholic - Physics  
                   2 - Patricia Culp - Holy Name - Zoology  
                   3 - Richard Harris - Central Catholic - Med/Health
- 1971            1 - R. Richard Harris - Central Catholic - Med./Health  
                   2 - Jeffrey Green - Reading High - Chemistry  
                   3 - Robert Skrocki - Central Catholic - Earth-Space
- 1972            1 - Maria Porcaro - Central Catholic - Med/Health  
                   2 - David Embree - Muhlenberg - Physics  
                   3 - Anton Kapp - Holy Name - Botany
- 1973            1 - Anton Kapp - Holy Name - Botany  
                   2 - Thomas P. Hafer - Central Catholic - Med/Health  
                   3 - Dennis Lorah - Boyertown - Chemistry
- 1974            1 - Paul Embree - Muhlenberg - Physics  
                   2 - Dennis P. Lorah - Boyertown - Chemistry  
                   3 - Richard H. Ebright - Muhlenberg - Zoology
- 1975            1 - Richard Ebright - Muhlenberg - Zoology  
                   2 - Paul Embree - Muhlenberg - Physics  
                   3 - Thomas Smithgall - Holy Name - Med/Health
- 1976            1 - Richard A. Ebright - Muhlenberg - Zoology  
                   2 - Paul M. Embree - Muhlenberg - Physics
- 1977            1 - Richard H. Ebright - Muhlenberg - Zoology  
                   2 - Paul Embree - Muhlenberg - Physics  
                   3 - Brad S. Rachman - Muhlenberg - Botany
- 1978            1 - James K. McCarthy - Muhlenberg - Earth-Space  
                   2 - David J. Eshelman - Exeter - Med/Health  
                   3 - Raffaella Torchia - Holy Name - Botany
- 1979            1 - Kirk Mathews - Central Catholic - Physics  
                   2 - David Eschelman - Exeter - Chemistry  
                   3 - Gregory Henry - Reading High - Zoology
- 1980            1 - James Linton - Reading High - Botany  
                   2 - Kirk Mathews - Central Catholic - Physics  
                   3 - Michael Swank - Reading High - Zoology
- 1981            1 - Andrew Fraley - Wilson - Math & Computers  
                   2 - Helen Rozzi - Central Catholic - Chemistry  
                   3 - Michael Swenk - Reading High - Botany

1982            1 - ChristopHer L. Fraley - Wilson - Math & Computers  
                   2 - StepHen L. Rozzi - Central Catholic - Physics  
                   3 - Timothy R. Valentino - Reading High - Chemistry

1983            1 - ChristopHer Fraley - Wilson - Math & Computers  
                   2 - ChristopHer Russo - Central Catholic - Physics  
                   3 - Jennifer Emkey - Holy Name - Med./Health

1984            1 - Jennifer Emkey - Holy Name - Med/Health  
                   2 - ChristopHer Fraley - Wilson - Math & Computers  
                   3 - Michele Swope - Holy Name - Botany

1985            1 - Michele Swope - Holy Name - Botany  
                   2 - Christopher Fraley - Wilson - Math & Computers  
                   3 - Heather Shimp - Holy Name - Earth-Space

1986            1 - David Haile - Holy Name - Zoology  
                   2 - Steven Litvin - Wilson - Math & Computers  
                   3 - Michele Swope - Holy Name - Physics

1987            1 - Steven Litvin - Wilson - Physics  
                   2 - David Haile - Holy Name - Zoology  
                   3 - Melissa Wall - Muhlenberg - Chemistry

1988            1 - Steven Litvin - Wilson - Physics  
                   2 - Sharon Pilarski - Holy Name - Med/Health  
                   3 - Anne Wert - Daniel Boone - Earth-Space

1989            1 - Sharon Pilarski - Holy Name - Med./Health  
                   2 - Michael Thompson - Central Catholic - Zoology  
                   3 - Daniel Cherrie - Oley - Physics

1990            1 - Lawrence Moore - Governor Mifflin - Zoology  
                   2 - StepHen Kelley - Governor Mifflin - Physics  
                   3 - Theresa Helms - Holy Name - Med/Health

1991            1 - George Gumbrell - Boyertown - Physics  
                   2 - Lawrence Moore - Governor Mifflin - Zoology  
                   3 - Peter A. Daley - Wilson - Physics

1992            1 - Michael Rhoades - Oley  
                   2 - Peter Daley - Wilson  
                   3 - Stephen Kelley - Governor Mifflin

1993            1 - Michael Rhoads - Oley  
                   2 - Peter Daley - Wilson  
                   3 - Gregory Emkey - Holy Name

1994            1 - Gregory Emkey - Holy Name  
                   2 - Derek Robinson - Wilson  
                   3 - Nicholas Warischalk - Reading Central Catholic

1995            1 - Gerry Lee - Wilson  
                   2 - Joshua Himmelberger - Hamburg  
                   3 - StepHen Emkey - Holy Name

1996  
 1 - Joshua Himmelberger - Hamburg  
 2 - StepHen Emkey - Holy Name  
 3 - Michael Nieman - Oley Valley

1997  
 1 - Brett DePoister - Reading Central Catholic  
 2 - Joshua Himmelberger - Hamburg  
 3 - StepHen Emkey - Holy Name

1998  
 1 - Brett DePoister - Reading Central Catholic  
 2 - Jesse Belanger - Oley Valley  
 3 - Kristina Sanford - Wilson

1999  
 1 - Jeff Payne - Wilson  
 2 - Kyle Usbeck - Wilson  
 3 - Stacey Blanck - Exeter

2000  
 1 - Kyle Usbeck - Wilson  
 2 - Jeff Payne - Wilson  
 3 - Dan Vroman - Exeter

2001  
 1 - Katie Sanford - Wilson  
 2 - Kyle Usbeck - Wilson  
 3 - Bradford James Brizek - Conrad Weiser

2002  
 1 - Jeffrey Pawlikowski - Conrad Weiser  
 2 - Katie Sanford - Wilson  
 3 - Nickolas Timpe - Home School

2003  
 1 - Denise Gardner - Conrad Weiser  
 2 - Kathryn Sanford - Wilson  
 3 - Nickolas Timpe - Home School

2004  
 1 - Thomas Trudel - Muhlenberg  
 2 - Kathryn Sanford - Wilson  
 3 - Peter Littlefield - Oley Valley

2005  
 1 - Hilary Peterson - Conrad Weiser  
 2 - Thomas Trudel - Muhlenberg  
 3 - Matthew Gardner - Conrad Weiser

2006  
 1 - Kimberly Larrabee - Reading  
 2 - Alex Youst - Conrad Weiser  
 3 - Jon Rittle - Conrad Weiser

2007  
 1 - Alex Quaintance - Muhlenberg  
 2 - Christopher Zimmerman - Muhlenberg  
 3 - Nicholas Showalter - Conrad Weiser

2008  
 1 – Christopher Zimmerman – Muhlenberg  
 2 – Rachel Bigos – Holy Name  
 3 – Ryan Moraski – Conrad Weiser

2009  
 1 – Seth Fisher – The King’s Academy  
 2 – Vincent Zampelli – Conrad Weiser  
 3 – John Keller – The King’s Academy

- 2010  
 1 – John Keller – The King’s Academy  
 2 – Gregory Scanlon – Holy Name HS  
 3 – Miranda Haslam – The King’s Academy
- 2011  
 1 – Matthew Weidner – Brandywine HS  
 2 – Miranda Haslam – The King’s Academy  
 3 – Aubrie Potteiger – Muhlenberg Middle
- 2012  
 1 – Matthew Weidner – Brandywine HS  
 2 – Andrew Przyjemski – Governor Mifflin HS  
 3 – Grant Bayer – Tulpehocken HS
- 2013  
 1 – StepHanie Keller – Conrad Weiser HS  
 2 – Megan Campbell – Conrad Weiser HS  
 3 – Catharine Scoboria – Berks Catholic HS
- 2014  
 1 – Andrew Przyjemski – Governor Mifflin HS  
 2 - Matthew Weidner – Brandywine HS  
 3 - Catharine Scoboria – Berks Catholic HS
- 2015  
 1 - Andrew Przyjemski – Governor Mifflin HS  
 2 – Marlin Thomas – Governor Mifflin HS  
 3 – Kayla Petersen - The King’s Academy
- 2016  
 1 - Alexa Schneck – Conrad Weiser HS  
 2 - JosephH Gresoi – Conrad Weiser HS  
 3 – Boatram Nguyen – Berks Catholic HS
- 2017  
 1 – Lacie Pichler – Conrad Weiser HS  
 2 – Baotram Nguyen – Berks Catholic HS  
 3 – Rosalie Brunner - Conrad Weiser HS
- 2018  
 1 – Rini Kaneria - Conrad Weiser HS  
 2 – Nikita Patel - Conrad Weiser HS  
 3 – Madison Bright - Conrad Weiser HS