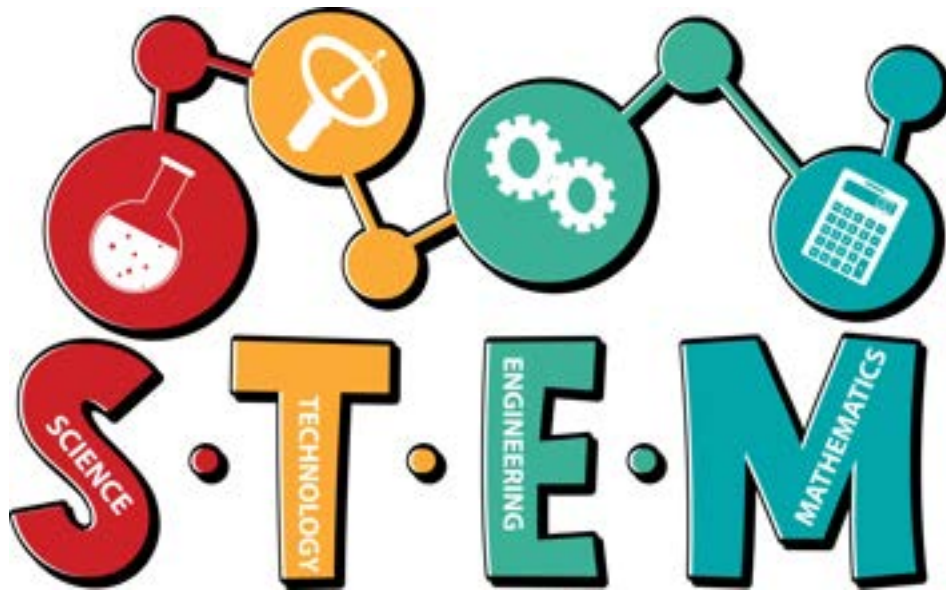


32nd Annual Kids for Science STEM Fair



**Awards Ceremony
Saturday, May 6, 2023
Eleanor Roosevelt High School
1:00 – 3:30 p.m.**

A Scientist is someone who...

- observes and wonders
- shares their ideas and discoveries
- listens to the ideas of others
- explores the world around them
- asks questions
- uses tools to solve problems
- conducts experiments



A Scientist is someone like you!



A Mathematician is someone who...

- uses their imagination
- predicts
- looks for patterns
- shares ideas
- estimates
- asks questions
- explains their answers
- solves problems
- experiments
- explores



A Mathematician is someone like you!



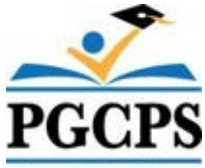
An Engineer is someone who...

- observes and wonders
- discovers and creates new things
- shares their curiosity
- asks questions
- explores the world around them
- constructs inventions
- uses tools to solve problems



An Engineer is someone like you!





**32nd Annual Kids for Science STEM Fair
Prince George's County Public Schools
9201 East Hampton Drive
Capitol Heights, MD 20743**

May 6, 2023

Greetings,

It is with great delight that members of the Prince George's County Public Schools Science Office and Kids for Science STEM Fair Steering Committee extend a warm welcome to all students, family members, judges, volunteers, teachers, and distinguished guests who have joined us for the 32nd Annual Kids for Science (KFS) Science, Technology, Engineering, and Mathematics (STEM) Fair.

The Kids for Science STEM Fair is a competitive event that showcases budding young scientists, technologists, engineers, mathematicians from grades 3, 4 and 5 representing elementary schools from across our school district. The projects entered in KFS displayed student's culmination of hard work as they conducted research, solved problems, developed prototypes, and created new innovations and answered their own curiosities.

The interconnections of all branches of physical, earth and planetary, chemical and biological sciences, environmental, technology, engineering, and mathematics, support sustainable innovations and discoveries that will lead to a better quality of life for all humans across the world!

Best Regards,

Prince George's County Public Schools Science Office and The 2023 Kids for Science STEM Fair Steering Committee



**32nd Annual Kids For Science STEM Fair
Awards Ceremony
Saturday, May 6, 2023
1:00 – 3:30 p.m.**

Master of Ceremonies
Mr. David Zahren

Pledge of Allegiance	Mr. Justin Leonard
Welcome	Dr. Godfrey Rangasammy
Introduction of the 32 nd Annual KFS Student Participants	Mr. David Zahren
Category Awards	Mr. David Zahren
Special Awards <ul style="list-style-type: none">• Science Supervisor STEM Award• The James Prigmore Award• Discover Education STEM Award	Dr. Godfrey Rangasammy
Educational Systems Federal Credit Union “Overall Grand STEM STEM Awards”	Dr. Godfrey Rangasammy Ms. Jackie Henry
Remarks and Closing	Mr. David Zahren

***PGCPS Elementary Schools
Represented in the
32nd Annual Kids for Science STEM Fair***



Avalon Elementary School
Barack Obama Elementary School
Bond Mill Elementary School
Capitol Heights Elementary School
Carole Highlands Elementary School
CMIT North Elementary School
Francis T. Evans Elementary School
Gaywood Elementary School
Glenarden Woods Elementary School
Greenbelt Elementary School
Heather Hills Elementary School

Hyattsville Elementary School
Indian Queen Elementary School
Judith P Hoyer Montessori
Longfields Elementary School
Northview Elementary School
Overlook Full Spanish Immersion School
Paint Branch Elementary School
Riverdale Elementary School
Robert Goddard Montessori
Templeton Elementary School
Valley View Elementary School



Category Awards

First, Second, Third Place and Honorable Mention - Placement ribbons and certificates are awarded to students in grades 3, 4, and 5 based on their overall score. ***First Place winners will receive a prize.*

Category Titles and Descriptions

Animal Sciences – The study that include all aspects of animals and animal life, animal life cycles, and animal interactions with one another or with their environment.

Biomedical and Health Sciences – The study of the diagnosis, treatment, prevention of diseases and other damages to the human body or mental systems specifically designed to address issues of human health and disease.

Chemistry – The study of the composition, structure, properties and reactions of matter.

Computer Science and Systems Software – The study of techniques in computer science, and the development of software, information processes or methods to demonstrate, analyze, or control a process/solution.

Earth and Environmental Sciences – The study of the environment and its effect on organisms/systems, including investigations of biological processes such as growth and life span, as well as studies of Earth systems and their evolution.

Embedded Systems – The study of electrical systems in which information is conveyed via signals and waveforms for purposes of enhancing communications, controls and/or sensing.

Energy: Sustainable Materials and Design – The study of the process for the production of the storage of energy.

Engineering Mechanics –The study of the science and engineering that involve movement or structure. The movement can be by the apparatus or the movement can affect the apparatus.

Environmental Engineering – The study of the engineering or development processes and infrastructure to solve environmental problems in the supply of water, the disposal of waste, or the control of pollution.

Materials Science – The study of the combination of various materials forms in systems, devices, and components that rely on their unique and specific properties. The scientific study of the properties and applications of materials of construction or manufacture.

Mathematics – The study of measurement, and relationships of quantities and sets, using numbers and symbols.

Physics and Astronomy – The study of matter and energy and of interactions between the two (Physics). The study of anything in the universe beyond the Earth (Astronomy).

Plant Sciences – The study of plants and how they live, including structure, development,

and classification.

Robotics and Intelligent Machines – The study of machine intelligence that reduces the reliance on human intervention



Many businesses, individuals, and organizations have contributed awards to our Kids for Science STEM Fair sponsor our Special Awards. These awards are based upon specific project criteria created by the presenting organization.

Discovery Education STEM Award – These awards are awarded to 3 (one for each grade level, 3, 4, and 5) students who have exemplary projects in the area of STEM.

PGCPS Science Supervisor Award – A plaque and prize package sponsored by the Educational Systems Federal Credit Union are awarded to one outstanding student whose project reflects excellent work integrating STEM.

James Prigmore Award – A monetary prize, sponsored by the **Kids for Science Fund**, recognizes one student in Grade 5 for a dynamic virtual interview and best overall design of their digital STEM fair project that was Google Slides

Educational Systems Federal Credit Union Kids for Science STEM Fair Grand Awards - Each Grand STEM Award is provided to one student from each grade level, 3, 4, and 5 for their exemplary project. The Grand STEM Awards are sponsored by the Educational Systems Federal Credit Union. Each student will receive a special prize provided by the credit union.

Judging Criteria for Non-Engineering Projects
All judge's decisions are final.

I. Research Question

- clear and focused purpose
- identifies contribution to field of study
- testable using scientific methods

II. Design and Methodology

- well-designed plan and data collection methods
- variables and controls defined, appropriate, and complete

III. Execution: Data Collection, Analysis, and Interpretation

- systematic data collection and analysis
- reproducibility of results
- appropriate application of mathematical and statistical methods
- sufficient data collected to support interpretation and conclusions

IV. Creativity

- project demonstrates significant creativity in one or more of the above criteria

V. Display Board

- logical organization of material
- clarity of graphics and legends
- supporting documentation displayed

VI. Virtual Interview (Voice-Over or Video)

- clear, concise, and thoughtful responses to questions
- understanding of basic science relevant to project
- understanding interpretation and limitations of results and conclusions
- degree of independence in conducting project
- recognition of potential impact in science, society, and/or economics
- quality of ideas for further research
- for team projects, contributions to and understanding of project by all members

Judging Criteria for Engineering Projects

All judge's decisions are final.

I. Research Problem

- description of a practical need or problem to be solved
- definition of criteria for proposed solution
- explanation of constraints

II. Design and Methodology

- design of alternatives to answer need or problem
- identification of a solution
- development of a prototype/model

III. Execution: Construction and Testing

- prototype demonstrates intended design
- prototype has been tested in multiple conditions/trials
- prototype demonstrates engineering skill and completeness

IV. Creativity

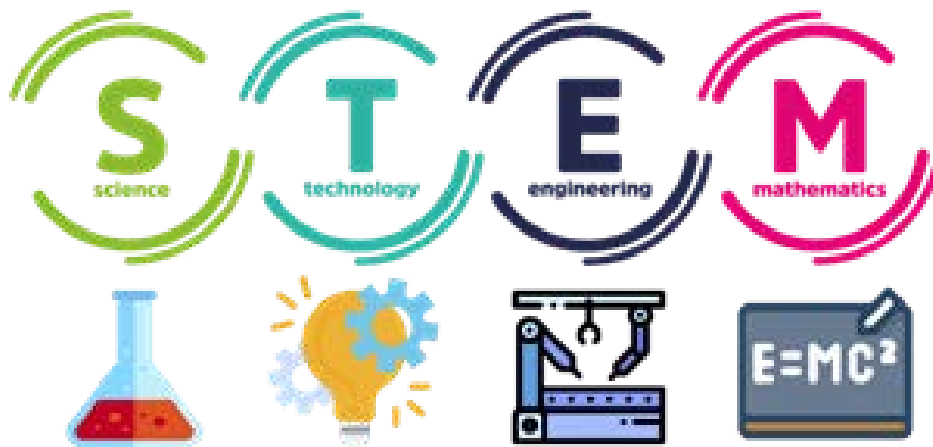
- project demonstrates significant creativity in one or more of the above criteria

V. Display Board

- logical organization of material
- clarity of graphics and legends
- supporting documentation displayed

VI. Virtual Interview (Voice-Over or Video)

- clear, concise, thoughtful responses to questions
- understanding of basic science relevant to project
- understanding interpretation and limitations of results and conclusions
- degree of independence in conducting project
- recognition of potential impact in science, society, and/or economics
- quality of ideas for further research
- for team projects, contributions to and understanding of project by all members



PGCPS 2023 Kids for Science STEM Fair Steering Committee

Ms. Aisha Stallworth	Longfields ES
Mrs. Annetta Woolfolk	Fairmont Heights HS
Dr. Ashok Sookdeo	Fairmont Heights HS
Mrs. Benora McCain-Wigfall	CMIT North ES
Mr. Christopher Gardy	Department of Testing, Evaluation and Research
Dr. Genevieve Cromer	William Wirt MS
Dr. Rolando R. Pascual	Charles Carroll MS
Dr. Ebony Robinson	Eleanor Roosevelt HS
Mrs. Elizabeth Butler	Martin Luther King, Jr. MS
Dr. Emerson Quirante	Accokeek Academy
Dr. Erika Johnson	Thomas Johnson MS
Ms. Felicia Torres	William Wirt MS
Ms. Gloria Muscardin	Hyattsville ES
Dr. Gonzalo Pitpit	Greenbelt MS
Mr. James Roberson	William S. Schmidt Outdoor Education Center
Mr. James Russ	Middle School Mathematics Office
Ms. Jasmine Dougans	Duval HS
Ms. Jennifer Findlater	Charles Carroll MS
Mrs. Jessica Leedy	Howard B. Owens Science Center
Ms. Karyn Freeman	Central HS
Dr. Kurt Lienau	Academy of Health Science @ PGCC
Mrs. Latisha Moore-Carrington	Indian Queen ES
Mrs. Manjot Choudhary	Charles Carroll MS

Mrs. Marilou Brooks Gladys Noon Spellman ES
Ms. Marilyn Quow William W. Hall Academy
Ms. Marilyn White Duval HS
Mr. Mark Magauay Accokeek Academy
Mrs. Marsha Dixon Woodmore ES
Ms. Melanie Mavins G. James Gholson MS
Mr. Justin Leonard Nicholas Orem MS
Ms. Nadine Gaujean Walker Mill MS
Ms. Nancy Cintron Overlook Full Spanish Immersion ES
Mrs. Saroj Shukla Charles Carroll MS
Dr. Serena Gayles Howard B. Owens Science Center
Ms. Shonda Pegram Benjamin Stoddert MS
Dr. Sunday Iwalaiye Laurel HS
Ms. Sunita Jacob Charles Carroll MS
Ms. Tameaka White Fairmont Heights HS
Dr. Terri Dove Online Campus HS
Ms. Tori Scott Waldon Woods ES
Ms. Valerie Rivers Accokeek Academy

Working Together to Make the 'Kids for Science' STEM Fair a Reality.



Prince George's County Public School's Science Office Team



Godfrey Rangasammy, Ed.D., Science Supervisor



Traci Walkup, Ed.D., Science Instructional Specialist



Treasa Elam-Respass, Ed.D., Science Instructional Specialist



Manda Jackson, Science Instructional Coach



Tanisha Johnson, Science Instructional Coach



Osvena Russell, Science Office Secretary

**Sponsors for
32nd Annual Kids for Science STEM Fair**



To Our Exceptional Virtual Category and Special Award Judges!

On behalf of the Prince George's County Public Schools' Science Office and the Kids for Science STEM Steering Committee, we would like to thank each of the virtual Category and Special Award Judges for taking part in the 32nd Annual Kids for Science STEM Fair. Your expertise with judging the students' projects played a valuable and intricate part in making the "Kids for Science" STEM Fair a success.

We thank you for your time and commitment on this day,
Saturday, May 6, 2023`



Special Thanks

We would like to thank all the teachers and administrators involved in supporting and conducting local school STEM fairs throughout the school year.

We would like to thank all parents, guardians, and family members in supporting their children's STEM endeavors and participation in the Kids for Science Virtual STEM Fair.

A debt of gratitude is owed to each virtual judge who once again supported this event and helped to make the **Kids for Science STEM Fair** a success!

The **PGCPS Office of Communications** for sharing information regarding the fair to the PGCPS community and beyond.

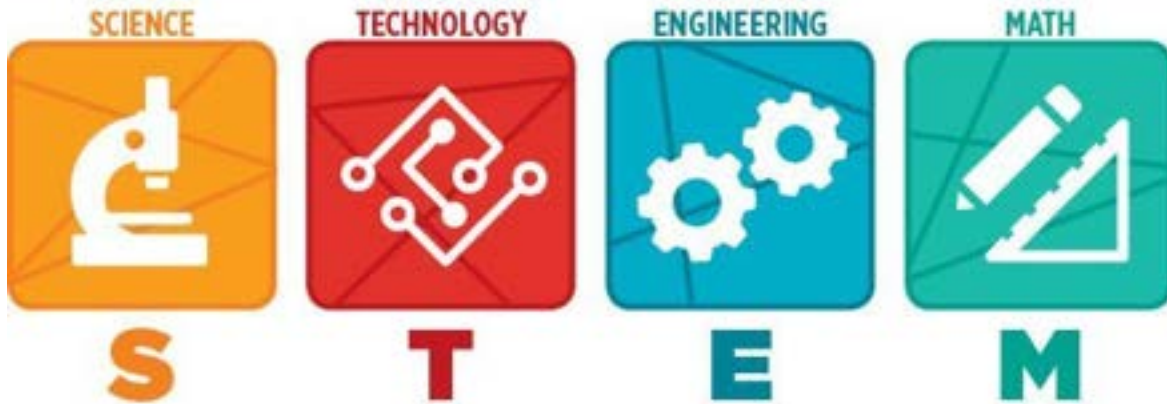
The booklet cover image was retrieved from Vecteezy.com

We greatly appreciate the support and services of the **PGCPS Office of Television Resources' Mr. David Zahren**, our Master of Ceremonies. For the past 32 years, Mr. Zahren has shown his commitment to science education through his award-winning science and public affairs programs.



Participating Students in the 32nd Annual Kids for Science STEM Fair

Student names are organized in alphabetical order by **FIRST** name.



Aderinsola	Adeyemo	4th	Physics And Astronomy	How fast do ice of different types of liquid melt?
Alexander	Rivero	5th	Robotics And Intelligent Machines	The DIY Drone Dilemma!
Allie	Baker	3rd	Chemistry	Color Ice Cubes
Aminata	Koly	4th	Biomedical And Health Sciences	Not All Apples Are Alike
Andrea	Argueta	5th	Plant Sciences	The Time Is Ripe
Andreas	Theodorou	3rd	Materials Science	Best Popcorn Popping Machine
Angel	Hernandez Agustin	5th	Chemistry	Freezer Test
Arturo	Zarate	3rd	Plant Sciences	Who grew it better?
Autumn	Jones	3rd	Plant Sciences	Acid Rain
Bethlehem	Bekele	4th	Engineering Mechanics	Different Catapult Design & Distance
Bryce	Naylor	3rd	Physics And Astronomy	How will different tires affect the speed of a radio controlled car?
Caden	Green	5th	Embedded Systems	The Router Blocker Experiment
Carleigh	Ezell	5th	Environmental Engineering	Erosion Expedition

Casey	Settles	3rd	Physics And Astronomy	The Fast & The Curious
Chideraa	Ugoagwu	5th	Chemistry	Frozen Salt
Christopher	Martinez	5th	Embedded Systems	The Helpful Light
Connor	Knickman	3rd	Mathematics	Roll The Dice
Darius	Dawkins	4th	Earth and Environmental Sciences	Will the lifestraw work?
David	Santiago Martinez	5th	Biomedical And Health Sciences	Greasy Much?
David	Alvarenga Salazar	4th	Plant Sciences	Plant Growth
Derek	Asamoah	5th	Biomedical And Health Sciences	Drinks and Sports Performance
Desmond	Morrell	4th	Plant Sciences	Which soil is best for beans?
Ella	McNamara	5th	Animal Sciences	Does age affect how fast cats can learn?
Emerson	Cardova	4th	Engineering Mechanics	Plastic Bottle Car
Erica	Bair	5th	Earth and Environmental Sciences	How to survive a nuclear blast-home edition?
Estiven	Martinez	5th	Chemistry	Does mass matter?
Ethan	Lam Ewen	4th	Materials Science	Comparing Heat Absorption For Different Color Roofs
Florenza (Dora)	McKenzie	5th	Environmental Engineering	Water and Shirts
Gabriel	Magee	4th	Earth and Environmental Sciences	Does temperature matter?
Gabriel	Elumba	4th	Engineering Mechanics	How much weight can the boat hold?
Gabrielle	Alleyne	4th	Engineering Mechanics	Book Cakes and Eggs
Gaia	Hollidge	4th	Chemistry	Dissolving Gummy Bears
Genesis	Bonilla	4th	Materials Science	Airplane Launcher
Helena	Lavallee	5th	Earth and Environmental Sciences	Ride or Die
Hollis	Spruill	4th	Physics And Astronomy	Far and Furious
Isaac	Portillo	5th	Chemistry	Freezer Test
Ismael	Koly	5th	Embedded Systems	Maglev Train: Repelling vs. Weight
Jael Ester	Jimenez-Cruz	5th	Plant Sciences	Plant Growth: Classical vs. Pop Music

Jason	Yutuc	5th	Physics And Astronomy	Light Bulbs
Jason	Fahnbulleh	3rd	Chemistry	Bouncing Eggs
Jordan	Joyner	5th	Earth and Environmental Sciences	Evaporation
Josue	Diaz	5th	Energy: Sustainable Materials And Design	Batteries Lasting
Josue	Lazo	5th	Energy: Sustainable Materials And Design	Which would be a better battery a potato or a lemon?
Jovann	Adams	5th	Computer Science and Systems Software	Caesar Cipher Decoder
Kaitlyn	Evans	5th	Chemistry	Is it safe to float?
Kameron	Robertson	3rd	Materials Science	May the force be with you!
Kennadi	Martines	4th	Materials Science	The Incredible Avocados!
Liam	Wheeler-Highl and	3rd	Physics And Astronomy	Piece Together Perpetual Motion
Luis	Aguilar Carrasco	5th	Earth and Environmental Sciences	How pure art thou?
LuKE	Bourne	4th	Engineering Mechanics	Will the size of my propeller determine the speed of my car?
Lulya	Henok	5th	Robotics And Intelligent Machines	Robo the Rabbit
Mackenzie	Foster	4th	Chemistry	The Shiniest Penny
Madison	Richardson	3rd	Physics And Astronomy	What makes ice melt faster?
Makamu	Senghor	3rd	Chemistry	Rock 3
Makari	Bacote	3rd	Plant Sciences	Flower Freshness
Makaylah	Butler	5th	Environmental Engineering	Compost Mixer
Maxcine	Manuel	3rd	Materials Science	Swim Fast or Swim Last
Maya	Walton	3rd	Chemistry	Biggest Bubble Gum
Melvin	Carbajal	5th	Physics And Astronomy	How far can they go?
Mia	Toliver	4th	Materials Science	Heavy Metal
Michael	Regotti-Belen o	5th	Chemistry	Does mass matter?
Miles	Mitchell	3rd	Energy: Sustainable Materials And Design	Plastic, Paper, or Styrofoam?

Morgan	Washington	5th	Earth and Environmental Sciences	Water Filtration
Nabila	Moussa	4th	Plant Sciences	Powerful Plants! The effect of vitamins on plant growth.
Nandeen	Bhallie	3rd	Engineering Mechanics	Balloon Powered Car Challenge
Naseer	Loutan	3rd	Plant Sciences	Bean Race
Nicholas	Williams Thomas	4th	Environmental Engineering	Stormwater filter
Nico	Natividad	5th	Energy: Sustainable Materials And Design	Jumping Jigawatts
Noah	Banks	4th	Plant Sciences	To Listen or Not To Listen, That is The Question
Nyla	Stokes	5th	Materials Science	How can magnetic levitation be used in the real world?
Ozil	Martinez Martinez	4th	Mathematics	Does Height Matter?
Priya	Hill	4th	Physics And Astronomy	Galaxia Magnética Limo
Rachel	Manene	4th	Chemistry	Rainbow Lava Lamp
Rodney	Morgan	4th	Engineering Mechanics	Rock Your Rocket
Ryan	Vogel	4th	Biomedical And Health Sciences	Rethink Your Drink
Sadie	Meyer	5th	Plant Sciences	Watering Different Plants with Different Liquids
Safiya	Moussa	3rd	Plant Sciences	pH-plant-tastic! The effect of water pH on plant growth.
Samia	Saeed	5th	Chemistry	Acidity of Sodas
Sayedbasid	Sadat	4th	Engineering Mechanics	Loops, Coils and Hoops
Scarleth	Garcia Tapia	4th	Plant Sciences	Changing Flower Colors
Sophia	Avila	5th	Engineering Mechanics	The Strength of Easter Egg Arches
Spandana	Noojipady	4th	Energy: Sustainable Materials And Design	Potato Power
Tanvi	Saha	4th	Physics And Astronomy	Physics Behind Skating in a Curved Path
Taylor	Brooks	4th	Chemistry	Slowing Apple Oxidation
Teresa	Gembecki	4th	Plant Sciences	Which Plant Food Makes Plants Grow Taller?

Trayvon	Scott	4th	Chemistry	Dry Ice
Tristan	Cruz	5th	Robotics And Intelligent Machines	Best Self-Watering Method for Plants
Valeria	Walderamma Santana	4th	Environmental Engineering	Garbage Eating Water Wheel
Vandan	Patel	4th	Earth and Environmental Science	What kind of soil is best for water retention?
Vivienne	Boone	4th	Plant Sciences	Will music or no music make grass seeds grow faster?
Yaretzi	Rosales	5th	Robotics And Intelligent Machines	Robo the Rabbit
Zachary	Fabic	4th	Computer Science and Systems Software	How long will it take for a kid to get to inappropriate content on YouTube?
Zarrah	Lewis	5th	Engineering Mechanics	Angles that Go the Distance
Zoe	Tin	5th	Engineering Mechanics	Grippy Keys
Zoey	Carter	5th	Chemistry	Temperature Versus Food Coloring

**The PGCPS Science Office
thank you for your support!**

