

York County Science Fair 2012

Student Winners

Junior Division – Animal Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JAS-2	Libby	Bieri	The Effect of the Type of Bivalve on Water Clarity	Ms. Owens	QLMS
2 nd	JAS-1	Lynne Kassie	Frecker Font	The Effect of Diet on Egg Production in Free Range Chickens	Mr. Morrison	GMS
3 rd	JAS-4	Benjamin	Clarke	After a While It Grows On You	Mr. McKellar	YMS
HM	JAS-3	Jacob	Peckham	No Butts in My Crabitat!	Ms. Guthrie	TMS

Senior Division – Animal Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SAS-3	David	Lewis	The Effect of Type of Mollusk on Filtration Rate	Mrs. Kuberek	THS
2nd	SAS-6	Kaelan Matthew	Hill Clarke	Barnacle Busters	Mrs. Ellis	YHS
3rd	SAS-7	Daniel	Bickley	The Effect of Brand of Hand Sanitizers on Insect Decomposition	Mrs. Ellis	YHS

Junior Division – Behavioral and Social Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
HM	JBE-6	Peyton	Mohrhusen	Name Brand vs Generic	Mr. McKellar	YMS

Senior Division – Behavioral and Social Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SBE-9	Katherine	Campbell	The Effect of Varying Tempos in Music on Task Performance	Mrs. Holtschneider	YHS
2nd	SBE-8	Carter	Bakkum	Is Science Fair Enjoyable?	Mrs. Holtschneider	YHS
3rd	SBE-15	Zachary	Brandt	****Late entry-no project information***	Mrs. Fletcher	YHS
HM	SBE-4	Kayla Megan Kayla	St. John Gaudette Curran	The Effect of Age on Short Term Memory	Mrs. McBride	THS

Junior Division – Biochemistry

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JBI-3	Corinne	Walters	Hydroponic Beans	Mrs. Brownschidle	YMS
2nd	JBI-2	Sarah	Lewis	The Effect of the Type of Sweetener on Perceived Sweetness	Ms. Guthrie	TMS
3rd	JBI-1	Lindsey	Blanks	How Environmental Conditions Affect Chemical Ripening of Apples	Ms. Guthrie	TMS

Senior Division – Biochemistry

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
HM	SBI-1	Renee	Saur	The effect of type of sugar on yeast fermentation	Mrs. Ellis	YHS

Junior Division – Chemistry

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JCH-14	Suparnaaya	Prasad	Measurements of Saturated Fat in Different Types of Cooking Oil	Mrs. Brownschidle	YMS
2nd	JCH-7	Carter	Rose	Money Laundering	Ms. Owens	QLMS
3rd	JCH-1	Katie	Liu	Does Water Change It's Refractive Index When Mixed With Acid or Salt?	Ms. Thompson	GMS

Senior Division – Chemistry

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1 st	SCH-16	Sarah	Shinn	***Late entry-no project information***		
2 nd	SCH-8	Dylan	Doelling	Relationship Between Solute and freezing point	Mrs. Holtschneider	YHS
3rd	SCH-10	Celia	Neser	Hot & Cold	Mrs. Ellis	YHS
HM	SCH-3	Evita Timothy Cody	Moody Richard Carroll	How Sugar Content Changes in Ripening Fruit	Mrs. Roberts	GHS
HM	SCH-15	Taylor Sidney	Wynne Garrett	Crystal Fudge: The effect of temperature on fudge crystallization	Mrs. Eckstein	YHS
HM	SCH-4	Brandon Olivia	Euker Craig	The Effect of Temperature on Chlorine Levels	Mrs. McBride	THS

Junior Division – Computer Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JCS-3	Kenneth	Petro	<u>Ocean Friendly Fish Video Game</u>	Mrs. Brownschidle	YMS

Senior Division – Computer Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SCS-3	Andrew	Luo	IP Security: Improving the Border Gateway Protocol	Mrs. Field	YHS
2nd	SCS-2	Alexander Landon	Liang Davis	Which programming language is faster, C or C++?	Mrs. Field	YHS
HM	SCS-4	Muhammad	Ahmed	The Affect of Processors on Phones	Mrs. LaMonte	YHS
HM	SCS6	Eric	Diggs	The Effect of a routers connection strength under different circumstances	Mrs. Warwick	YRA

Junior Divison – Earth & Planetary Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JEA-1	Nick	Vollman	Solar Energy: Angle, Distance and Power	Mrs. Cunningham	GMS

Senior Division – Earth & Planetary Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
	SEA-2	Scott, Jacqueline	Cabaniss, Carson	Power of Biochar	Mrs. Ellis	YHS

Junior Division – Engineering: Electrical & Mechanical

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JEE-5	Bobby	Grey	Electrical Motor Experiment	Mr. Webster	YMS
2nd	JEE-4	Joo-Won	Lee	The Effect of Different Types of Glue on Maximum Weight It Can Hold	Ms. Guthrie	TMS
3rd	JEE-1	Diane	Park	Fruit Batteries	Mr. Morrison	GMS
HM	JEE-3	Reilly	Kartchner	The Effect of Light Filters on the Amount of Power Produced with a Solar Sterling Engine	Ms. Owens	QLMS

Senior Division – Engineering: Electrical & Mechanical

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SEE-3	Wiktorja	Plawska	Characterization of Frequency and Levels of Various Electromagnetic Sources	Mrs. Eckstein	YHS
2nd	SEE-1	Aekta	Bandodkar	The Effect of Pinhole Diameter on Resolution	Mrs. Kuberek	THS
3rd	SEE-2	Vraj	Gajjar	Efficiency of Propellers	Mrs. Ellis	YHS

Junior Division – Engineering: Materials & Bioengineering

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JEN-5	Bailey	Jacobson	Stealth Technology: How Does It Work?	Ms. Theresa Guthrie	TMS
2nd	JEN-4	Jenny	Gu	The Effect of Type of Bridge on Amount of Mass Supported	Mrs. Ann Marie Feigh	TMS
3rd	JEN-6	Jonathan	Melendez	Strength of Magnets	Mr. Michael Webster	YMS
HM	JEN-1	Claire	Nelson	The Effect of Method of Making Ice Cream on the Thickness of Ice Cream	Mrs. Cunningham	GMS
HM	JEN-2	Beau	Wong	The Effect of Brand of Paper Towels on Absorbency	Mrs. Cunningham	GMS

Senior Division – Engineering: Materials & Bioengineering

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SEN-11	Fariah	Ishrat	The Effect of Water Treatment Methods on the Quality of Water	Ms. Hardesty	YHS
2nd	SEN-8	Elizabeth	Park	Roads: The Next Major Source of Energy?	Mrs. Holtschneider	YHS
3rd	SEN-9	Sandra	Edwards – Thro	Appropriate Technology Method for Point-of-Use Water Disinfection in the Developing World	Mrs. Eckstein	YHS
HM	SEN-7	Chih-Wei	Chang	The Effect of Various Types of Salt on Dough's Electrical Resistance	Mrs. Holtschneider	YHS
HM	SEN-2	Vance Suzanne	Nguyen Merritt	The Effect of the Level of Sunscreen SPF on the Protection from UV Rays	Mrs. McBride	THS
HM	SEN-6	Annie Ashley	Swain Gailey	Cymatics – “C” the Music	Mrs. Field	YHS
HM	SEN-3	Casey Sierra Julia	Oakley Carless Cook	What Hair Won't Fail? The Effect of Different Hairsprays on the Hold of Hair	Mrs. McBride	THS

Junior Division – Energy & Transportation

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JET-3	Ross Hoon	Milner Ho Shin	Chemical Energy Cells in Comparison to Other Energy Sources	Mr. McKellar	YMS
2nd	JET-2	Ahmad	Alazzam	Spectacular Savings	Mr. McKellar	YMS
3rd	JET-1	Michelle	Shin	The Effect of Tire Tread on Gas Mileage	Mr. Morrison	GMS

Senior Division – Energy & Transportation

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SET-6	Tatum	Conner	The Effects of Different Oils on Energy Usage	Mrs. Eckstein	YHS
2nd	SET-3	Sophia	Lin	Economic Solar Heating System for Residential Usage	Mrs. Christman	GHS
3rd	SET-7	Linda	Alexander	The Effect of a Parachute's Shape and the Amount of Strings on its Drop Velocity	Mrs. LaMonte	YHS
HM	SET-10	Sara	Mohamed Khalil	The Effect of Outside Temperature on Rate of Heat Loss	Ms. Hardesty	YHS

Junior Division – Environmental Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JEV-3	Mason	Stoecker	Clams VS Oysters	Mr. McKellar	YMS
2nd	JEV-2	Delaney	Vest	The Effects of Different Types of Drywall on Copper Corrosion	Ms. Guthrie	TMS
3rd	JEV-10	Alexis	Haskell	Run Away Runoff	Mrs. Brownschidle	YMS
HM	JEV-8	Jackson	Reames	Nature's Filters	Mrs. Brownschidle	YMS

Senior Division – Environmental Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SEV-9	Mara Katherine	Reichle Strike	The effect of Foliar Fertilizers compared to the traditional granular application technique on the quality of water from the Chesapeake Bay, when applied to <i>Agropyron cristatum</i> in a controlled environment	Mrs. Fletcher	YHS
2nd	SEV-8	Ashley	Lytle	The effect of fertilizer on the nitrate concentration in the runoff of grass	Mrs. Holtschneider	YHS
3rd	SEV-5	Jessica	Chandrasekhar	The Effects of Various Environmental Pollutants on the Counts of Duckweed	Mrs. Eckstein	YHS
HM	SEV-4	Jordan	Koppelman	Best method from food spoilage?	Mrs. Ellis	YHS

Junior Division – Mathematical Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JMA	Winnie	Zhang	How to Develop Algorithm Programs to Play Tic-Tac-Toe	Mrs. Cunningham	GMS

Senior Division – Mathematical Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SMA-2	Jeffrey	Beyon	Application of Fourier Series to Audio Signal	Mrs. Amber LaMonte	YHS
2nd	SMA-1	David Linh	Cabaniss, Vinh	Business Growth During a Recession	Mrs. Bonnie Ellis	YHS
HM	SMA-3	Anas Jaeyoon	Syed Park	How Random are Random Number Generators?	Ms. Cynthia Hardesty	YHS

Junior Division – Medicine & Health

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JME-3	Madison	Conner	Don't Let Your Teeth Go Swimming?	Mr. McKellar	YMS
2nd	JME-1	Alex	Lee	Can Motion Video Games Be a Form of Exercise	Mrs. Fox	GMS
3rd	JME-2	Noora	Abdel-Fattah	The Effect of Types of Drinks on Tooth Decay	Ms. Beazlie	TMS
HM	JME-6	Jillian	Honig	Good-night!	Mrs. Brownschidle	YMS
HM	JME-4	Mason Chase	Milner Downey	Energy Cells in Comparison to Other Energy Sources	Miss White	YMS
HM	JME-5	Mark S. Cole	Evans Lytle	Germ Killer	Mrs. Brownschidle	YMS

Senior Division – Medicine & Health

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SME-1	Radha	Venkatesan	Identification of IKB kinase Beta (IKKb) Inhibitors Through Structure Based Virtual Screening	Mr. Long	GHS
2nd	SME-9	Louis	Murray	Can You See What I See ?	Mrs. Holtschneider	YHS
3rd	SME-12	Hunter	Dayton	***Late entry-no project information****	Mrs. Field	YHS
HM	SME-4	Emma	Giesken	The Effects of Yoga and Cardio on Blood Pressure	Mrs. McBride	THS
HM	SME-2	Visva Jennifer Chiraag	Patel Barber Shetty	The Effect of Different Contaminants on Blood Glucose Testing	Mrs. McBride	THS
HM	SME-3	Allie Courtney	Galoozis Hoff	The Effect of Genetics on the Trait of Taste	Mrs. McBride	THS
HM	SME-5	Maggie Emily Nick	Williams Richards Curren	The Effect of Different Beverages on Tooth Decay	Mrs. McBride	THS
HM	SME-10	Symone Huma	Holliday Ahsai	Effect of Motrin on Quickness of Pain Relief	Mrs. Eckstein	YHS
HM	SME-8	Cailynn	Houlihan	Acid Erosion on Teeth	Mrs. Kuberek	THS
HM	SME-7	Ben	Williams	Which Aspirin/Pain Reliever Pill takes the Shortest Amount of Time to Dissolve in Vinegar?	Mrs. Kuberek	THS
HM	SME-6	James	Lucenta	Wow...I Have a Headache!	Mrs. Lerberg	THS

Junior Division – Physics & Astronomy

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JPH-4	Robin	Bai	Measuring Spectral Properties of Various Light Sources Based on The Effect of Grating Diffraction on CD/DVD	Ms. Beazlie	TMS
2nd	JPH-1	Matthew	Trepe	Could the Vikings Navigate By Polarized Skylight?	Mr. Fragapane	GMS
3rd	JPH-5	Sam	Grey	How the Launch Angle Affect Arrow's Trajectory	Mrs. Brownschidle	YMS
HM	JPH-8	Clara	Wincheski	The Effect of Fruit or Vegetables on the Amount of Electricity Conducted by a circuit	Ms. O'Hare	QLMS

Senior Division – Physics & Astronomy

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SPH-6	Shi Jia	Wang	The Changing Magnetic Field of Planet Earth	Mrs. Eckstein	YHS
2nd	SPH-5	Glory	Kim	The Effect of Titanium Dioxide Nanoparticles on the Energy Conversion Process of Organic Solar Cells	Mrs. Holtschneider	YHS
HM	SPH-12	Jessie	Jung	The Parallax Effect	Mrs. Field	YHS
HM	SPH-3	Destiny	Hagendorfer	The Dual Nature of Light	Mrs. Ellis	YHS

Junior Division – Plant Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JPS-7	Madaline	Honig	Eco-Friendly Sprays: How Friendly are They?	Mr. McKellar	YMS
2nd	JPS-3	Charlotte	Bieri	The Effect of Different Types of Soil on the Germination of Grass Seed	Ms. Buckley	QLMS
3rd	JPS-4	Michael	Fochtman	The Effect of Drinks on Germination of Seeds	Ms. Buckley	QLMS
HM	JPS-5	Mallory	Downey	Can I Grow After This? The Effect of Temperature on the Growth and Germination of Plants	Ms. Buckley	QLMS
HM	JPS-6	Logan	Robnett	Which Plant Will Take Flight	Mrs. Feigh	TMS

Senior Division – Plant Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SPS-4	Alyssa Diana	Purdy Kinney	The Effect of Light Color on Plant Growth	Mrs. McBride	THS
2nd	SPS-10	Leah	Reichle	The Effect of Hyperaccumulators on the Phytoremediation of Lead Tetroxide	Mrs. Holtschneider	YHS
3rd	SPS-6	Jeffrey Zachari	Taylor Bultman	The Effect of Worms and Newspaper on Plant Growth	Mrs. McBride	THS
HM	SPS-8	Allison	Dynan	Do longevity enhancers extend the vase life of flowers?	Mrs. Holtschneider	YHS
HM	SPS-3	Ashley Kaitlin	Lawrence Yachem	How Detergents Affect Seed Germination	Mrs. Roberts	GHS
HM	SPS-5	Madison	Landers	The Effect of Salinity on the Growth of Marsh Grass	Mrs. McBride	THS
HM	SPS-7	Selena	Moore	The Effect of Music on Plant Growth	Mrs. Ellis	YHS
HM	SPS-9	Sravani	Tripuraneni	Biological Pest Control: Beneficial Nematodes and their effect on Grub	Mrs. Holtschneider	YHS

Special Awards:

Chiropractic Medicine-sponsored by Rebound Chiropractic, Dr. Vincent Joseph

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SME-4	Emma	Giesken	The Effects of Yoga and Cardio on Blood Pressure	Mrs. McBride	THS
2nd	SME-12	Hunter	Dayton	***Late entry-no project information****	Mrs. Field	YHS
3rd	JME-1	Alex	Lee	Can Motion Video Games Be a Form of Exercise	Mrs. Fox	GMS

Peninsula Dental Society: Savings Bonds (\$100-1st, \$75-2nd, \$50-3rd)

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	SME-5	Maggie Emily Nick	Williams Richards Curren	The Effect of Different Beverages on Tooth Decay	Mrs. McBride	THS
2nd	SME-8	Cailynn	Houlihan	Acid Erosion on Teeth	Mrs. Kuberek	THS
3rd	SCH-6	Tanisha	Powell	The Freezing Point of Honey	Mrs. McBride	THS
HM	SME-10	Symone Huma	Holliday Ahsai	Effect of Motrin on Quickness of Pain Relief	Mrs. Eckstein	YHS

Va. Department of Environmental Quality – Coastal Resources Libraries

Junior Division – Earth & Planetary Sciences

Place	Category Code	First Name	Last Name	Title of Project	Sponsor	School
1st	JEA-1	Nick	Vollman	Solar Energy: Angle, Distance and Power	Mrs. Cunningham	GMS

Senior Division – Earth & Planetary Sciences

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Virginia Air & Space Museum: Two tickets for admission and exhibits

Junior Division – Physics & Astronomy

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Senior Division – Physics & Astronomy

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