

Category Code	Student Last Name	Student First Name	Student Grade	Title	School Name
PHY	Baumgartner	Noah	11	The Analysis of the Gravitational Displacement of Globular Cluster M15-ngc7078	Central Virginia Governor's School for Science & Technology
PHY	Childers	Andrew	11	Gravitational Tidal Forces Acting Upon Globular Cluster M2	
PHY	Fields	Harrison	11	Investigation into Tidal Disruption in Star Cluster M92-ngc6341	
PHY	Fleck	Ian	11	The Effect of Expired Hockey Helmets When Impact Tested Compared to Non-expired Helmets	
PHY	MacCallum	Matthew	11	Determining the Sweet Spot of a Baseball Bat	
PHY	Schira	Jonathan	11	The Effectiveness of Distilled Water as a Radiation Shield Against Gamma Radiation Caused By the Source Ba-133	
PHY	Wood	Carson	11	The Lasting Effect of Temperature Extremes on a Climbing Rope	
PHY	Wilson	Jacob	12	An Analysis of the Mass, Volume, and Habitability of Exoplanets based on the Distance away from Stellar Host	Chesapeake Bay Governor's School for Marine & Environmental Science
PHY	Gumulak	Michal	10	The Effect of Different Lights on The Electrical Output of a Photovoltaic Cell	Clover Hill High School
PHY	Ladosci	Katherine	10	The Effect of Various Shoe Insole Materials on Energy Absorbed	
PHY	Walsh	Norah	9	The Effect of Water Density on Refraction	
PHY	Jones	Dana	12	Getting WISE: A Search for Active Galactic Nuclei at the North and South Ecliptic Poles	Massanutten Regional Governor's School
	Horton	Savannah	12		
PHY	Esleck	Devin	11	The Effect of Type of Lighting Cut-Offs on Safety	Mills E. Godwin High School
PHY	Kasinath	Naren	10	C-Type Asteroids as a Shield against Ionizing Radiation during Spaceflight	
PHY	Koppu	Satya	11	Cement-Conjugated Graphene: A Novel Earthquake Resistant Material	
PHY	Macturk	Spencer	10	Average Acceleration of Model Rocket Engines	
PHY	Majety	Medha	10	Changes in levels of Surface Gravity on the Evaporation Rate of a Singularity	

PHY	Patel	Reegal	11	The Effects of Different Gases on a Football's Hang Time	Southwest Virginia Governor's School
PHY	Elmissouab	Hamza	9	Determination of Optimal Solar Panel Tilt	T. C. Williams High School
PHY	Feld	Reagan	9	Satellites and Asteroids	
PHY	Humphrey	Ana	10	The Mathematical Identification of Exoplanet Candidates through N-body Simulations	
PHY	Kohan	Amy	10	The Effect of Different Types of Mask Padding on Concussion Prevention.	Wakefield High School
PHY	Severn	Zachariah	9	Innovation in Backpack Safety: Can Gummy Bears Save Lives?	
PHY	Biddle	Wyatt	10	The Effect of Time on the Brightness of Light Emitting Diodes	Washington-Lee High School
PHY	Chassagneux	Sylvain	10	The Effects of Wood Type and Screw Width on the Torque of Screw	
PHY	Chowdhury	Ritavash	11	The Effect of Type and Size of Wire on Electrical Resistance and Conductivity	
PHY	Gallin	Alex	10	The Effect of Ferrofluid on the Static Friction Coefficient	
PHY	Lazorchak	Graham	9	The Effect of Sound Insulation Material on Volume of Sound Recorded on a Guitar String	
PHY	Liddle	Michaela	9	The Effect of Density on Pitch	
PHY	Moreno	Lucas	10	Neodymium Magnets: How a Change In Temperature Affects Magnetization	
PHY	Russell-Hunter	Sarah	10	The Effect of Violin String Core on Stability of Pitch	
PHY	Presson	Abigail	9	The Effect of Distance from the Sun on Asteroid Population	
PHY	Velasco	Paul	9	Refraction of Light: Testing Snell's Law	
PHY	Williams	Kelton	10	The Future Of Transportation: Quantum Locking	
PHY	Anderson	Caitlin	9	The Effect of Water Temperature on the Amount of Voltage Produced Using a Polymer Electrolyte Membrane Fuel Cell	Yorktown High School
PHY	Kambhampaty	Adi	9	The Effect of Track Deflection on Projectile Speed in a Magnetic Accelerator	
PHY	Singh	Arshdeep	10	The Effect of the Different Configurations of Magnet Wire Coils on Electromotive Force Output	