

Special Awards

Albemarle Amateur Radio Club Award (#1) - Certificate and book.

Sponsored by: Albemarle Amateur Radio Club

S0901 - The Application of LIDAR for Mobile Aerial Systems

Jay Rothenberger, Aaron Poulter-martinez

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

Albemarle Amateur Radio Club Award(#2) - Certificate and book.

Sponsored by: Albemarle Amateur Radio Club

J0903 - Antenna Coverage Areas: Comparing Yagi and Dipole Antennas

Abigail Rollins

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Change the World Award - \$200, certificate, letter

Sponsored by: Amber Ulbrich

S1301 - A Novel Calculus Model That Predicts the Concentration of Nickel Chloride in Electrically Treated Water

Derek Tao, Brian Li

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

American Meteorological Society Award #1 - Certificate

Sponsored by: American Meteorological Society

S0701 - Surface Tension: The Underrated Phenomenon

Michael Labelle, Abby Boitnott, Peter Dister

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

American Meteorological Society Award #2 - Certificate

Sponsored by: American Meteorological Society

S1203 - Turbid Waters

Felicity Detoll

Teacher: Donna deToll

Mountain View High School, Stafford County

American Psychological Association Award - Certificate

Sponsored by: American Psychological Association

J0217 - Just a Pigment of Your Imagination

Charlotte Niven, Carolyn O'connell, Devyn Rieger

Teacher: Kimberly Taylor

Village School, Independent/Private

A S U Walton Sustainability Award (#1) - Certificate and chance to win trip to Sustainability Solutions Festival

Sponsored by: Arizona State University - Rob & Melani Walton Sustainability Solutions Initiatives

S1403 - The Morris Orthotic--the Smart Orthotic for Diabetic Patients

Margaret Richey

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

A S M Materials Education Foundation Award - Certificate & Medallion

Sponsored by: ASM Material Education Foundation

J1105 - Eco-Friendly Air Filters

Noor Zakriya

Teacher: Susan Easter

Gayle Middle School, Stafford County

Association for Women Geoscientists Award - Certificate and Acceptance Form

Sponsored by: Association for Women Geoscientists

J0801 - Reducing Nitrate Pollution in Virginia's Waterways

Susannah Carter

Teacher: Sarah Green, Gretchen Feury

The Covenant School, Independent/Private

Battelle Innovation Award - \$500 & Plaque

Sponsored by: Battelle Memorial Institute

S1403 - The Morris Orthotic--the Smart Orthotic for Diabetic Patients

Margaret Richey

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

Booz Allen Hamilton - Trophy & \$300

Sponsored by: Booz Allen Hamilton

S1403 - The Morris Orthotic--the Smart Orthotic for Diabetic Patients

Margaret Richey

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

Broadcom MASTERS (J01) - Certificate & Entry Booklet

Sponsored by: Broadcom MASTERS

J0106 - Synergistic Repulsion of Ants by Lipid Fraction of Cinnamon and Aqueous Fraction of Lemon

Meena Ambati

Teacher: Teresa Goodin

Henley Middle School, Albemarle County

Broadcom MASTERS (J02) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0231 - The Stroop Effect

Troy Moskowitz

Teacher: Michele Stewart

Post Oak Middle School, Spotsylvania County

Broadcom MASTERS (J03) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0305 - Does Fruit Generate Electricity?

Michelle Balderrama

Teacher: Nicole Harmon

Culpeper Middle School, Culpeper County

Broadcom MASTERS (J04) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0401 - Is it Worth the Risk?

Jillian Smith

Teacher: Gregory Palmer

Louisa Middle School, Louisa County

Broadcom MASTERS (J05) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0513 - Disintegration Dilemma: To Eat or Not to Eat

Emmy Vernon

Teacher: Alicia Prevost

Classical Conversations, Home School

Broadcom MASTERS (J06) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0608 - The Photonic Bit

Samuel Rosner

Teacher: Diana McCullough

Sutherland Middle School, Albemarle County

Broadcom MASTERS (J07) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0707 - Using A Telescope to Find the Mass of Jupiter

Beau Yates

Teacher: Lauren Cabrera

Charlottesville Catholic School, Independent/Private

Broadcom MASTERS (J08) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0811 - The Ultimate Scratch Test

Matilyn Carter

Teacher: Dara Carter

Locust Grove Middle School, Orange County

Broadcom MASTERS (J09) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J0914 - Stirling Engine

Leah Gunnoe

Teacher: Anne Deane

Tandem Friends School, Independent/Private

Broadcom MASTERS (J10) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1001 - Gel Fuel – Future or Flop

Julian Drake

Teacher: Sarah Green, Gretchen Feury

The Covenant School, Independent/Private

Broadcom MASTERS (J11) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1105 - Eco-Friendly Air Filters

Noor Zakriya

Teacher: Susan Easter

Gayle Middle School, Stafford County

Broadcom MASTERS (J12) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1209 - Just Like a Canary in a Coal Mine

Haley Minnery

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Broadcom MASTERS (J13) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1301 - Detecting Credit Card Fraud Using Benford's Law

Craig Kimball

Teacher: Susan Easter

Gayle Middle School, Stafford County

Broadcom MASTERS (J14) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1402 - Are Fingerprints Hereditary? A Multi-Generational Analysis of Six Families

James Henter

Teacher: Kristopher Chain

Peabody School, Independent/Private

Broadcom MASTERS (J15) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1502 - Boxed Salad- Whats sneaking around in it

Aashni Shetty

Teacher: Diana McCullough

Sutherland Middle School, Albemarle County

Broadcom MASTERS (J16) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1621 - The Effect of Air Pressure and Mass on the Time of Flight, Maximum Elevation, and Muzzle Velocity of a Weighted Ping Pong Ball Launched from an Air Cannon

Samuel Richardson

Teacher: Cindy Richardson

Hope2, Home School

Broadcom MASTERS (J17) - Certificate & entry booklet.

Sponsored by: Broadcom MASTERS

J1706 - Killer Cabbage Clones

Sarah lindsay Merriman

Teacher: Gina Tuck

Classical Conversations, Home School

Charlottesville Astronomical Society Award (Junior) - Certificate & a custom built Dobsonian telescope and the book "Turn left at Orion."

Sponsored by: Charlottesville Astronomical Society

J0707 - Using A Telescope to Find the Mass of Jupiter

Beau Yates

Teacher: Lauren Cabrera

Charlottesville Catholic School, Independent/Private

Charlottesville Astronomical Society Award (Senior) - Certificate & a custom built Dobsonian telescope and the book "Turn left at Orion."

Sponsored by: Charlottesville Astronomical Society

S1603 - Radio Messier Marathon

Hunter Yates

Teacher: Steve Yates

The Covenant School, Independent/Private

Intel Excellence in Computer Science Award - Certificate & \$200

Sponsored by: Intel

S0602 - Helping Emergency Responders Locate Victims

Yousef Haggy

Teacher: Butch Morris

Riverbend High School, Spotsylvania County

I S W E E P Special Award (#1) - Certificate & entry packet.

ISWEEEP provides hotel, breakfasts, some lunches, local transportation, and org fees. Does not include travel to the event or dinners.

Sponsored by: International Sustainable World Energy Engineering Environment Project Olympiad (ISWEEEP)

S1101 - Autonomous Agricultural Vehicle

John carr Haden, Cole Weis, Marcel Tisdelle

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

I S W E E P Special Award (#2) - Certificate & entry packet.

ISWEEEP provides hotel, breakfasts, some lunches, local transportation, and org fees. Does not include travel to the event or dinners.

Sponsored by: International Sustainable World Energy Engineering Environment Project Olympiad (ISWEEEP)

S1001 - The Effect of Blade Shape on the Noise Production of Wind Turbines

Alyssa Jordan
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Mu Alpha Theta Award - Certificate and acceptance form
Sponsored by: Mu Alpha Theta, the National High School and Two-Year College Mathematics Honor Society
S1302 - Are Circular Dependent Grids of Random Variables Possible? And Can They Inform Sample Point Location Selection?

Elizabeth Kromkowski
Teacher: Charles Kromkowski
Charlottesville High School, Charlottesville City

NASA Earth System Science Award - Certificate
Sponsored by: NASA
J1207 - Inland V.S. Outland: Which Is Cleaner?

Rachel Quinn
Teacher: Linda Lapp
Freedom Middle School, Spotsylvania County

National Ground Intelligence Center Best of Show Award - Certificate and medallion.
Sponsored by: National Ground Intelligence Center

S1604 - Shake Shoes: Producing Energy Through Ambulatory Motion

Erin Hensien, Mary Desimone
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

National Ground Intelligence Center Engineering Award (Junior 1) - Certificate and notebook.
Sponsored by: National Ground Intelligence Center

J0903 - Antenna Coverage Areas: Comparing Yagi and Dipole Antennas

Abigail Rollins
Teacher: Ashley Martin
Ni River Middle School, Spotsylvania County

National Ground Intelligence Center Engineering Award (Junior 2) - Certificate and notebook.
Sponsored by: National Ground Intelligence Center

J1001 - Gel Fuel – Future or Flop

Julian Drake
Teacher: Sarah Green, Gretchen Feury
The Covenant School, Independent/Private

National Ground Intelligence Center Engineering Award (Senior 1) - Certificate and notebook.
Sponsored by: National Ground Intelligence Center

S0901 - The Application of LIDAR for Mobile Aerial Systems

Jay Rothenberger, Aaron Poulter-martinez
Teacher: Carol Stutzman
Western Albermarle High School, Albemarle County

National Ground Intelligence Center Environmental Sciences Award (Junior 1) - Certificate and notebook.
Sponsored by: National Ground Intelligence Center

J1209 - Just Like a Canary in a Coal Mine

Haley Minnery
Teacher: Katie Hawkins
Stafford Middle School, Stafford County

National Ground Intelligence Center Life Sciences Award (Junior 1) - Certificate and notebook
Sponsored by: National Ground Intelligence Center

J0234 - VR vs. pain

Russell Dolleris, Wilson Draper
Teacher: Jennifer Page
North Branch School, Independent/Private

National Ground Intelligence Center Mathematics and Computer Sciences Award (Senior 1) - Certificate and notebook.

Sponsored by: National Ground Intelligence Center

S1301 - A Novel Calculus Model That Predicts the Concentration of Nickel Chloride in Electrically Treated Water

Derek Tao, Brian Li
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

National Ground Intelligence Center Physical Sciences Award (Junior 1) - Certificate and notebook.
Sponsored by: National Ground Intelligence Center

J1606 - Electromagnetic Projectile

Kelsey Skees
Teacher: Courtney Quail
Thompson Middle School, Stafford County

National Ground Intelligence Center Physical Sciences Award (Junior 2) - Certificate and notebook.
Sponsored by: National Ground Intelligence Center

J1621 - The Effect of Air Pressure and Mass on the Time of Flight, Maximum Elevation, and Muzzle Velocity of a Weighted Ping Pong Ball Launched from an Air Cannon

Samuel Richardson
Teacher: Cindy Richardson
Hope2, Home School

National Ground Intelligence Center Physical Sciences Award (Senior 1) - Certificate and notebook.
Sponsored by: National Ground Intelligence Center

S1604 - Shake Shoes: Producing Energy Through Ambulatory Motion

Erin Hensien, Mary Desimone
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Office of Naval Research Naval Science Award (Junior 1) - Medallion, certificate
Sponsored by: Naval Science Award Program

J1301 - Detecting Credit Card Fraud Using Benford's Law

Craig Kimball
Teacher: Susan Easter
Gayle Middle School, Stafford County

Office of Naval Research Naval Science Award (Junior 2) - Medallion, certificate
Sponsored by: Naval Science Award Program

J1618 - Sending Sound Through Light

Jacob Lewis
Teacher: Courtney Quail
Thompson Middle School, Stafford County

Office of Naval Research Naval Science Award (Junior 3) - Medallion, certificate
Sponsored by: Naval Science Award Program

J0903 - Antenna Coverage Areas: Comparing Yagi and Dipole Antennas

Abigail Rollins
Teacher: Ashley Martin
Ni River Middle School, Spotsylvania County

Office of Naval Research Naval Science Award (Junior 4) - Medallion, certificate
Sponsored by: Naval Science Award Program

J1607 - Engineering electromagnet.

Nathan Shoppell
Teacher: Sheri Sanders
King George Middle School, King George County

Office of Naval Research Naval Science Award (Junior 5) - Medallion, certificate
Sponsored by: Naval Science Award Program

J0701 - Crystal Clear: The effect of saturation levels on crystal growth

Tyler Tarbet
Teacher: Linda Lapp
Freedom Middle School, Spotsylvania County

Office of Naval Research Naval Science Award (Junior 6) - Medallion, certificate
Sponsored by: Naval Science Award Program

J1621 - The Effect of Air Pressure and Mass on the Time of Flight, Maximum Elevation, and Muzzle Velocity of a Weighted Ping Pong Ball Launched from an Air Cannon

Samuel Richardson
Teacher: Cindy Richardson
Hope2, Home School

Office of Naval Research Naval Science Award (Senior 1) - Medallion, certificate, \$50
Sponsored by: Naval Science Award Program

S1201 - A Reusable Method to Simultaneously Determine the Concentration of Metal Cations in Water

Jack Stalfort
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Office of Naval Research Naval Science Award (Senior 2) - Medallion, certificate, \$50
Sponsored by: Naval Science Award Program

S1601 - Acoustic Fresnel Lens

Hyunsuk Kim
Teacher: Erik Born
Woodberry Forest School, Independent/Private

RICOH Sustainable Development Award - Certificate

Sponsored by: Ricoh Americas Corporation

S1102 - Burn Your Bananas: An In-Depth Comparison of Which Biofuels are the Best Material for a Briquette

Camellia Pastore, Nathaniel Carlson
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Society For In Vitro Biology Award (11th grade only) - Certificate and acceptance form

A formal letter of congratulations will be sent and publicity of his/her achievement will be included in the society's newsletter on their website at <http://www.sivb.org>. In addition, it is possible that the recipient will be contacted by our society and invited to submit an abstract of their work to our annual meeting.

Sponsored by: Society for In Vitro Biology

S0402 - Removing a Trait From DNA Using CRISPR

Juliet Kingsley, Maggie Angevine
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

U. S. Metric Award - Certificate

Sponsored by: U.S. Metric Association

J1610 - Gauss Rifle - Magnetic Power

Christian Ehrle
Teacher: Suzanne Wilson
Dixon-Smith Middle School, Stafford County

Air Force Award (Senior 1) - Backpack, computer accessories kit, and Certificate

Sponsored by: United States Air Force

S1403 - The Morris Orthotic--the Smart Orthotic for Diabetic Patients

Margaret Richey
Teacher: Carol Stutzman
Western Albermarle High School, Albemarle County

Air Force Award (Senior 2) - Backpack, computer accessories kit, and Certificate

Sponsored by: United States Air Force

S0501 - Sparking Safety: Environmentally Friendly Pyrotechnics

Emma Graham, Peter Grosch
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Air Force Award (Senior 3) - Backpack, computer accessories kit, and Certificate

Sponsored by: United States Air Force

S0901 - The Application of LIDAR for Mobile Aerial Systems

Jay Rothenberger, Aaron Poulter-martinez

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

Taking the Pulse of the Planet Award (NOAA) - Certificate & Medallion

Sponsored by: United States Department of Commerce, Office of the Under Secretary for Oceans and Atmosphere

S1203 - Turbid Waters

Felicity Detoll

Teacher: Donna deToll

Mountain View High School, Stafford County

Virginia Dental Association (Animal Sciences) - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S0103 - The Effects of H₂O₂ on Earthworms prior to an Earthquake

Kellen Egan

Teacher: Michele Egan

North Stafford High School, Stafford County

Virginia Dental Association (Behavioral and Social Sciences) - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S0201 - Project X: Determining the Effect of the Letter X on Product Attractiveness

Nate Kliewer, Bailey Stumbaugh

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Virginia Dental Association (Biochemistry) - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S0301 - The Effect of Histone Modification on the Efficiency of the Chemotherapeutic Drug Cisplatin

Benjamin Grant, Zak Robbins

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Virginia Dental Association (Cellular & Molecular Biology) - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S0401 - Necrosis of Lung Adenocarcinoma by Targeting a Gamete-Specific Protein

Mriganka Mandal

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Virginia Dental Association (Chemistry) - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S0501 - Sparking Safety: Environmentally Friendly Pyrotechnics

Emma Graham, Peter Grosch

Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Virginia Dental Association (Medicine and Health Sciences) - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S1401 - Resurrection Plants: A Novel Approach to Natural Cancer Treatment

Ashwin Swaminathan
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Virginia Dental Association (Microbiology) - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S1501 - The Effects of Carbaryl Pesticide and 3:1:2 Fertilizer on Strawberry Root Bacteria

Liam Godbold
Teacher: Gene Godbold
Home School, Home School

Virginia Dental Association Grand Award - Certificate, career information, ADA Journal Reprint.

Sponsored by: Virginia Dental Association

S0401 - Necrosis of Lung Adenocarcinoma by Targeting a Gamete-Specific Protein

Mriganka Mandal
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Virginia Lakes & Watersheds Award (Junior) - \$50 Target Gift Card (\$30 for team members)

Sponsored by: Virginia Lakes and Watersheds Association

J1213 - The effect of different bodies of water qualities on the best habitat for aquatic life?

Nicholas Wilson
Teacher: Lisa Winn
Thornburg Middle School, Spotsylvania County

Virginia Lakes & Watersheds Award (Senior) - \$100 Target Gift Card (\$75 for team members)

Sponsored by: Virginia Lakes and Watersheds Association

S1203 - Turbid Waters

Felicity Detoll
Teacher: Donna deToll
Mountain View High School, Stafford County

Create a Healthful World Award - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J0309 - How Much Fat is in Your Food?

Kellylynn Brennan
Teacher: Katie Hawkins
Stafford Middle School, Stafford County

Food Scientist Award (Nutrition Award) - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J1512 - The 5 Second Rule

Elijah Settle

Teacher: Elaine Frank

Rappahannock Middle School, Rappahannock County

Household Scientist Award - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J0811 - The Ultimate Scratch Test

Matilyn Carter

Teacher: Dara Carter

Locust Grove Middle School, Orange County

Hybrid/Interdisciplinary Scientist Award - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J1716 - The Shady Side of Phototropism

Kendall Hyer

Teacher: Patrick Scharf

Louisa Middle School, Louisa County

Next Engineer Award - Certificate

Sponsored by: Virginia Piedmont Regional Science Fair

J0808 - Project Breaking Point

Olivia Lupo

Teacher: Jason Hicks

Heim Middle School, Stafford County

Next Thomas Edison Award - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J1107 - Homemade vs. Store Bought: Water Filter Edition

Grace Ha

Teacher: Courtney Quail

Thompson Middle School, Stafford County

Promising/Future Environmentalist Award - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J1207 - Inland V.S. Outland: Which Is Cleaner?

Rachel Quinn

Teacher: Linda Lapp

Freedom Middle School, Spotsylvania County

Social Science Award - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J0103 - Pavlov's Parody

Alexandra Cannon

Teacher: Michele Egan

Poole Middle School, Stafford County

Why Didn't I Think of This Award - Certificate.

Sponsored by: Virginia Piedmont Regional Science Fair

J1411 - The Effect of Tinted Glasses on the Blood Pressures of Diabetic Individuals

Jessie Wang

Teacher: Sheri Sanders

King George Middle School, King George County

Stockholm Junior Water Prize #1 - Stockholm Junior Water Prize; Certificate and advancement to State/Stockholm competition

Sponsored by: Water Environment Federation

S1301 - A Novel Calculus Model That Predicts the Concentration of Nickel Chloride in Electrically Treated Water

Derek Tao, Brian Li

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Stockholm Junior Water Prize #2 - Stockholm Junior Water Prize; Certificate and advancement to State/Stockholm competition

Sponsored by: Water Environment Federation

S1201 - A Reusable Method to Simultaneously Determine the Concentration of Metal Cations in Water

Jack Stalfort

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Yale Science & Engineering Association Award (11th grade only) - Preliminary Certificate and website for receiving formal award certificate and medallion.

<http://physics.gcsu.edu/Yale>

Student must go to site no later than 30 May of the Fair year. A formal award certificate, suitable for framing, and a pewter medallion will be forwarded directly to the recipient(s) by the end of September.

Sponsored by: Yale Science & Engineering Association

S0901 - The Application of LIDAR for Mobile Aerial Systems

Jay Rothenberger, Aaron Poulter-martinez

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

Categories

Honorable Mention: Animal Sciences - J01

J0101 - Jumps and Chirps

Cailin Dunn

Teacher: Nicole Harmon

Culpeper Middle School, Culpeper County

Honorable Mention: Animal Sciences - J01

J0102 - Natural Mosquito Control

Samantha Greer

Teacher: Julie Phegley

A. G. Wright Middle School, Stafford County

Honorable Mention: Animal Sciences - J01

J0103 - Pavlov's Parody

Alexandra Cannon

Teacher: Michele Egan

Poole Middle School, Stafford County

Honorable Mention: Animal Sciences - J01

J0105 - Sharks vs Magnets: The Ultimate Battle!

Maya Wallach

Teacher: Suzanne Wilson

Dixon-Smith Middle School, Stafford County

Honorable Mention: Animal Sciences - J01

J0107 - The affect of a Commercially-available Copper Supplement on Yearling Angus Heifers

Olivia Gibson

Teacher: Elaine Frank

Rappahannock Middle School, Rappahannock County

Honorable Mention: Animal Sciences - J01

J0108 - The Affect of Salt Concentration on Artemia Salina

Zhaleen Emerson

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Honorable Mention: Animal Sciences - J01

J0110 - What gender of dog is more intelligent?

Sidney Seale

Teacher: Sheri Sanders

King George Middle School, King George County

Honorable Mention: Animal Sciences - J01

J0111 - What is the effect of photographs on horses' memory

Caroline Booker

Teacher: Sarah Green
The Covenant School, Independent/Private

Honorable Mention: Animal Sciences - J01

J0112 - Which is tastier?

Cambray Walmer
Teacher: Jennifer Behm
Post Oak Middle School, Spotsylvania County

Honorable Mention: Animal Sciences - J01

J0113 - Which Paw is Purrfect?

Grace Speyer
Teacher: Jason Hicks
Heim Middle School, Stafford County

Third Place: Animal Sciences - J01

J0109 - The Effect of Water Temperature on a Goldfish's Respiration Rate

Mia Rowe
Teacher: Beth Evans
Sutherland Middle School, Albemarle County

Second Place: Animal Sciences - J01

J0104 - Shark Solutions

Charlie Vavrik
Teacher: Anne Deane
Tandem Friends School, Independent/Private

First Place: Animal Sciences - J01

J0106 - Synergistic Repulsion of Ants by Lipid Fraction of Cinnamon and Aqueous Fraction of Lemon

Meena Ambati
Teacher: Teresa Goodin
Henley Middle School, Albemarle County

Honorable Mention: Behavioral & Social Sciences - J02

J0201 - Are You Gonna Eat That? The study of body image and how it affects eating habits.

Isabella Kulstad
Teacher: Courtney Quail
Thompson Middle School, Stafford County

Honorable Mention: Behavioral & Social Sciences - J02

J0202 - Can Children Beat the System

Victor Salcedo
Teacher: Michele Egan
Poole Middle School, Stafford County

Honorable Mention: Behavioral & Social Sciences - J02

J0204 - Does astrology actually work?

Kate Chamberlain

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Behavioral & Social Sciences - J02

J0205 - Does Chewing Gum Help You Focus Better?

Sarah Beiter

Teacher: Lauren Cabrera

Charlottesville Catholic School, Independent/Private

Honorable Mention: Behavioral & Social Sciences - J02

J0208 - Does the Appearance of Food Affect a Person's Desire to Eat It and the Taste They Perceive?

Natalie Cuba

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Behavioral & Social Sciences - J02

J0212 - How do people try to solve one side of the Rubik's cube?

Rysun Ebelherr, Kieran Arehart

Teacher: Jennifer Page

North Branch School, Independent/Private

Honorable Mention: Behavioral & Social Sciences - J02

J0221 - Musical Concentration

Luke Vance, Emily Wright

Teacher: Jennifer Page

North Branch School, Independent/Private

Honorable Mention: Behavioral & Social Sciences - J02

J0222 - Photographic Memory

Jackson Lusk

Teacher: Sheri Sanders

King George Middle School, King George County

Honorable Mention: Behavioral & Social Sciences - J02

J0226 - Testing Sleep

Jazmyn Whittingham

Teacher: Julie Phegley

A. G. Wright Middle School, Stafford County

Honorable Mention: Behavioral & Social Sciences - J02

J0227 - The Effect of Age on a Person's Ability to Perceive Optical Illusions

Autumn Ryan

Teacher: Susan Easter

Gayle Middle School, Stafford County

Honorable Mention: Behavioral & Social Sciences - J02
J0228 - The Effect of Colored Paper on Kids Memories
Autumn Bissett
Teacher: Lisa Winn
Thornburg Middle School, Spotsylvania County

Honorable Mention: Behavioral & Social Sciences - J02
J0229 - The Font Facts
Mckeiran Romasser, Taylor Gray
Teacher: Michele Stewart
Post Oak Middle School, Spotsylvania County

Honorable Mention: Behavioral & Social Sciences - J02
J0230 - The human perception of time
Austin Evans
Teacher: Michele Egan
Poole Middle School, Stafford County

Honorable Mention: Behavioral & Social Sciences - J02
J0232 - Too Old to Learn?
Ryland Dickman
Teacher: Sarah Green
The Covenant School, Independent/Private

Honorable Mention: Behavioral & Social Sciences - J02
J0234 - VR vs. pain
Russell Dolleris, Wilson Draper
Teacher: Jennifer Page
North Branch School, Independent/Private

Honorable Mention: Behavioral & Social Sciences - J02
J0236 - What Food is This?
Elizabeth Buteau
Teacher: Jennifer Page
North Branch School, Independent/Private

Third Place: Behavioral & Social Sciences - J02
J0217 - Just a Pigment of Your Imagination
Charlotte Niven, Carolyn O'connell, Devyn Rieger
Teacher: Kimberly Taylor
Village School, Independent/Private

Second Place: Behavioral & Social Sciences - J02
J0225 - Strooper Sharp Senses
Caroline Miller, Vivien Wong
Teacher: Kimberly Taylor
Village School, Independent/Private

First Place: Behavioral & Social Sciences - J02

J0231 - The Stroop Effect

Troy Moskowitz

Teacher: Michele Stewart

Post Oak Middle School, Spotsylvania County

Honorable Mention: Biochemistry - J03

J0309 - How Much Fat is in Your Food?

Kellylynn Brennan

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Honorable Mention: Biochemistry - J03

J0310 - Lemons vs Car Batteries

Lily Hurt

Teacher: Kimberly Taylor

Village School, Independent/Private

Honorable Mention: Biochemistry - J03

J0313 - Rethink What You Drink

Hailey Rose

Teacher: Tammy Rose

Home School, Home School

Third Place: Biochemistry - J03

J0314 - Rotten to the Core

Kenzie Macdonald

Teacher: Kimberly Taylor

Village School, Independent/Private

Second Place: Biochemistry - J03

J0312 - Power Poll: Which Nut Has the Most Potential Energy and Why?

Ava Benner

Teacher: Julie Phegley

A. G. Wright Middle School, Stafford County

First Place: Biochemistry - J03

J0305 - Does Fruit Generate Electricity?

Michelle Balderrama

Teacher: Nicole Harmon

Culpeper Middle School, Culpeper County

Second Place: Cellular & Molecular Biology - J04

J0402 - Strawberry Extraction Reaction

Princess cassandra Ferrer

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

First Place: Cellular & Molecular Biology - J04

J0401 - Is it Worth the Risk?

Jillian Smith

Teacher: Gregory Palmer

Louisa Middle School, Louisa County

Honorable Mention: Chemistry - J05

J0504 - Acidic Curd

Charlotte Kaczka

Teacher: Erin Percival

Sutherland Middle School, Albemarle County

Honorable Mention: Chemistry - J05

J0506 - Burn Candles Burn!

Kallie Buchanan

Teacher: Michele Stewart

Post Oak Middle School, Spotsylvania County

Honorable Mention: Chemistry - J05

J0508 - Chlorinated or Dechlorinated

William Sage

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Chemistry - J05

J0509 - Crazy Candy Crystals

Calel Colon, Andy Packwood

Teacher: Erin Percival

Sutherland Middle School, Albemarle County

Honorable Mention: Chemistry - J05

J0511 - Crystals Rock! - Observing the Growth of Sugar Crystals

Ashleigh Gorry

Teacher: Gina Tuck

Classical Conversations, Home School

Honorable Mention: Chemistry - J05

J0517 - How insulation affects freezer burn

Josh Liberman

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Chemistry - J05

J0526 - Potion in my Lotion

Zoe Lenzmeier, Owen Lenzmeier

Teacher: Jason Hicks

Heim Middle School, Stafford County

Honorable Mention: Chemistry - J05

J0531 - Stains - Now You See Them... Now You Don't

Elizabeth Blough

Teacher: Janet Blough

Classical Conversations, Home School

Honorable Mention: Chemistry - J05

J0534 - The Burning Cup

Kenji Epling

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Chemistry - J05

J0539 - The Effect of Electric Current on the Speed of Electrolysis in Water

Victor Kriska

Teacher: Jaime Henning

Chancellor Middle School, Spotsylvania County

Honorable Mention: Chemistry - J05

J0540 - Tie-Dye Fun

Caitlin Hennessy

Teacher: Jaymie Hennessy, Jayme Hennessy

Classical Conversations, Home School

Honorable Mention: Chemistry - J05

J0541 - What liquid cleans coins the best?

Robert Walters

Teacher: Linda Lapp

Freedom Middle School, Spotsylvania County

Third Place: Chemistry - J05

J0532 - SUNSCREEN Know what to buy so you don't fry.

Olivia Smith

Teacher: Susan Easter

Gayle Middle School, Stafford County

Second Place: Chemistry - J05

J0527 - Quantifying Staining Effects of Drinks with Time

Kayleigh Nelson

Teacher: Elizabeth Yorio

Post Oak Middle School, Spotsylvania County

First Place: Chemistry - J05

J0513 - Disintegration Dilemma: To Eat or Not to Eat

Emmy Vernon

Teacher: Alicia Prevost

Classical Conversations, Home School

Honorable Mention: Computer Science - J06

J0602 - Android Mobile School Bus Application

Cassia Gainer

Teacher: Elaine Frank

Rappahannock Middle School, Rappahannock County

Honorable Mention: Computer Science - J06

J0603 - Buffering

Lauren Myers

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Honorable Mention: Computer Science - J06

J0604 - Building a Pen Mouse

Isabella Liu

Teacher: Erin Percival

Sutherland Middle School, Albemarle County

Honorable Mention: Computer Science - J06

J0609 - What materials block a Wi-Fi signal?

Joshua Mamea

Teacher: Lisa Winn

Thornburg Middle School, Spotsylvania County

Honorable Mention: Computer Science - J06

J0610 - Why no WIFI?

Kumayl Naqvi

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Third Place: Computer Science - J06

J0606 - How Strong is Your Password?

Julia Richardson, Skylar Duffy

Teacher: Suzanne Wilson

Dixon-Smith Middle School, Stafford County

Second Place: Computer Science - J06

J0601 - A Medical System for Fallen, Unconscious, or Immobile People

Emily Chang

Teacher: Erin Percival

Sutherland Middle School, Albemarle County

First Place: Computer Science - J06

J0608 - The Photonic Bit

Samuel Rosner

Teacher: Diana McCullough

Sutherland Middle School, Albemarle County

Honorable Mention: Earth & Planetary Science - J07

J0701 - Crystal Clear: The effect of saturation levels on crystal growth

Tyler Tarbet

Teacher: Linda Lapp

Freedom Middle School, Spotsylvania County

Third Place: Earth & Planetary Science - J07

J0706 - The Effect of the Blue Ridge Mountains on Local Weather

Cole Rozwadowski

Teacher: Nicole Harmon

Culpeper Middle School, Culpeper County

Second Place: Earth & Planetary Science - J07

J0708 - Weather Attacks

Katelyn Lauber

Teacher: Dara Carter

Locust Grove Middle School, Orange County

First Place: Earth & Planetary Science - J07

J0707 - Using A Telescope to Find the Mass of Jupiter

Beau Yates

Teacher: Lauren Cabrera

Charlottesville Catholic School, Independent/Private

Honorable Mention: Engineering – Materials & Bioengineering - J08

J0808 - Project Breaking Point

Olivia Lupo

Teacher: Jason Hicks

Heim Middle School, Stafford County

Honorable Mention: Engineering – Materials & Bioengineering - J08

J0809 - Sound Proofing

Jordan Tefft

Teacher: Linda Lapp

Freedom Middle School, Spotsylvania County

Third Place: Engineering – Materials & Bioengineering - J08

J0801 - Reducing Nitrate Pollution in Virginia's Waterways

Susannah Carter

Teacher: Sarah Green, Gretchen Feury

The Covenant School, Independent/Private

Second Place: Engineering – Materials & Bioengineering - J08

J0803 - Does your outer wall siding keep the hot temperatures out?

Mason Armentrout

Teacher: Jennifer Behm

Post Oak Middle School, Spotsylvania County

First Place: Engineering – Materials & Bioengineering - J08

J0811 - The Ultimate Scratch Test

Matilyn Carter

Teacher: Dara Carter

Locust Grove Middle School, Orange County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0902 - A Presidential Invention, Reinvented and Reimagined! (Roof to Boat, Continuation)

Sydney Morefield

Teacher: Jason Hicks

Heim Middle School, Stafford County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0906 - Electrons, Electrodes, and Electrolytes: The Effects of pH

Carrie Hynes

Teacher: Belinda Casto-Landolt

Thompson Middle School, Stafford County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0909 - LED vs Incandescent Lighting

Hunter Aversa

Teacher: Jaime Henning

Chancellor Middle School, Spotsylvania County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0910 - Potato Gun Power

Mason Brooking, James Downin

Teacher: Kristen Boudreau

Prospect Heights Middle School, Orange County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0911 - Rain Power and Conductivity

Sandra Fisher

Teacher: Suzanne Wilson

Dixon-Smith Middle School, Stafford County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0917 - The Electric Train

Madeline Price

Teacher: Jaime Henning

Chancellor Middle School, Spotsylvania County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0919 - Too Cool for School

Ethan Sheffield

Teacher: Michele Stewart

Post Oak Middle School, Spotsylvania County

Honorable Mention: Engineering – Electrical & Mechanical - J09

J0920 - Water-powered Faraday Generator

Matthew Willis

Teacher: Erin Percival

Sutherland Middle School, Albemarle County

Third Place: Engineering – Electrical & Mechanical - J09

J0921 - Which Bridge is Stronger?

Ryan Fillis, Keegan Browning

Teacher: Jason Hicks

Heim Middle School, Stafford County

Second Place: Engineering – Electrical & Mechanical - J09

J0903 - Antenna Coverage Areas: Comparing Yagi and Dipole Antennas

Abigail Rollins

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

First Place: Engineering – Electrical & Mechanical - J09

J0914 - Stirling Engine

Leah Gunnoe

Teacher: Anne Deane

Tandem Friends School, Independent/Private

Honorable Mention: Energy & Transportation - J10

J1008 - Refraction Action Energy

Elizabeth Jackson

Teacher: Kimberly Taylor

Village School, Independent/Private

Honorable Mention: Energy & Transportation - J10

J1011 - Solar Ovens

William Lee

Teacher: Dara Carter

Locust Grove Middle School, Orange County

Honorable Mention: Energy & Transportation - J10

J1013 - The Effect of Blade Length on Wind Turbines

Paige Baker

Teacher: Sheri Sanders

King George Middle School, King George County

Honorable Mention: Energy & Transportation - J10

J1020 - Water Wheel War

Annie Devine

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Honorable Mention: Energy & Transportation - J10

J1021 - Which solar powered hot dog cooker works the best

Teyah Driver

Teacher: Linda Lapp

Freedom Middle School, Spotsylvania County

Third Place: Energy & Transportation - J10

J1006 - May The Force Be With You

Franceszca Penaredondo, Moira Cantwell

Teacher: Lauren Cabrera

Charlottesville Catholic School, Independent/Private

Second Place: Energy & Transportation - J10

J1007 - Mechanical Windmill Blade Study

Alexander Dachos

Teacher: Sheri Sanders

King George Middle School, King George County

First Place: Energy & Transportation - J10

J1001 - Gel Fuel – Future or Flop

Julian Drake

Teacher: Sarah Green, Gretchen Feury

The Covenant School, Independent/Private

Honorable Mention: Environmental Management - J11

J1101 - An Attempt to Help Save The Glaciers

Megan Charette

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Environmental Management - J11

J1102 - Building Simple Water Filters Using Plastic Bottles

Melanie Kiser

Teacher: Sheri Sanders

King George Middle School, King George County

Honorable Mention: Environmental Management - J11

J1103 - Decomposing Trash Dash

Noel Wright

Teacher: Michele Stewart

Post Oak Middle School, Spotsylvania County

Honorable Mention: Environmental Management - J11

J1104 - E-Waste (Electronic Waste)

Katelyn Moore

Teacher: Dara Carter

Locust Grove Middle School, Orange County

Honorable Mention: Environmental Management - J11

J1108 - Let's Heat Things Up to Break Them Down

Emily Eppard

Teacher: Gregory Palmer

Louisa Middle School, Louisa County

Honorable Mention: Environmental Management - J11

J1111 - The Desalination Dilema

Fiona Gordon

Teacher: Jaime Henning

Chancellor Middle School, Spotsylvania County

Third Place: Environmental Management - J11

J1113 - Third World Country Heavy Metal Water Contamination Solution

William Nerney

Teacher: christine nerney

Hope2, Home School

Second Place: Environmental Management - J11

J1109 - Phytoremediation: The Case for Lemna minor

Alex Hawley

Teacher: Belinda Casto-Landolt

Gayle Middle School, Stafford County

First Place: Environmental Management - J11

J1105 - Eco-Friendly Air Filters

Noor Zakriya

Teacher: Susan Easter

Gayle Middle School, Stafford County

Honorable Mention: Environmental Sciences - J12

J1201 - Ability of Soil to Hold Water

Grace Buck

Teacher: Patrick Scharf

Louisa Middle School, Louisa County

Honorable Mention: Environmental Sciences - J12

J1204 - Does the pH of Water Affect the pH of Soil?

Luke Arcement

Teacher: Victoria Arcement

Home School, Home School

Honorable Mention: Environmental Sciences - J12

J1213 - The effect of different bodies of water qualities on the best habitat for aquatic life?

Nicholas Wilson

Teacher: Lisa Winn

Thornburg Middle School, Spotsylvania County

Third Place: Environmental Sciences - J12

J1207 - Inland V.S. Outland: Which Is Cleaner?

Rachel Quinn

Teacher: Linda Lapp

Freedom Middle School, Spotsylvania County

Second Place: Environmental Sciences - J12

J1205 - Hot Gases

Annamarita Sofis

Teacher: Courtney Quail

Thompson Middle School, Stafford County

First Place: Environmental Sciences - J12

J1209 - Just Like a Canary in a Coal Mine

Haley Minnery

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Honorable Mention: Mathematical Sciences - J13

J1303 - Measuring Speed of Light

Ryan Paduano, Alexander Caesar

Teacher: Lauren Cabrera

Charlottesville Catholic School, Independent/Private

Third Place: Mathematical Sciences - J13

J1302 - Geometry Affects on a soccer field

Adrian Anderson

Teacher: Kristen Boudreau

Prospect Heights Middle School, Orange County

Second Place: Mathematical Sciences - J13

J1304 - Spidrons

Heather Williams

Teacher: Elaine Frank

Rappahannock Middle School, Rappahannock County

First Place: Mathematical Sciences - J13

J1301 - Detecting Credit Card Fraud Using Benford's Law

Craig Kimball

Teacher: Susan Easter

Gayle Middle School, Stafford County

Honorable Mention: Medicine & Health Sciences - J14

J1411 - The Effect of Tinted Glasses on the Blood Pressures of Diabetic Individuals

Jessie Wang

Teacher: Sheri Sanders

King George Middle School, King George County

Honorable Mention: Medicine & Health Sciences - J14

J1412 - The Effects of Different Fruits on Blood Glucose Levels

Cassidy Renzi

Teacher: Jaime Henning

Chancellor Middle School, Spotsylvania County

Third Place: Medicine & Health Sciences - J14

J1404 - Brew Can Do It

Iris Susen, Caroline Jaffe

Teacher: Kimberly Taylor

Village School, Independent/Private

Second Place: Medicine & Health Sciences - J14

J1408 - Running on Inspiration

Lauren Doty

Teacher: Suzanne Wilson

Dixon-Smith Middle School, Stafford County

First Place: Medicine & Health Sciences - J14

J1402 - Are Fingerprints Hereditary? A Multi-Generational Analysis of Six Families

James Henter

Teacher: Kristopher Chain

Peabody School, Independent/Private

Honorable Mention: Microbiology - J15

J1504 - DISINFECTING E.COLI: OYSTER MUSHROOM EXTRACT VS. CHLORINE BLEACH

Catherine Storke

Teacher: Sheri Sanders

King George Middle School, King George County

Honorable Mention: Microbiology - J15

J1507 - Invasion of the mold

Rachel Kerlavage, Anna Nichols

Teacher: Michele Egan

Poole Middle School, Stafford County

Honorable Mention: Microbiology - J15

J1509 - Micro Biology

Tyler Miranda

Teacher: Jaime Henning

Chancellor Middle School, Spotsylvania County

Honorable Mention: Microbiology - J15

J1510 - mouthwash mania

Addhya Timilsena, Morgyn Williams

Teacher: Katie Huffstickler

Poole Middle School, Stafford County

Honorable Mention: Microbiology - J15

J1511 - Musical Bacteria

Jestinus Jackson III

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Microbiology - J15

J1512 - The 5 Second Rule

Elijah Settle

Teacher: Elaine Frank

Rappahannock Middle School, Rappahannock County

Honorable Mention: Microbiology - J15

J1517 - Will Aloe Vera Juice Keep Berries From Molding?

Sage Ebellherr

Teacher: Jennifer Page

North Branch School, Independent/Private

Third Place: Microbiology - J15

J1508 - It's Humid Out There

Logan Jenkins

Teacher: Gregory Palmer

Louisa Middle School, Louisa County

Second Place: Microbiology - J15

J1503 - Determination of Antibacterial properties of Trigonella foenum-graecum

Aditi Prakash

Teacher: Teresa Goodin

Henley Middle School, Albemarle County

First Place: Microbiology - J15

J1502 - Boxed Salad- Whats sneaking around in it

Aashni Shetty

Teacher: Diana McCullough

Sutherland Middle School, Albemarle County

Honorable Mention: Physics & Astronomy - J16

J1601 - A Vibration Duration Sensation: The Effect of Piano Intervals on the Duration of a Sympathetic Vibration

Nora Tuck

Teacher: Gina Tuck

Classical Conversations, Home School

Honorable Mention: Physics & Astronomy - J16

J1602 - Back to the Past...

Ella Dover

Teacher: Suzanne Wilson

Dixon-Smith Middle School, Stafford County

Honorable Mention: Physics & Astronomy - J16

J1614 - Magnetic Shielding

Langston Spencer-hamm

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

Honorable Mention: Physics & Astronomy - J16

J1616 - Measuring Magnetic Fields

Isaac Amouzou

Teacher: Michele Egan

Poole Middle School, Stafford County

Honorable Mention: Physics & Astronomy - J16

J1620 - Testing the Grip of Artificial Hands

Luci Harrison

Teacher: Ashley Martin

Ni River Middle School, Spotsylvania County

Honorable Mention: Physics & Astronomy - J16

J1624 - The Effect of Wire Gauge on the Voltage Produced by a Linear Generator

Kevin Hoang, Max Wooten

Teacher: Erin Percival

Sutherland Middle School, Albemarle County

Honorable Mention: Physics & Astronomy - J16

J1626 - This will make you flip

Kevin Lee, Bradley Passarella

Teacher: Lauren Cabrera

Charlottesville Catholic School, Independent/Private

Honorable Mention: Physics & Astronomy - J16

J1627 - Trash Talking: The Plight of pollution affecting echolocation

Rebecca Pratte

Teacher: Michele Egan

Poole Middle School, Stafford County

Third Place: Physics & Astronomy - J16

J1618 - Sending Sound Through Light

Jacob Lewis

Teacher: Courtney Quail

Thompson Middle School, Stafford County

Second Place: Physics & Astronomy - J16

J1607 - Engineering electromagnet.

Nathan Shoppell
Teacher: Sheri Sanders
King George Middle School, King George County

First Place: Physics & Astronomy - J16

J1621 - The Effect of Air Pressure and Mass on the Time of Flight, Maximum Elevation, and Muzzle Velocity of a Weighted Ping Pong Ball Launched from an Air Cannon

Samuel Richardson
Teacher: Cindy Richardson
Hope2, Home School

Honorable Mention: Plant Sciences - J17

J1703 - Effects of Acid Rain on Plant Life

Gabriel Courtney
Teacher: curtis courtney
Home School, Home School

Honorable Mention: Plant Sciences - J17

J1704 - Growing on Up

Elizabeth Rosson
Teacher: Gregory Palmer
Albemarle High School, Albemarle County

Honorable Mention: Plant Sciences - J17

J1707 - Lettuce See If Plants Like Coffee

Cara Seely
Teacher: Jaime Henning
Chancellor Middle School, Spotsylvania County

Honorable Mention: Plant Sciences - J17

J1709 - pH and its affect on germination

Abby Vann
Teacher: Courtney Quail
Thompson Middle School, Stafford County

Honorable Mention: Plant Sciences - J17

J1712 - Tea or No Tea

Lucas Umberger
Teacher: Sheri Sanders
King George Middle School, King George County

Honorable Mention: Plant Sciences - J17

J1715 - The IrRADiated Radish

Kathryn Bahre
Teacher: Linda Lapp
Freedom Middle School, Spotsylvania County

Honorable Mention: Plant Sciences - J17

J1718 - Which peels give the most levels of fertility for vermicompost?

Elizabeth Steenhoven

Teacher: Crystal Radziszewski, Julie Phegley

A. G. Wright Middle School, Stafford County

Third Place: Plant Sciences - J17

J1714 - The Fresh Test

Kenneth Chan

Teacher: Sheri Sanders

King George Middle School, King George County

Second Place: Plant Sciences - J17

J1721 - Will it grow?

Michael Foley

Teacher: Katie Hawkins

Stafford Middle School, Stafford County

First Place: Plant Sciences - J17

J1706 - Killer Cabbage Clones

Sarah lindsay Merriman

Teacher: Gina Tuck

Classical Conversations, Home School

Third Place: Animal Sciences - S01

S0102 - The Effect of Neonicotinoids on Honey Bee Colonies

Arghya Shetty, Natalie Li

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Second Place: Animal Sciences - S01

S0101 - Angora Goat Heredity Patterns

Ruby Neisser

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

First Place: Animal Sciences - S01

S0103 - The Effects of H₂O₂ on Earthworms prior to an Earthquake

Kellen Egan

Teacher: Michele Egan

North Stafford High School, Stafford County

Honorable Mention: Behavioral & Social Sciences - S02

S0203 - The Correlation Between Music Tempo and Sports Performance

Brock Shorten

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Third Place: Behavioral & Social Sciences - S02

S0204 - The Effects of Manual and Electronic Notetaking on Memory and Retention

Abigail Meistrell, Mary Buetow

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Second Place: Behavioral & Social Sciences - S02

S0201 - Project X: Determining the Effect of the Letter X on Product Attractiveness

Nate Kliewer, Bailey Stumbaugh

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

First Place: Behavioral & Social Sciences - S02

S0202 - The Correlation between Color and Memory

Holly Hilten, Shannon Barrett-johnson

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

First Place: Biochemistry - S03

S0301 - The Effect of Histone Modification on the Efficiency of the Chemotherapeutic Drug Cisplatin

Benjamin Grant, Zak Robbins

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Second Place: Cellular & Molecular Biology - S04

S0402 - Removing a Trait From DNA Using CRISPR

Juliet Kingsley, Maggie Angevine

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

First Place: Cellular & Molecular Biology - S04

S0401 - Necrosis of Lung Adenocarcinoma by Targeting a Gamete-Specific Protein

Mriganka Mandal

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

First Place: Chemistry - S05

S0501 - Sparking Safety: Environmentally Friendly Pyrotechnics

Emma Graham, Peter Grosch

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Honorable Mention: Computer Science - S06

S0601 - Hacking Into the Web of Cyberbullying: Creating A Program to Recognize Cyberbullying

Emma Hartman, Annabel Shropshire

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Third Place: Computer Science - S06

S0603 - Program for Determining How Well Internet Service Providers Meet Their Service Level Agreements

Nolan Alexander

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Second Place: Computer Science - S06

S0604 - The Literal Engine: A High-Impact Way to Speed Up Automata Processing

Jesse Du

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

First Place: Computer Science - S06

S0602 - Helping Emergency Responders Locate Victims

Yousef Haggy

Teacher: Butch Morris

Riverbend High School, Spotsylvania County

First Place: Earth & Planetary Science - S07

S0701 - Surface Tension: The Underrated Phenomenon

Michael Labelle, Abby Boitnott, Peter Dister

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

Second Place: Engineering – Materials & Bioengineering - S08

S0801 - Effectiveness of Solar Panel Coatings for Dust and Sand Prevention

Hannah Woodward

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

First Place: Engineering – Materials & Bioengineering - S08

S0802 - The Effect of Saltwater on Different Types of Fish Hooks

Jacob Beachley

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Third Place: Engineering – Electrical & Mechanical - S09

S0903 - Viability of Peltier Chips in Cooling Central Processing Units

Max Sun, Aidan Hesselroth

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Second Place: Engineering – Electrical & Mechanical - S09

S0901 - The Application of LIDAR for Mobile Aerial Systems

Jay Rothenberger, Aaron Poulter-martinez

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

First Place: Engineering – Electrical & Mechanical - S09

S0902 - The Chord Board: Enabling Beginners of All Ages to Learn the Piano

Catherine Grebe, Emma Kim

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Second Place: Energy & Transportation - S10

S1002 - The Effect of Ethanol Concentration on Energy Production

Will Freedman, Nicholas Hagspiel

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

First Place: Energy & Transportation - S10

S1001 - The Effect of Blade Shape on the Noise Production of Wind Turbines

Alyssa Jordan

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Second Place: Environmental Management - S11

S1101 - Autonomous Agricultural Vehicle

John carr Haden, Cole Weis, Marcel Tisdelle

Teacher: Carol Stutzman

Western Albermarle High School, Albemarle County

First Place: Environmental Management - S11

S1102 - Burn Your Bananas: An In-Depth Comparison of Which Biofuels are the Best Material for a Briquette

Camellia Pastore, Nathaniel Carlson

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

Third Place: Environmental Sciences - S12

S1202 - Feeding the Ground

Kiana Newman, Madison Perry

Teacher: Jeanette Dellinger

Mountain View High School, Stafford County

Second Place: Environmental Sciences - S12

S1201 - A Reusable Method to Simultaneously Determine the Concentration of Metal Cations in Water

Jack Stalfort

Teacher: Kirsten Fuoti

Albemarle High School, Albemarle County

First Place: Environmental Sciences - S12

S1203 - Turbid Waters

Felicity Detoll
Teacher: Donna deToll
Mountain View High School, Stafford County

Second Place: Mathematical Sciences - S13

S1301 - A Novel Calculus Model That Predicts the Concentration of Nickel Chloride in Electrically Treated Water

Derek Tao, Brian Li
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

First Place: Mathematical Sciences - S13

S1302 - Are Circular Dependent Grids of Random Variables Possible? And Can They Inform Sample Point Location Selection?

Elizabeth Kromkowski
Teacher: Charles Kromkowski
Charlottesville High School, Charlottesville City

Third Place: Medicine & Health Sciences - S14

S1402 - Small changes in the DNA of the CFTR gene lead to changes in protein structure and cystic fibrosis

Maria Vizcaino
Teacher: Katina Dudley
Monticello High School, Albemarle County

Second Place: Medicine & Health Sciences - S14

S1401 - Resurrection Plants: A Novel Approach to Natural Cancer Treatment

Ashwin Swaminathan
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

First Place: Medicine & Health Sciences - S14

S1403 - The Morris Orthotic--the Smart Orthotic for Diabetic Patients

Margaret Richey
Teacher: Carol Stutzman
Western Albermarle High School, Albemarle County

First Place: Microbiology - S15

S1501 - The Effects of Carbaryl Pesticide and 3:1:2 Fertilizer on Strawberry Root Bacteria

Liam Godbold
Teacher: Gene Godbold
Home School, Home School

Honorable Mention: Physics & Astronomy - S16

S1603 - Radio Messier Marathon

Hunter Yates

Teacher: Steve Yates
The Covenant School, Independent/Private

Third Place: Physics & Astronomy - S16
S1602 - Applications of Unconventional Fire Extinguishing

Olivia Storer
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Second Place: Physics & Astronomy - S16

S1601 - Acoustic Fresnel Lens

Hyunsuk Kim
Teacher: Erik Born
Woodberry Forest School, Independent/Private

First Place: Physics & Astronomy - S16

S1604 - Shake Shoes: Producing Energy Through Ambulatory Motion

Erin Hensien, Mary Desimone
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

First Place: Plant Sciences - S17

S1701 - Effects of Sound Frequencies on Plants

Ian Blaine, Laura Friel
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County

Best Of Show: Chemistry - S05

S0501 - Sparking Safety: Environmentally Friendly Pyrotechnics

Emma Graham, Peter Grosch
Teacher: Kirsten Fuoti
Albemarle High School, Albemarle County