

## **2009 West Tennessee Regional Science and Engineering Fair Award Recipients:**

**-American Psychological Association & Teachers of Psychology in Secondary Schools:** For Best Exhibit in the Behavioral and Social Sciences **Winner:** Kaci Brewer **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville **Project Title:** The Effect of Cell Phone Exposure on the Memory of *Pogonomyrmex barbatus* (ant) **Grade:** 12

**-ASM Materials Education Foundation:** To the most outstanding project related to materials science in any grade **Winner:** Kelly Arnold **School:** Camden Central High School **Sponsoring Teacher:** Renee Wyatt **Project Title:** The Effect of H<sub>2</sub>SO<sub>4</sub> and NaOH on the Tensile Strength of Metal **Grade:** 11

**-American Meteorological Society:** To the best two student projects in Senior Division (Award may be given to a project in the Junior Division if they are more meritorious than those in Senior Division)

**Winner:** Davis Moran **School:** Dresden Middle School **Sponsoring Teacher:** Cynthia Watson **Project Title:** Tracking Atmospheric Haze **Grade:** 8

**Winner:** John Warner **School:** Union City Middle School **Sponsoring Teacher:** Marsha Stokes **Project Title:** Getting the Best Solar Energy Possible **Grade:** 7

**-Assoc. for Women Geoscientists:** To the one female student with the most outstanding project related to the geosciences in any grade **Winner:** Ashley Grimes **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville **Project Title:** The Effect of Environmental Factors on the Amount of Lead Chromate Produced by Field Turf **Grade:** 12

**-Delta Faucet of Tenn.: The Delta Green Awards:** One award to the best “green” project in each div.

**Winner:** Tristan Jernigan, Jackson Bruff, Knox Faulkner **School:** Union City Middle School **Sponsoring teacher:** Robyn Doyle **Project title:** Homemade Hydrogen Generator **Grade:** 6

**Winner:** Isaac Haynes **School:** FAITH home school **Sponsoring teacher:** Michelle McFarland **Project title:** Alternate Energy **Grade:** 6

**Winner:** Savannah Blackwell **School:** Union City Middle School **Sponsoring teacher:** Beverly Dones **Project title:** Tadpole Lifespan: How it is Affected by Water Ph **Grade:** 8

**Winner:** Will Freeman **School:** Gleason Middle School **Sponsoring Teacher:** Betty Jackson **Project Title:** Wind Energy: The Effect of Various Numbers of Blades and Blade Angles on Energy Output of a Horizontal Axis Adaptable Learning Wind Turbine in a Constant Wind Setting **Grade:** 7

**Winner:** Nicole Drake **School:** Westview High School **Sponsoring teacher:** Rosemary Neville

**Project Title:** The Effect of Chemical Fertilizers on Cladophora delicatula (a marine alga)  
**Grade:** 11

**Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**-Delta Faucet of Tenn. Green Award Overall best green project at the fair:**

**Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**-International Sustainable World (Energy, Engineering and Environment) Program:**

**Outstanding - Winner:** Nicole Drake **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project Title:** The Effect of Chemical Fertilizers on Cladophora delicatula (a Marine alga) **Grade:** 11

**Winner:** Zach Ward **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Effect of Calcium on Acid Rain Damage of Zea mays (corn) **Grade:** 11

**Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**-Mu Alpha Theta National High School and Two Year College Mathematics Club Award:**

Individual or group project demonstrating the most challenging, thorough and creative investigation of a problem involving modern mathematics. **Winner:** Tony Tang **School:** Westview High School **Sponsoring teacher:** Rosemary Neville **Project title:** The Duet of Science and Music – A Study of the Waveforms of Sound **Grade:** 10

**-National Society of Professional Engineers:** Best exhibit in Engineering **Winner:** Blake Hooten  
**School:** Westview High School **Sponsoring teacher:** Rosemary Neville **Project title:** The Effect of Angled Targets on High Speed Projectile Damage **Grade:** 12

**-National Oceanic and Atmospheric Administration (NOAA):** For research emphasizing NOAA's mission to understand and predict change in Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social and environmental needs.

**Winner:** Nicole Drake **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project Title:** The Effect of Chemical Fertilizers on Cladophora delicatula (a marine alga)  
**Grade:** 11

**-RICOH Sustainable Development Award:** Presented to the student or team whose project offers the greatest potential for increasing our ability to grow environmentally friendly and socially responsible businesses. **Winner:** Zach Ward **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville **Project title:** The Effect of Calcium on Acid Rain Damage of Zea mays (corn) **Grade:** 11

**-Society for In Vitro Biology: Winner:** Lacy Fisher **School:** Camden Central High School  
**Sponsoring teacher:** Kim Harris **Project title:** The Effectiveness of Burley Tobacco and Formic Acid in the Treatment of Honey Bees for the Varroa Mite and the Hive Beetle **Grade:** 10

**-Stockholm Junior Water Prize of the Water Environment Federation:** Up to 3 awards to the most outstanding project related to water quality, water resource management, water protection, water or wastewater treatment.

**Winner:** Zach Ward **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Effect of Calcium on Acid Rain Damage of Zea mays (corn) **Grade:** 11

**Winner:** Nicole Drake **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project Title:** The Effect of Chemical Fertilizers on Cladophora delicatula (a marine alga)  
**Grade:** 11

**-State of Tennessee Department of Economic and Community Development Award:** Energy Division: Best energy conservation project in the elementary, junior and senior divisions:

**Senior Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**Junior Winner:** Will Freeman **School:** Gleason Middle School **Sponsoring Teacher:** Betty Jackson  
**Project Title:** Wind Energy: The Effect of Various Numbers of Blades and Blade Angles on Energy Output of a Horizontal Axis Adaptable Learning Wind Turbine in a Constant Wind Setting **Grade:** 7

**Elementary Winner:** Isaac Haynes **School:** FAITH home school **Sponsoring teacher:** Michelle McFarland  
**Project title:** Alternate Energy **Grade:** 6

**-United States Metric Association Award:** The award is presented to the student whose project involves a significant amount of quantitative measurement and which best used the SI metric system for those measurements. **Winner:** Morgan Fowler **School:** Camden Central High School  
**Sponsoring teacher:** Sonya Chapman **Project title:** Preliminary Analysis of RAPD for Species Identification of Jerky **Grade:** 12

**-United States Air Force Awards – The Air Force Research Laboratory:** Four awards given in senior division – voted best projects of the fair (particularly those with aerospace application) as judged by the Air Force judges.

**Winner:** Blake Hooten **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project title:** The Effect of Angled Targets on High Speed Projectile Damage **Grade:** 12

**Winner:** Kelly Arnold **School:** Camden Central High School **Sponsoring Teacher:** Renee Wyatt  
**Project Title:** The Effect of H<sub>2</sub>SO<sub>4</sub> and NaO<sub>4</sub> on the Tensile Strength of Metal **Grade:** 11

**Winner:** Kaci Brewer **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project Title:** The Effect of Cell Phone Exposure on the Memory of *Pogonomyrmex barbatus* (ant) **Grade:** 12

**Winner:** Will Freeman **School:** Gleason Middle School **Sponsoring Teacher:** Betty Jackson  
**Project Title:** Wind Energy: The Effect of Various Numbers of Blades and Blade Angles on Energy Output of a Horizontal Axis Adaptable Learning Wind Turbine in a Constant Wind Setting **Grade:** 7

**-United States Navy/Marine Corps present on behalf of the Office of Naval Research:** Two awards for the outstanding Elementary and Junior divisions, and two for the Senior division:

**Elem./ Jr. – Winner:** Blake Stoker **School:** Dresden Middle School **Sponsoring teacher:** Cynthia Watson **Project title:** The Buck Stops Here **Grade:** 7

**Winner:** Christine Puckett **School:** West Middle School **Sponsoring teacher:** Carol Lipscomb  
**Project title:** How do Horseshoes Affect a Horse's Feet and their Performance **Grade:** 8

**Senior: Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville **Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**Winner:** Zach Ward **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Effect of Calcium on Acid Rain Damage of Zea mays (corn) **Grade:** 11

**-United States Army Awards:**

**Engineering:**

**Winner:** Samuel Flippin **School:** FAITH Home School **Sponsoring teacher:** Leslie Haynes **Project title:** Aerodynamics and Miles Per Gallon **Grade:** 11

**Environmental Science:**

**Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville **Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**Mathematics/Computer Science:**

**Winner:** Blake Hooten **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project title:** The Effect of Angled Targets on High Speed Projectile Damage **Grade:** 12

**Life Science:**

**Winner:** Nicole Drake **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project Title:** The Effect of Chemical Fertilizers on *Cladophora delicatula* (a marine alga)  
**Grade:** 11

**Physical Science:**

**Winner:** Zach Ward **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Effect of Calcium on Acid Rain Damage of Zea mays (corn) **Grade:** 11

**United States Army Bronze Medallion Winner:**

**Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**-Yale Science and Engineering Association:** Most outstanding grade exhibit in the areas of Computer science, Engineering, Physics or Chemistry:

**Winner:** Nicole Drake **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project Title:** The Effect of Chemical Fertilizers on Cladophora delicatula (a marine alga)  
**Grade:** 11

**-Union University Elementary Physical Science Awards Division:**

**Winner:** Kalen Johnson **School:** Jackson Careers & Technology **Sponsoring teacher:** Judy Britt  
**Project title:** Light Bulb Study **Grade:** 6  
**Honorable Mention**

**Winner:** Brighton Smith **School:** Milan Middle School **Sponsoring teacher:** Sheila Dunphy  
**Project title:** Water n Wind **Grade:** 6  
**Third Place**

**Winner:** John Ball **School:** FAITH Home School **Sponsoring teacher:** Star Neely **Project title:**  
The Effect of Golf Tee Height on Driving Distance **Grade:** 5  
**Second Place**

**Winner:** Nate Schwindt **School:** Jackson Careers & Technology **Sponsoring teacher:** Judy Britt  
**Project title:** Does the Length of the String Affect the Speed of the Swing? **Grade:** 5  
**First Place**

**-Union University Elementary Lifescience Division**

**Winner:** Madison Borden **School:** FAITH Home school **Sponsoring teacher:** Michelle McFarland  
**Project title:** "Clean" Kisses or Not **Grade:** 6  
**Honorable Mention**

**Winner:** Nathan Smith **School:** Covington Integrated Arts Academy **Sponsoring teacher:**  
Stephanie Turnbow **Project title:** Spud Wars **Grade:** 5  
**Third Place**

**Winner:** Hannah Brandt **School:** FAITH Home school **Sponsoring teacher:** Michelle McFarland  
**Project title:** Which Applesauce Will Mold the Fastest: Regular, Sugar-free, or Cinnamon?  
**Grade:** 6  
**Second Place**

**Winner:** Christian Campos **School:** Union City Middle School **Sponsoring teacher:** Robin Doyle  
**Project title:** Enhancing Effect of Dietary Vinegar on the Dissolving of Calcium for Increased Intestinal Absorption **Grade:** 6  
**First Place**

**-Union University Elementary Team Division:**

**Second Place Elementary Team Winners**

**Winners:** Allison Banks, Kestrel Bridges, Lauren Hailey **School:** University School of Jackson  
**Sponsoring teacher:** Jeff Johnson **Project title:** Apples Gone Bad **Grade:** 5

**First Place Elementary Team Winners**

**Winners:** Brian Schreiber, Grant Ley, Kyron Goodman **School:** Milan Middle School **Sponsoring teacher:** Sheila Dunphy **Project title:** Can a Fish Remember the Way Through a Maze **Grade:** 6

**-Union University Junior Physical Science Division:**

**Winner:** Jonathan Wade **School:** Munford Middle School **Sponsoring teacher:** Laura Sanders  
**Project title:** Does the Ratio of Sand to Cement Affect the Strength of Concrete? **Grade:** 8  
**Honorable Mention**

**Winner:** Luke Searcy **School:** Union City Middle School **Sponsoring teacher:** Beverly Dones  
**Project title:** Hydrogen as a Fuel Source **Grade:** 8  
**Third Place**

**Winner:** Cara Lunsford **School:** FAITH Home school **Sponsoring teacher:** Brooke Evens **Project title:** The Effect of the Wavelength of Light in Temperature **Grade:** 8  
**Second Place**

**Winner:** Will Freeman **School:** Gleason Middle School **Sponsoring Teacher:** Betty Jackson  
**Project Title:** Wind Energy: The Effect of Various Numbers of Blades and Blade Angles on Energy Output of a Horizontal Axis Adaptable Learning Wind Turbine in a Constant Wind Setting **Grade:** 7  
**First Place**

**-Union University Junior Lifescience Division:**

**Winner:** Savannah Blackwell **School:** Union City Middle School **Sponsoring teacher:** Beverly Dones **Project title:** Tadpole Lifespan: How it is Affected by Water Ph **Grade:** 8

## **Honorable Mention**

**Winner:** Blake Stoker **School:** Dresden Middle School **Sponsoring teacher:** Cynthia Watson  
**Project title:** The Buck Stops Here **Grade:** 7

**Third Place**

**Winner:** Lauren Smethwick **School:** Dresden Middle School **Sponsoring teacher:** Cynthia Watson  
**Project title:** Do String Players have Longer Left Fingers? **Grade:** 7

**Second Place**

**Winner:** Gabriella Broussard **School:** FAITH Home school **Sponsoring teacher:** Leslie Haynes  
**Project title:** Does Migraine Pain Location Predict Migraine Symptoms? **Grade:** 8

**First Place**

## **-Union University Junior/Senior Team Division:**

**Winners:** Taylor and Sidney Ball **School:** FAITH Home school **Sponsoring teacher:** Leslie Haynes  
**Project title:** Effect of Sodium Tripolyphosphate on the Life Cycle and Heart Rate of Daphnia

**Grade:** 10 & 11

**Second Place**

**Winners:** Dana Smith, Manal Abdi **School:** Rose Hill Middle School **Sponsoring teacher:** Janice Hunt  
**Project title:** Which One? Which One? **Grade:** 7

**First Place**

## **-Union University Senior Physical Division:**

**Winner:** Kelly Arnold **School:** Camden Central High School **Sponsoring Teacher:** Renee Wyatt  
**Project Title:** The Effect of H<sub>2</sub>SO<sub>4</sub> and Na<sub>2</sub>O<sub>4</sub> on the Tensile Strength of Metal **Grade:** 11

**Honorable Mention**

**Winner:** Blake Hooten **School:** Westview High School **Sponsoring teacher:** Rosemary Neville  
**Project title:** The Effect of Angled Targets on High Speed Projectile Damage **Grade:** 12

**Third Place**

**Winner:** Ashley Grimes **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project Title:** The Effect of Environmental Factors on the Amount of Lead Chromate Produced by Field Turf **Grade:** 12

**Second Place**

**Winner:** Robert Davis **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Efficiency of Various Solar Heating Methods **Grade:** 12

**First Place**

**-Union University Senior Lifescience Division:**

**Winner:** Kaci Brewer **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project Title:** The Effect of Cell Phone Exposure on the Memory of Pogonomyrmex barbatus (ant) **Grade:** 12

**Honorable Mention**

**Winner:** Rachel Stegall **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Effect of Heterodera glycine on the Growth Rate of Glycine max **Grade:** 12

**Third Place**

**Winner:** Zach Ward **School:** Westview High School **Sponsoring Teacher:** Rosemary Neville  
**Project title:** The Effect of Calcium on Acid Rain Damage of Zea mays (corn) **Grade:** 11

**Second Place**

**Winner:** Nathaniel Hubbs **School:** Camden Central High School **Sponsoring teacher:** Renee Wyatt  
**Project title:** Cattle Grazing Effects on Terrestrial Salamanders **Grade:** 9

**First Place**

