

2025 High Plains Regional Science & Engineering Fair Award Winners

Sixth Grade Biological Sciences Category

- 1st Soap VS. Hand Sanitizer
By: Izzy Oberloh from St. Thomas More Middle School
- 2nd Exploring the Impact of Light Colors on Plant Growth
By: Avery Joyce from St. Thomas More Middle School
- 3rd HydroFusion
By: Ravi Anand from St. Thomas More Middle School
- 4th Diabetes, It's Hard Work
By: Eloise Haugland from Spearfish Middle School
- 5th Petri Dishes Phenomena
By: Peter Benavente from St. Thomas More Middle School

Sixth Grade Engineering Category

- 1st Breaking Point
By: Fisher Bordewyk from St. Thomas More Middle School
- 2nd Soak it up
By: Kyah Carrier from St. Thomas More Middle School
- 3rd The Digital Twin COVID Tracker: Learning from Wastewater!
By: Isha Gadhamshetty from Southwest Middle School
- 4th Gravitare
By: Kate Palmer from St. Thomas More Middle School
- 5th FLYING FAR THE SCIENCE OR PAPER AIRPLANE DISTANCE
By: Tenley Sage from St. Thomas More Middle School

Sixth Grade Physical Sciences Category

- 1st Catastrophic Copper
By: Ardan Fischer from Spearfish Middle School
- 2nd Rusty Results
By: Julianna Minor from Spearfish Middle School
- 3rd May The FORCE Be With You
By: Claire Jennings from Spearfish Middle School
- 4th Wood Strength
By: Macy Mosset from Spearfish Middle School
- 5th Out With A Bang
By: Vandyn Severson from Newell School

Sixth Grade Social Sciences Category

- 1st Melodies of the Mind
By: Palmer Ramey from St. Thomas More Middle School
- 2nd Paw-Control
By: Nolan Schuldt from Spearfish Middle School
- 3rd Typing Tunes
By: Alison Dagit from Spearfish Middle School
- 4th Beat to the Rhythm
By: Ali Hammerbeck from St. Thomas More Middle School
- 5th Sleepy Head
By: Hadley Koistinen from Spearfish Middle School

Seventh Grade Biological Sciences Category

- 1st What water pH grows plants the best?
By: Layla Drieling from Belle Fourche Middle School
- 2nd Does spicy food affect body temperature?
By: Berklee Nore from Belle Fourche Middle School
- 3rd Better Brownies
By: Lucille Ahart from Newell School
- 4th Deep Water Diving
By: Breck Thompson and Beau Thompson from Spearfish Middle School
- 5th Clean Soap
By: Kyle Kenstler from Newell School

Seventh Grade Engineering Category

- 1st SMORES: Smart Materials for Better Recycling and Environmental Sustainability –
Upcycling Waste to Water with Bunny Poop-Based Graphene
By: Neha Gadhamshetty from Southwest Middle School
- 2nd Construction of Bridges
By: Kanon Dana and Asher Olson from Spearfish Middle School
- 3rd Bridge Busters
By: Hope Herweh from Spearfish Middle School
- 4th Are We Really Safe
By: Libby Johnson from Spearfish Middle School
- 5th How Can The Development Of An Artificial Pancreas Benefit People With Diabetes?
By: Quorra Carlson from Spearfish Middle School

Seventh Grade Physical Sciences Category

- 1st what solution best breaks down rust
By: Benjamin Raba from Belle Fourche Middle School
- 2nd The Efficiency of Shapes and their Aerodynamics
By: Ean Eisner from Spearfish Middle School
- 3rd Chilling Reaction
By: Kailyn Custis from Spearfish Middle School
- 4th What is Better a Swish or Bank Shot?
By: Camden Dardis and Scotty Wood from Spearfish Middle School
- 5th Breaking the Laws of Classical Physics
By: Peter Vareberg from St. Thomas More Middle School

Seventh Grade Social Sciences Category

- 1st Parental and Political Parties
By: Grace Carriveau from Spearfish Middle School
- 2nd Can We Guess People's Names?
By: Kassandra Pollard from Spearfish Middle School
- 3rd How Does Age Affect How People View The Mandela Effect?
By: Ellysabeth Coauette from Spearfish Middle School
- 4th Stroop Test
By: Elliot Quinonez from Spearfish Middle School
- 5th The wonders of AI
By: Alex Weingartner from Black Hills Christian Academy

Eighth Grade Biological Sciences Category

- 1st Water My Way

- 2nd *By: Aubrey Schuldt from Spearfish Middle School*
Will a Sheep have a Higher Rate of Gain in Hot Weather or Cold Weather
By: Kasey Dobesh from Belle Fourche Middle School
- 3rd Which is Cleaner: A Horse's Mouth or a Human's Mouth?
By: Kalani Meyers from Belle Fourche Middle School
- 4th Can you get larger eggs from peanuts?
By: Rebecca Stumpf from Belle Fourche Middle School
- 5th Beetles in the Black Hills
By: Rosalee Masson from Spearfish Middle School

Eighth Grade Engineering Category

- 1st Biometric Hands
By: Vidalia Baker from Klein Elementary
- 2nd Will Different Pressures Make Enough Volts to Power Lights?
By: Harper Mccue and Marley Mosset from Spearfish Middle School
- 3rd Stickin Strong
By: Torin Limbo from Spearfish Middle School
- 4th Sweet Sustainability
By: Katherine Moore from Spearfish Middle School
- 5th Generating Power
By: Michael Prue and Jeff Lopez from Todd County Middle School

Eighth Grade Physical Sciences Category

- 1st Optimizing Driver Flight Distance and Accuracy
By: Brady Sage from St. Thomas More Middle School
- 2nd Strike Out
By: Grace Bordewyk from Spearfish Middle School
- 3rd Does the Speed of Different Sizes of Magnets Change While Going Down a Copper Tube?
By: Brooke Waseen from Spearfish Middle School
- 4th Does Temperature Effect a Golf Balls Bounce
By: Saxton Stiefvater from Belle Fourche Middle School
- 5th What Type of Food Creates the Most Bacteria in your Mouth?
By: Avery Coyle from Belle Fourche Middle School

Eighth Grade Social Sciences Category

- 1st How does the McGurk effect change a subject's perception of sound?
By: Mehcaid Carlson from Spearfish Middle School
- 2nd Do Middle School Students Perform Better on Computer or Paper Tests?
By: Elizabeth Moore from Belle Fourche Middle School
- 3rd Time Warp
By: Addison Aalbu from Spearfish Middle School
- 4th Who Turned on the Lights?
By: Caisley Brady and Mckenna Lafferty from Todd County Middle School
- 5th Vaping
By: Bryson Rogers, Arnold Iron Shell and Ozuya Black Moon from Todd County Middle School

High School Biological Sciences Category

- 1st My Family Pedigree
By: Catherine Van Winkle from Van Winkle Home School

- 2nd How Different Colors of Light Affect Vitamin C Content in Fruits
By: Gailup Bollinger and Geana Bollinger from Timber Lake High School
- 3rd Effects of Caffeine on Cognition
By: Presley Goldade and Emma Johnston from Timber Lake High School

High School Engineering Category

- 1st Biostream: Optimized Agriculture
By: Andrew Nelson and Ethan Fischer from Rapid City Christian School

High School Physical Sciences Category

- 1st Microplastics with our daily water intake
By: Hailey Roggow from Timber Lake High School

High School Social Sciences Category

- 1st How does yelling at athletes affect their performance
By: Maria Scherer from Timber Lake High School
- 2nd Can Humans Differentiate Between AI and Human Art
By: Maddie Lou Gray from Timber Lake High School
- 3rd Does Music Taste Reflect Personality?
By: Sara Keller from Timber Lake High School

Special Awards

The American Psychological Association Award recognizes outstanding research in psychology science under the category of behavior and social sciences or any category related to psychology sciences, biochemistry, computer science, environmental science, mathematical science, medicine, and health.

- Winner: Natalie Schutz, *A Window into Sleep: How Sleep Windows Affect Sleep*, Spearfish Middle School

The Association of Women Geoscientists Award is given to a female student whose project exemplifies high standards of innovativeness and scientific excellence in the geosciences.

- Winner: Cattleya Big Crow-Bissonette, *Sandstone Versus Volcanic Rock*, Porcupine School

The Environmental Protection Agency Award is presented to the project which best applies Science, Technology, Engineering, and Mathematics (STEM) to research and solutions that aim to protect the environment and human health.

- Winner: Bayla Miner & Alli Sheeler, *Save the Top Soil*, Spearfish Middle School

The NASA Earth System Science Award is presented to the student who exhibited outstanding efforts with a project relating to earth systems.

- Winner: Neha Gadhamshetty, *SMORES: Smart Materials for Better Recycling and Environmental Sustainability – Upcycling Waste to Water with Bunny Poop-Based Graphene*, Southwest Middle School

The NASA South Dakota Space Grant Award is given to the top space-related project.

- Winner: Karsten Lind, *Rocket Calculator*, STM Middle School

The National Oceanic and Atmospheric Administration Taking the Pulse of the Planet Award goes to an individual whose research emphasizes NOAA's mission of science, service, and stewardship: to understand and predict change in climate, weather, oceans, and coasts; to share that knowledge and information with others; and to conserve and manage coastal and marine ecosystems and resources.

- Winner: Kasey Dobesh, *Will a Sheep have a Higher Rate of Gain in Hot Weather or Cold Weather*, Belle Fourche Middle School

The Office of Naval Research is committed to supporting science, technology, engineering, and math initiatives and programs for our nation's young people and recognizes one senior and one junior division winner.

- Junior Division Winner: Brady Sage, *Optimizing Driver Flight Distance and Accuracy*, STM Middle School
- Senior Division Winner: Catherine Van Winkle, *My Family Pedigree*, Van Winkle Home School

The Regeneron Biomedical Science Award is presented to an exceptional student scientist who not only demonstrates an impressive command of biomedical sciences but also embodies Regeneron's core values.

- Winner: Catherine Van Winkle, *My Family Pedigree*, Van Winkle Home School

Ricoh Americas Corporation recognizes outstanding efforts in addressing issues of environmental responsibility and sustainable development in their science and engineering project with the Sustainable Development Award.

- Winner: Ethan Fischer & Andrew Nelson, *Biostream: Optimized Agriculture*, Rapid City Christian School

The South Dakota Mines MME Dept Glass and Ceramics Award is presented to the student whose project involves ceramic, glass, or glaze to explore performance and chemistry of the materials.

- Winner: Solvei Knutsen, *Ski Wax'n*, STM Middle School

The South Dakota Science Teachers Association Award is presented for excellence in the field of scientific research.

- Winner: Brady Sage, *Optimizing Driver Flight Distance and Accuracy*, STM Middle School

The Stockholm Junior Water Prize Award for excellence in a water-related science research project is awarded to:

- Winner: Hailey Roggow, *Microplastics with our daily water intake*, Timber Lake High School

The United States Air Force Research Laboratory is proud to support science, technology, engineering, and math initiatives for our nation's youth and recognizes one

senior division winner.

- Winner: Ethan Fischer & Andrew Nelson, *Biostream: Optimized Agriculture*, Rapid City Christian School

The Yale Science & Engineering Association, Inc., Award recognizes an outstanding 11th grade project exhibiting in the areas of Science, Technology, Engineering, and Mathematics.

- Winner: Maria Scherer, *How does yelling at athletes affect their performance*, Timber Lake High School

Before we announce the senior division runner up and overall winners, we have a special award to present. We received a \$5,000 gift from alumnus Gary Stevens to give to a deserving school for a lab makeover. This award recognizes the school's continued commitment to STEM education and participation in the High Plains Regional Science Fair. We proudly present this award to:

- Winner: Timber Lake High School, LuAnn Lindskov

The runner-up qualifier for the Regeneron International Science and Engineering Fair was selected from the top-scoring projects in the senior division and will replace the first-place qualifier if for any reason the qualifier cannot attend the International Fair.

- Runner-up qualifiers: Ethan Fischer & Andrew Nelson, *Biostream: Optimized Agriculture*, Rapid City Christian School

The first-place qualifier for the Regeneron International Science and Engineering Fair is the student who was chosen from the top-scoring projects in the senior division and will represent the High Plains Region on an all-expense paid trip to the international fair in Columbus, Ohio, in May.

- First place qualifier: Catherine Van Winkle, *My Family Pedigree*, Van Winkle Home School