

2009 Colorado Science and Engineering Fair

Grand Awards Press Release

Junior Division Best Individual Project

First Place

Sara Volz 8th grade
Making Biodiesel Greener
 Cheyenne Mountain Charter Academy Colorado Springs

Second Place

Casey Campbell 8th grade
Phytoremediation of Coal Bed Methane Produced Water
 La Veta Jr/Sr High School La Veta

Third Place

Wyatt Palser 8th grade
To Spin or Not to Spin: An Investigation of Fishing Lure Design
 Otis Jr/Sr High School Otis

Senior Division Best Individual Project

First Place

David Wu 12th grade
Char and Methanol Synthesis by the Destructive Distillation of Biomass – Environmental Implications
 Cherry Creek High School Greenwood Village

Second Place

Kelli Lynch 9th grade
Irradiation Extermination
 Blevins Junior High School Fort Collins

Third Place

Sarah Guthrie 12th grade
Effect of Cytotoxic Chemicals on Apoptosis in Caenorhabditis elegans
 Boulder High School Boulder

Junior Division Best Team Project

First Place

Erin McLaughlin & Jessie McLaughlin 7th grade
The Seawall Solution
 Sacred Heart of Jesus School Boulder

Second Place

Allison Gudvangen & Claire Derr 8th grade
Toxic Waves
 North Middle School Colorado Springs

Third Place

Ryan Johnston & Maeva Allsup 8th grade
The Scent of Blood
 Dolores Middle School Dolores

Honorable Mention

Damien Ruybal & Brady Copeland 8th grade
Fruit: The Greener Cleaner
 Pueblo School for the Arts and Pueblo

Senior Division Best Team Project

First Place

Lorne Muir II & Nathan Weeks 9th grade
The Effectiveness of Carbon Water Filters on E. coli and Pharmaceuticals
 The Classical Academy Colorado Springs

Second Place

Tonya Pavlenko & Laura Gudvangen 10th grade
The Internal Battle With Melanoma: Triggering an Immune Response Using Toll Ligands
 Palmer High School Colorado Springs

Third Place

William Leigh & Mark Seres 11th grade
Phytoplankton and DMS: A Study of Environmental Alteration
 Cherry Creek High School Greenwood Village

Honorable Mention

Ben Smith, Kasey Miles & Kyle Tallent 9th grade
Presenting the Champion or Maybe Not
 Hotchkiss High School Hotchkiss

Junior Division Animal Sciences

First Place

Randi Timmons 8th grade
Giddy-Up Glucose
 Walsh Jr/Sr High School Walsh

Second Place

Trey Nestor 7th grade
Swimming With Ease Could Make You Wheeze The Effect Of Chlorine On The Respiratory System
 Merino Jr/Sr High School Merino

Third Place

Chandler Kolb 8th grade
My Horse's Ultimate Exercise: Dressage vs. Recovery Time
 Challenger Middle School Colorado Springs

Senior Division Animal Sciences

First Place

Nakayla Lestina 9th grade
Biological Control of Canada Thistle-Phase 3: Testing Local Crops for Damage by Canada Thistle
 Dove Creek High School Dove Creek

Second Place

Michael Johnson 10th grade
Different Hunting Seasons and Their Effects on Deer and Elk Population
 Canon City High School Canon City

Third Place

Abby Ney 9th grade
Moo...Gration
 Blevins Junior High School Fort Collins

Team Nomination

Ben Smith, Kasey Miles & Kyle Tallent 9th grade
Presenting the Champion or Maybe Not
 Hotchkiss High School Hotchkiss

Team Nomination

Charlie Smith & Jennifer Vero 12th grade
Need a Compass? Find a Horse
 Nederland Middle/Senior High School Nederland

Junior Division Behavioral & Social Sciences

First Place

Taylor Phelps 8th grade
Now You See It Now You Don't
 The Classical Academy Colorado Springs

Second Place

Meghan Shanahan 8th grade
That Dam Rat
 Monte Vista Middle School Monte Vista

Third Place

Julia Siegel 7th grade
The Confusion of the Rainbow
 Herzel Rocky Mountain Hebrew Academy Denver

Honorable Mention

Carissa Harlow 6th grade
Call It Disaster: Cell Phone Use During Simulated Driving
 Mountain View Core Knowledge Canon City

Honorable Mention

Nick Fallentine 7th grade
Gone in 30 Seconds
 The Classical Academy Colorado Springs

Honorable Mention

Michael Seltzer 8th grade
Don't Think and Drive!
 Summit Middle School Boulder

Honorable Mention

Kristiana Longfield 7th grade
The Effects of Television on Children's Choices
 Hotchkiss K-8 School Hotchkiss

Senior Division Behavioral & Social Sciences

First Place

Katlin Hornig 12th grade
The Effects of Equine Association on the Initial Beneficiary Benefactor
 Sargent Jr/Sr High School Monte Vista

Second Place

Raylene Larson 12th grade
Stressed Out? The Effects of Extra Curricular Activities on the Corisol Levels of Teens
 Fleming High School Fleming

Third Place

Emily Owens 10th grade
Sleep-Deprivation Won't Make You a Dope
 Merino Jr/Sr High School Merino

Honorable Mention

Brynna Hasvold-Rickett 9th grade
Personality and Politics: Is There A Correlation Between Personality and Political Affiliation?
 Blevins Junior High School Fort Collins

Honorable Mention

Alana Wilbee 10th grade
Do You See What I See?
 Palmer High School Colorado Springs

Junior Division Chemistry

First Place

Belinda Pak 8th grade
Naturally Spotless
 Summit Middle School Boulder

Second Place

Tanner Dunivan 8th grade
Hazardous Herbicides
 Walsh Jr/Sr High School Walsh

Third Place

Gerri Roberts 8th grade
A Model Study of Drug Intake
 Turner Middle School Berthoud

Honorable Mention

Sophie Wright 8th grade
C What Happens to Your Vitamin C
 Stanley British Primary School Denver

Honorable Mention

Kole Van Treese 8th grade
A "Well" of A Problem
 Sargent Jr/Sr High School Monte Vista

Senior Division Chemistry

First Place

Alan Bromwell 12th grade
An Alternative Application of the Sabatier Process for More Sustainable Transit
 Cherry Creek High School Greenwood Village

Second Place

Benjamin Hoffman 12th grade
Synthesis of 4-Bromo-2,2'-Bipyridine
 Fairview High School Boulder

Third Place

Emily Schnoor 11th grade
Catching the Electric Current
 Sargent Jr/Sr High School Monte Vista

Honorable Mention

Travis Zuniga 10th grade
*Analysis of Fuel Composition by Gas Chromatography/
 Mass Spectrometry (GC/MS)*
 South High School Pueblo

Junior Division Earth & Space Sciences**First Place**

Linda Kolb 8th grade
Soaking It Up Soil Style
 Sargent Jr/Sr High School Monte Vista

Second Place

Sophia Schneider 7th grade
*Neutralization Investigation: Battery Chemicals in
 Landfills*
 North Middle School Colorado Springs

Third Place

Taylor Volesky 7th grade
Acid Rain Effects on Cave Formation
 Cherry Creek Challenge School Denver

Senior Division Earth & Space Sciences**First Place**

Tanya Petach 10th grade
Mitigation of Soil Liquefaction with Magnetic Fields
 Fairview High School Boulder

Second Place

Sean Buck 12th grade
*Reconstructing Paleoecosystems: Community Structure
 Throughout the EECO*
 Cherry Creek High School Greenwood Village

Third Place

Johanna Phillips 9th grade
Infested Forests and Evapotranspiration
 Monte Vista High School Monte Vista

Honorable Mention

Lisa Kant 12th grade
*Soil Biogeochemical Development of the Mendenhall
 Glacier Forelands*
 Boulder High School Boulder

Junior Division Energy & Transportation**First Place**

Sara Volz 8th grade
Making Biodiesel Greener
 Cheyenne Mountain Charter Academy Colorado Springs

Second Place

Grant Yowell 7th grade
Go Green with Thermal Energy
 Genoa-Hugo School Hugo

Third Place

Drew Auburger 8th grade
*H2O MPG: Does a Homemade Hydrogen Electrolyzer
 Really Improve Fuel Mileage?*
 Springfield Jr/Sr High School Springfield

Senior Division Energy & Transportation**First Place**

Stacey Lyne 12th grade
Improved Efficiency of Microbial Fuel Cells
 Brush High School Brush

Second Place

Grant Slinger 12th grade
H2O - Water or Fuel?
 Stratton High School Stratton

Third Place

Raleigh Burt 11th grade
*Optimizing Energy Extraction and Water Conservation of
 Geothermal Heating Systems*
 Sargent Jr/Sr High School Monte Vista

Honorable Mention

Abbi Helfer 9th grade
Sun-Sational Solar
 Palmer High School Colorado Springs

Junior Division Engineering**First Place**

Wyatt Palser 8th grade
*To Spin or Not to Spin: An Investigation of Fishing Lure
 Design*
 Otis Jr/Sr High School Otis

Second Place

Rachel Purswell 7th grade
Get a Grip
 The Classical Academy Colorado Springs

Third Place

Samir Berrada 6th grade
The Laser Car
 Cortez Middle School Cortez

Honorable Mention

Kenna Brown 8th grade
Safest Skyscraper Foundations
 East Middle School Grand Junction

Honorable Mention

Zachary Schoenherr 7th grade
How Does Your Spaghetti Hold Up?
 Weld Central Junior High School Keenesburg

Honorable Mention

Zane Willburn 8th grade
Water Purification Off The Grid, Phase II
 Mancos Middle School Mancos

Team Nomination

Erin McLaughlin & Jessie McLaughlin 7th grade
The Seawall Solution
 Sacred Heart of Jesus School Boulder

Senior Division Engineering**First Place**

Ethan Hahn 11th grade
*Design and Construction of a Silent
 Magnetohydrodynamic Propulsion System*
 The Classical Academy Colorado Springs

Second Place

Jesse Ellison 11th grade
Plasma Propulsion III
 Bayfield High School Bayfield

Third Place

Ambrose Soehn 10th grade
*Analyzing the Material "Fingerprint": The Relationship of
 Fundamental Frequency to Young's Modulus*
 Boulder High School Boulder

Honorable Mention

Kelci Garcia 10th grade
Parabolic Solar Desalination for the Developing World
 Antonito Jr/Sr High School Antonito

Honorable Mention

Kyle Myhra 11th grade
Spotsucker Cleaning System
 Broomfield High School Broomfield

Honorable Mention

Cole Kembel 12th grade
*Motion Sensored Controls: Advancement In A Higher
 Application*
 Brush High School Brush

Junior Division Environmental Sciences**First Place**

Casey Campbell 8th grade
Phytoremediation of Coal Bed Methane Produced Water
 La Veta Jr/Sr High School La Veta

Second Place

Sydney Matteson 6th grade
*Heads or Tails? The Effects of Antibiotics in Stream
 Water on Planaria Regeneration*
 North Middle School Colorado Springs

Third Place

Sabine Lindler 6th grade
Natural Materials for Insulation vs. Fiberglass
 Miller Middle School Durango

Honorable Mention

Logan Graham 6th grade
*The Effects of Magnesium Chloride Road De-icer on
 Plants*
 Miller Middle School Durango

Honorable Mention

Ryan Tustin 7th grade
Waste Not! Watt Not!
 The Classical Academy Colorado Springs

Honorable Mention

Joel Lopez 8th grade
It's A Dirty Job
 Woodlin School Woodrow

Honorable Mention

Melissa Poet 8th grade
Feces to Fuel
 Arriba-Flagler School Flagler

Honorable Mention

Amanda Coopersmith 8th grade
Snug as a Bug: Green Insulation
 Cherry Creek Challenge School Denver

Team Nomination

Damien Ruybal & Brady Copeland 8th grade
Fruit: The Greener Cleaner
 Pueblo School for the Arts and Pueblo

Team Nomination

Allison Gudvangen & Claire Derr 8th grade
 Claire Derr 8th grade
Toxic Waves
 North Middle School Colorado Springs

Senior Division Environmental Sciences**First Place**

David Wu 12th grade
*Char and Methanol Synthesis by the Destructive
 Distillation of Biomass – Environmental Implications*
 Cherry Creek High School Greenwood Village

Second Place

Jeffrey Hibbert 10th grade
*Quantitative Assay of Environmental Cs-137 in
 Oncorhynchus clarki pleuriticus and Oncorhynchus mykiss
 Muscle Tissue and Soil From Fallout in a Mountain
 Environment*
 Lone Star School Otis

Third Place

Erik Schnaderbeck 10th grade
*The Effect of Reservoir on the Biodiversity of Aquatic
 Invertebrates in Cold Water Fisheries*
 Sargent Jr/Sr High School Monte Vista

Honorable Mention

Molly Graber 9th grade
Manufactured Monster: Antibiotic Resistance in the Water of Colorado Springs
 Palmer High School Colorado Springs

Honorable Mention

Alan Seltzer 11th grade
Carbon Sinks to Carbon Sources: A Soil Analysis of the Colorado Mountain Pine Beetle Infestation
 Fairview High School Boulder

Team Nomination

William Leigh & Mark Seres 11th grade
Phytoplankton and DMS: A Study of Environmental Alteration
 Cherry Creek High School Greenwood Village

Team Nomination

Lorne Muir II & Nathan Weeks 9th grade
The Effectiveness of Carbon Water Filters on E. coli and Pharmaceuticals
 The Classical Academy Colorado Springs

Junior Division Math & Computer Sciences

First Place

Matthew Haney 8th grade
A Taste of Xcode: An Analysis of Security of the RSA Public-Key Encryption Algorithm
 American Academy Lone Tree

Second Place

Jessica Constant 8th grade
Your's, Mine and Our's II: A Further Study into Modeling the Spread of Pollutants in the Atmosphere
 Saint Joseph Catholic School Fort Collins

Third Place

Tucker Leavitt 8th grade
Predicting the Inferno
 Miller Middle School Durango

Honorable Mention

Kaley Kukus 8th grade
Art and Nature: It All Adds Up
 Woodlin School Woodrow

Senior Division Math & Computer Sciences

First Place

Dominic Fuller-Rowell 12th grade
Dual Frequency GPS Accuracy with a Single Frequency Receiver
 Boulder High School Boulder

Second Place

Vikash Evans Hypio 9th grade
Voting Systems: An Outcome Analysis
 Hotchkiss High School Hotchkiss

Third Place

Bethany Dilda 11th grade
The Golden Ratio: An Exploration of the Prevalence of Phi
 Branson School Branson

Honorable Mention

Christopher Krause 11th grade
Variograms: Forewarning Disaster
 The Classical Academy Colorado Springs

Junior Division Medicine & Health

First Place

Quint Mediate 8th grade
The Size Is Right: A Study in Food Servings
 The Classical Academy Colorado Springs

Second Place

Clay Patton 8th grade
Farm Fresh vs. Store Bought Eggs
 Genoa-Hugo School Hugo

Third Place

Mali Garrett-Mills 7th grade
The Effects of Various Liquids on Hydroxyapatite Calcium Tablets: An Inadequate Model for Tooth Decay
 Smiley Middle School Denver

Honorable Mention

Madison Dewey 7th grade
Polyvinyl Chloride, Polypropylene, Polystyrene - Pick your Poison?
 North Middle School Colorado Springs

Senior Division Medicine & Health

First Place

Sarah Guthrie 12th grade
Effect of Cytotoxic Chemicals on Apoptosis in Caenorhabditis elegans
 Boulder High School Boulder

Second Place

Aarthi Shankar 11th grade
Proteomic Characterization of ECM to Identify Tumor Associated Biomolecules Part 2
 Rampart High School Colorado Springs

Third Place

Connie Liu 10th grade
Restoration of microRNA-200c: Effect on HEY Cancer Cell Behavior
 Cherry Creek High School Greenwood Village

Honorable Mention

Radhika Rawat 11th grade
Assaying Cellular Migration on A 2D Surface: A Comparative Approach to Cancer Metastasis
 Boulder High School Boulder

Honorable Mention

Nathan Frantz 9th grade
A Depressing Diet? A Study of Food Additives and Clinical Depression
 Fleming High School Fleming

Team Nomination

Tonya Pavlenko & Laura Gudvangen 10th grade
The Internal Battle With Melanoma: Triggering an Immune Response Using Toll Ligands
 Palmer High School Colorado Springs

Junior Division Microbiology

First Place

Savannah Lyle 8th grade
Vitamin C: A Potential Treatment for Cold Sores?
 North Middle School Colorado Springs

Second Place

Jens Hybertson 8th grade
Modern Drugs from Ancient Medicine: Finding New Antibiotics in Native American Medicinal Plants
 Summit Middle School Boulder

Third Place

Dante Carter 7th grade
Your Kitchen Cleaners Might Kill E. coli But What Else Do They Kill?
 North Middle School Colorado Springs

Honorable Mention

Rex Stowers 6th grade
Pure H₂O: Will Solar Distillation Kill Bacteria?
 St. Columba School Durango

Honorable Mention

Michelle Dworkin 8th grade
Antibacterial Soap vs. Regular Soap
 Blevins Junior High School Fort Collins

Honorable Mention

Jennifer Jones 6th grade
Transfer of Bacteria from a Person to a Bottle of Water
 Hoff Elementary School Keenesburg

Honorable Mention

Denvir Clarke 8th grade
Bacteria: What Products Kill the Most Bacteria?
 Bayfield Middle School Bayfield

Honorable Mention

Avra Saslow 6th grade
Got Sour Milk?
 Miller Middle School Durango

Honorable Mention

Malia Barca 6th grade
Water, Water, Everywhere, But Not a Drop to Drink: E. coli Dangers!
 Eagle County Charter Academy Edwards

Senior Division Microbiology

First Place

Kelli Lynch 9th grade
Irradiation Extermination
 Blevins Junior High School Fort Collins

Second Place

Jessie Haugen 12th grade
Slime Out: A Correlation Between the Effects of Digestive Enzymes on Pseudomonas Fluorescens Biofilm
 Sargent Jr/Sr High School Monte Vista

Third Place

Ryan Dewey 10th grade
Deadringing Copper: Amplifying the Bacteriacidal Properties of Copper and Cuprous Oxide
 Palmer High School Colorado Springs

Junior Division Physics

First Place

Isabella Soehn 8th grade
Convection Cells: The Saline Effect
 Summit Middle School Boulder

Second Place

Srish Sharma 8th grade
An Investigation On How Applying Stress to a Fluid Effects the Fluids Ability to Disperse Force
 American Academy Lone Tree

Third Place

Kyle Harlow 8th grade
Hot Rods: Three Methods for Measuring the Expansion Coefficients of Metals
 Mountain View Core Knowledge Canon City

Honorable Mention

Sydney Rohlwing 8th grade
Txt r' Tlk: A Comparison of the Electromagnetic Fields Produced by Cell Phones When Calling and Text Messaging
 American Academy Lone Tree

Honorable Mention

Rachel Rossi 7th grade
Radio Wave Roundup
 Miller Middle School Durango

Honorable Mention

Christopher Weyer 8th grade
"Higher" Performance Pinewood Car
 Creekside Middle School Monument

Honorable Mention

John Cheslock 7th grade
Double Range With Double Counterweight
 Sargent Jr/Sr High School Monte Vista

Senior Division Physics

First Place

Layne Barrett 9th grade
Wind Turbines And Bat Barotrauma
The Classical Academy Colorado Springs

Second Place

Isaac Brost 12th grade
The Rotational Phenomenon of a Simple Wing
Brush High School Brush

Third Place

Donald Dutro 12th grade
Identifying the Properties of Constructive and Destructive Interference
Genoa-Hugo School Hugo

Honorable Mention

Samuel Meaux 10th grade
Pressure Induced Voltage Output in Piezoelectric Crystals
Faith Christian Academy Arvada

Honorable Mention

Shelby Messer 11th grade
"That Sounds Suppressing" The Study of Acoustic Fire Suppression
Genoa-Hugo School Hugo

Junior Division Plant Sciences

First Place

Haley Matteson 7th grade
HOT PLANTS: The Effects of Global Warming on Development of Plants, Blossoms, Seeds, and Seed
North Middle School Colorado Springs

Second Place

Beth Lenz 8th grade
Does Carbon Dioxide Effect Zea mays and Phaseolus vulgaris Growth?
Buchanan Middle School Wray

Third Place

Brisha Wakasugi 8th grade
Under Pressure: Stress Gene Response in Pressure Bruised Tubers
Sierra Grande Jr/Sr High School Blanca

Honorable Mention

Anna Tedstrom 8th grade
Dog-Gone Yellow Spots
Eagle County Charter Academy Edwards

Team Nomination

Ryan Johnston & Maeva Allsup 8th grade
The Scent of Blood
Dolores Middle School Dolores

Senior Division Plant Sciences

First Place

Haydn Christensen 12th grade
Aquaponics vs. Hydroponics: A Comparison of Tilapia Effluent and Conventional Fertilizers as a Hydroponic Nutrient
Sargent Jr/Sr High School Monte Vista

Second Place

Jordan Lestina 10th grade
Biodiesel from Sunflowers: Phase 2-An Analysis of Soil Moisture Content and Sunflower Oil Content
Dove Creek High School Dove Creek

Third Place

Nikki Buhrdorf 9th grade
Aspens in a State of SADness: A Statistical Analysis of the Decline of Populus tremula
Hotchkiss High School Hotchkiss

Honorable Mention

Tawney Bleak 10th grade
Evaluating Forage Soybean as an Alternative Dryland Crop for the Central Great Plains
Otis Jr/Sr High School Otis

Honorable Mention

Andrew Delany 12th grade
Mendelian Study of Cosmos bipinnatus
Basalt High School Basalt

Honorable Mention

Tyler Willson 12th grade
Effect of Carbon on Tanacetum vulgare
Basalt High School Basalt

Team Nomination

Lindsay Baum, Kylie Dickson & Kristin Watkins 12th grade
The Stress Effects of Caffeine and Alcohol on Arabidopsis Wild-type and Mutant Strains
Monarch High School Louisville

2009 Colorado Science and Engineering Fair Special Awards Press Release

Teacher Awards

Lockheed Martin

Teacher of the Year Award

Dena Palser
certificate, \$3,000 grant
Lone Star School

Professional Association of Colorado Educators

PACE Teacher Award

Paul Strode
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute
Boulder High School

Mike Viney
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute
Blevins Junior High School

TJ Donahue
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute
Cherry Creek High School

Karl Donnelson
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute
Otis Jr/Sr High School

Patricia Keeling
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute
La Veta School District

Don Anderson
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute
Sacred Heart of Jesus School

David Volz
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute

Candus Muir
certificate, one week Space Discovery Institute 2009 summer science course, choice of \$100 DonorsChoose gift card or covered cost of required materials for the institute
The Classical Academy

Colorado Science and Engineering Fair

Ralph Desch Memorial Technical Writing Award

Sarah Guthrie
certificate, \$100
Boulder High School
Effect of Cytotoxic Chemicals on Apoptosis in Caenorhabditis elegans

Poster Art Contest

Kenna Brown
certificate, \$100
East Middle School

Junior Division Student Choice Award

Kaley Kukus
trophy, certificate, \$100
Woodlin School
Art and Nature: It All Adds Up

Senior Division Student Choice Award

Krista Garchar & Stephanie Williams
trophy, certificate, \$100
Dolores High School
Can Carnations Smell Like Dead People? Ask a Trained K9

Pioneers of Science Award - Georges LCF Cuvier

Reilly Hilbert
certificate, \$30
Blessed Sacrament Catholic School
Magnificent Metamorphosis

Pioneers of Science Award - Charles Darwin

Katelynn Lippitt
certificate, \$30
Wiggins Middle School
Which Do They Prefer - Crabs and Colors

Pioneers of Science Award - Sigmund Freud

Julia Siegel
certificate, \$30
Herzel Rocky Mountain Hebrew
The Confusion of the Rainbow

Pioneers of Science Award - Margaret Mead

Emma Reece
certificate, \$30
North Middle School
Visual, Auditory, or Kinesthetic?

Pioneers of Science Award - Alfred Bernard Nobel

Anthony Clark
certificate, \$30
Eagle County Charter Academy
Does Composition Put You Above the Competition?

Pioneers of Science Award - Marie Curie

Haley Foster 7th grade
certificate, \$30
The Classical Academy Colorado Springs
Is Green Clean?

Pioneers of Science Award - Edwin Hubble

Jordan Bushnell 7th grade
certificate, \$30
Irving Middle School Colorado Springs
*Weathering Degradation of Anthropogenic Formations in
Marble and Granite*

Pioneers of Science Award - Alfred Lothar Wegner

Lexi Thompson 8th grade
certificate, \$30
Otis Jr/Sr High School Otis
H2O Hurricanes are Heated by Oceans

Pioneers of Science Award - James Prescott Joule

Melissa Poet 8th grade
certificate, \$30
Arriba-Flagler School Flagler
Feces to Fuel

Pioneers of Science Award - Sir William Grove

Alexandre Basagoitia 7th grade
certificate, \$30
Sargent Jr/Sr High School Monte Vista
Powerful Garbage

Pioneers of Science Award - Nicola Tesla

Patrick Telck 6th grade
certificate, \$30
Mountain View Core Knowledge Canon City
Wood Glue Hold . . . Or Not?

Pioneers of Science Award - James Buchanan Eads

Henry Kamp 7th grade
certificate, \$30
Denver School of the Arts Denver
*How a Checkered Chroma-Key Background Makes Light
Distortion Visible and Measureable*

Pioneers of Science Award - Rachel Louise Carson

Joel Lopez 8th grade
certificate, \$30
Woodlin School Woodrow
It's A Dirty Job

Pioneers of Science Award - Barry Commoner

Caleb Wright 7th grade
certificate, \$30
Yuma Middle School Yuma
Going Green With Water

Pioneers of Science Award - Charles Babbage

Tyler Meyer 7th grade
certificate, \$30
Mt. Garfield Middle School Clifton
Dice Probabilities

Pioneers of Science Award - Grace Hopper

Dominic Carrese 6th grade
certificate, \$30
North Middle School Colorado Springs
Give Me Oxygen!: The Effects of Wastewater Treatment

Pioneers of Science Award - Greene Vardiman Black

Hunter Sneller 6th grade
certificate, \$30
Lincoln Elementary School Lamar
Water vs Gatorade

Pioneers of Science Award - Albert Schweitzer

MacKenzie Renzelman 8th grade
certificate, \$30
Buchanan Middle School Wray
Do Poppy Seeds Affect Drug Test?

Pioneers of Science Award - John Edward Salk

Austin Zuniga 6th grade
certificate, \$30
Roncallie Middle School Pueblo
*"How Clean is Your Mouth" (The Effects of Mouthwash on
Bacteria)*

Pioneers of Science Award - Louis Pasteur

Mackenzey Becker 7th grade
certificate, \$30
Monte Vista Middle School Monte Vista
Dirty Rotten Fountains

Pioneers of Science Award - Albert Einstein

Andrew Perry 8th grade
certificate, \$30
Otis Jr/Sr High School Otis
'Chute Me

Pioneers of Science Award - Sir Isaac Newton

Wyatt Vick 6th grade
certificate, \$30
Genoa-Hugo School Hugo
How to Make a Rheostat

Pioneers of Science Award - Max Planck

Aidan Mike 7th grade
certificate, \$30
North Middle School Colorado Springs
Nitinol (Memory Masters)

Pioneers of Science Award - Luthar Burbank

Ashley Snyder 6th grade
certificate, \$30
Lincoln Elementary School Lamar
A Comparison of Moisture Content of Three Apples

Pioneers of Science Award - Carolus Linnaeus

Josiah Higgins 7th grade
certificate, \$30
Genoa-Hugo School Hugo
To Fertilize or Not to Fertilize

Military

United States Air Force

Isaac Brost 12th grade
certificate, messenger bag, jotter, pen, & MP3 player
Brush High School Brush
The Rotational Phenomenon of a Simple Wing

Jesse Ellison 11th grade
certificate, messenger bag, jotter, pen, & MP3 player
Bayfield High School Bayfield
Plasma Propulsion III

Antonia Lira 11th grade
Susana Lira 9th grade
certificate, messenger bag, jotter, pen, & MP3 player
Lamar High School Lamar
Analyzing High Energy Cosmic Rays

United States Army

Joe Rosenbrock 10th grade
certificate, \$50
Brush High School Brush
Valveless Pumping

Jesse Ellison 11th grade
certificate, \$50
Bayfield High School Bayfield
Plasma Propulsion III

Cole Kembel 12th grade
certificate, \$50
Brush High School Brush
Motion Sensored Controls: Advancement In A Higher Application

Christiaan van der Walt IV 12th grade
certificate, \$50
Denver School of the Arts Denver
Accelerants' Minor League Baseball

Adam Schendel 11th grade
certificate, silver medallion
Merino Jr/Sr High School Merino
Lockdown Bot Phase 2.0

United States Navy and Marine Corps

Office of Naval Research Award

Casey Campbell 8th grade
certificate, medallion
La Veta Jr/Sr High School La Veta
Phytoremediation of Coal Bed Methane Produced Water

Rachel Purswell 7th grade
certificate, medallion
The Classical Academy Colorado Springs
Get a Grip

Drew Auburger 8th grade
certificate, medallion
Springfield Jr/Sr High School Springfield
H2O MPG: Does a Homemade Hydrogen Electrolyzer Really Improve Fuel Mileage?

Malia Barca 6th grade
certificate, medallion
Eagle County Charter Academy Edwards
Water, Water, Everywhere, But Not a Drop to Drink: E. coli Dangers!

Joshua Garcia 10th grade
certificate, \$75 gift certificate, medallion
Monte Vista High School Monte Vista
Brain Age: Conditioning the Human Brain in Minutes a Day!

Caleb Kruse 11th grade
certificate, \$75 gift certificate, medallion
Home Schooled Colorado Springs
Researching Calcification, and the Effects of Ocean Acidification on Marine Algae

Ambrose Soehn 10th grade
certificate, \$75 gift certificate, medallion
Boulder High School Boulder
Analyzing the Material "Fingerprint": The Relationship of Fundamental Frequency to Young's Modulus

Organizational

Air and Waste Management Association Rocky Mountain States Section

Allie Martin 10th grade
\$50 (to be mailed later)
Woodlin School Woodrow
The Pink Side of Water: An Investigation of Estrogen in Northeast Colorado Water Sources

Casey Campbell 8th grade
\$50 (to be mailed later)
La Veta Jr/Sr High School La Veta
Phytoremediation of Coal Bed Methane Produced Water

Logan Graham 6th grade
\$50 (to be mailed later)
Miller Middle School Durango
The Effects of Magnesium Chloride Road De-icer on Plants

Jessica Constant 8th grade
\$50 (to be mailed later)
Saint Joseph Catholic School Fort Collins
Your's, Mine and Our's II: A Further Study into Modeling the Spread of Pollutants in the Atmosphere

Jordan Bushnell 7th grade
\$50 (to be mailed later)
Irving Middle School Colorado Springs
Weathering Degradation of Anthropogenic Formations in Marble and Granite

American Association of University Women

Sophie Wright 8th grade
\$100 (to be mailed later)
Stanley British Primary School Denver
C What Happens to Your Vitamin C

**American Chemical Society
Colorado Local Section**

Sophie Wright 8th grade
certificate, \$100 (to be mailed later)
Stanley British Primary School Denver
C What Happens to Your Vitamin C

Alan Bromwell 12th grade
certificate, \$100 (to be mailed later)
Cherry Creek High School Greenwood Village
An Alternative Application of the Sabatier Process for More Sustainable Transit

**American Institute of Chemical Engineers
Rocky Mountain Section**

Zane Willburn 8th grade
\$75 (to be mailed later)
Mancos Middle School Mancos
Water Purification Off The Grid, Phase II

Srish Sharma 8th grade
\$100 (to be mailed later)
American Academy Lone Tree
An Investigation On How Applying Stress to a Fluid Effects the Fluids Ability to Disperse Force

Kelci Garcia 10th grade
\$75 (to be mailed later)
Antonito Jr/Sr High School Antonito
Parabolic Solar Desalination for the Developing World

Lorne Muir II & Nathan Weeks 9th grade
\$100 (to be mailed later)
The Classical Academy Colorado Springs
The Effectiveness of Carbon Water Filters on E. coli and Pharmaceuticals

American Meteorological Society

Jessica Constant 8th grade
certificate
Saint Joseph Catholic School Fort Collins
Your's, Mine and Our's II: A Further Study into Modeling the Spread of Pollutants in the Atmosphere

Johanna Phillips 9th grade
certificate
Monte Vista High School Monte Vista
Infested Forests and Evapotranspiration

**American Statistical Association
Colorado/Wyoming Chapter
David Young Award**

Jens Hybertson 8th grade
\$150, student membership in the American Statistical Association, acknowledgement at the chapter spring meeting and on chapter web site
Summit Middle School Boulder
Modern Drugs from Ancient Medicine: Finding New Antibiotics in Native American Medicinal Plants

Sarah Guthrie 12th grade
\$150, student membership in the American Statistical Association, acknowledgement at the chapter spring meeting and on chapter web site
Boulder High School Boulder
Effect of Cytotoxic Chemicals on Apoptosis in Caenorhabditis elegans

**American Vacuum Society
Rocky Mountain Chapter**

Sophia Schneider 7th grade
\$50, \$50 matching award to the teacher/sponsor
North Middle School Colorado Springs
Neutralization Investigation: Battery Chemicals in Landfills

Srish Sharma 8th grade
\$50, \$50 matching award to the teacher/sponsor
American Academy Lone Tree
An Investigation On How Applying Stress to a Fluid Effects the Fluids Ability to Disperse Force

Isabella Soehn 8th grade
\$100, \$100 matching award to the teacher/sponsor
Summit Middle School Boulder
Convection Cells: The Saline Effect

Jesse Ellison 11th grade
\$50, \$50 matching award to the teacher/sponsor
Bayfield High School Bayfield
Plasma Propulsion III

Tanya Petach 10th grade
\$100, \$100 matching award to the teacher/sponsor
Fairview High School Boulder
Mitigation of Soil Liquefaction with Magnetic Fields

**American Water Works Association
Rocky Mountain Section & Rocky Mountain
Water Environmental Association**

Kole Van Treese 8th grade
certificate, \$200 (to be mailed later)
Sargent Jr/Sr High School Monte Vista
A "Well" of A Problem

Malia Barca 6th grade
certificate, \$400 (to be mailed later)
Eagle County Charter Academy Edwards
Water, Water, Everywhere, But Not a Drop to Drink: E. coli Dangers!

Ben Armstrong 11th grade
certificate, \$200 (to be mailed later)
Monte Vista High School Monte Vista
Enemies of the Environment: Estrogen Mimics Can They Be Stopped?

Erik Schnaderbeck 10th grade
certificate, \$400 (to be mailed later)
Sargent Jr/Sr High School Monte Vista
The Effect of Reservoir on the Biodiversity of Aquatic Invertebrates in Cold Water Fisheries

Armbruster Associates

Charles Armbruster Memorial Award

Zachary Schoenherr 7th grade
\$100
Weld Central Junior High School Keenesburg
How Does Your Spaghetti Hold Up?

ASM International

Sean Wright 9th grade
\$50
Blevins Junior High School Fort Collins
Casting Aluminum Helmet Hangers

Ambrose Soehn 10th grade
\$75
Boulder High School Boulder
Analyzing the Material "Fingerprint": The Relationship of Fundamental Frequency to Young's Modulus

Association for Women Geoscientists

Laramide Chapter

Courtlyn Carpenter 8th grade
\$75, achievement medal
East Middle School Grand Junction
Getting to the Root of Groundwater Pollution

Ashlynn Miller 10th grade
\$75, achievement medal
Lone Star School Otis
Investigating the Effects of Tissue Decay on the Underlying Soil Chemistry

Boulder Flycasters - Trout Unlimited

Trout Unlimited Award

Erik Schnaderbeck 10th grade
\$100 savings bond (to be mailed later); Boulder Flycaster's hat
Sargent Jr/Sr High School Monte Vista
The Effect of Reservoir on the Biodiversity of Aquatic Invertebrates in Cold Water Fisheries

Colorado Association of Meat Processors

Ben Smith, Kasey Miles & Kyle Tallent 9th grade
certificate, \$60
Hotchkiss High School Hotchkiss
Presenting the Champion or Maybe Not

Colorado Association of Science Teachers

Randi Timmons 8th grade
certificate, \$100
Walsh Jr/Sr High School Walsh
Giddy-Up Glucose

Xavier Sabourin 6th grade
certificate, \$100
Cortez Middle School Cortez
Local Plants as Insect Repellant

Allie Martin 10th grade
certificate, \$100
Woodlin School Woodrow
The Pink Side of Water: An Investigation of Estrogen in Northeast Colorado Water Sources

Amanda Patrick 10th grade
certificate, \$100
Merino Jr/Sr High School Merino
Oh What a Pain . . . Ear Infections Cause Obesity

Gerald Gromko Award

Cole Kembel 12th grade
\$175, plaque
Brush High School Brush
Motion Sensored Controls: Advancement In A Higher Application

Colorado Biology Teachers' Association

Beth Lenz 8th grade
certificate, \$75
Buchanan Middle School Wray
Does Carbon Dioxide Effect Zea mays and Phaseolus vulgaris Growth?

Radhika Rawat 11th grade
certificate, \$75
Boulder High School Boulder
Assaying Cellular Migration on A 2D Surface: A Comparative Approach to Cancer Metastasis

Colorado Dental Association

Jessica Green 8th grade
\$50, plaque
St. John the Evangelist School Loveland
Does Teeth Whitening Toothpaste, Teeth Whitening Gum, or Teeth Whitening Strips Remove Stains Better

Mali Garrett-Mills 7th grade
\$100, plaque
Smiley Middle School Denver
The Effects of Various Liquids on Hydroxyapatite Calcium Tablets: An Inadequate Model for Tooth Decay

Alyssa Dunlap 9th grade
\$50, plaque
Springfield Jr/Sr High School Springfield
Open Wide and See What's Inside?

Jessie Haugen 12th grade
\$100, plaque
Sargent Jr/Sr High School Monte Vista
Slime Out: A Correlation Between the Effects of Digestive Enzymes on Pseudomonas Fluorescens Biofilm

Colorado Division of Wildlife

Kolton Miller 8th grade
Mancos Middle School Mancos
Bear-icade

Rennie Winkelman 9th grade
Blevins Junior High School Fort Collins
Effect of Water Quality on Aquatic Invertebrates

Colorado Environmental Health Association

Malia Barca 6th grade
certificate, \$75
Eagle County Charter Academy Edwards
Water, Water, Everywhere, But Not a Drop to Drink: E. coli Dangers!

Lorne Muir II & Nathan Weeks 9th grade
certificate, \$150, invitation to exhibit at the CEHA Annual
Educational Conference (\$400 value)
The Classical Academy Colorado Springs
*The Effectiveness of Carbon Water Filters on E. coli and
Pharmaceuticals*

Colorado Foundation for Agriculture

Agriculture in the Classroom Award

Brisha Wakasugi 8th grade
certificate, \$50
Sierra Grande Jr/Sr High School Blanca
*Under Pressure: Stress Gene Response in Pressure Bruised
Tubers*

AleahDell Sheldon 7th grade
certificate, \$50
Quest Academy Dacono
Heterozygous Inheritance in a Paint Stallion

Alan Seltzer 11th grade
certificate, \$50
Fairview High School Boulder
*Carbon Sinks to Carbon Sources: A Soil Analysis of the
Colorado Mountain Pine Beetle Infestation*

Tawney Bleak 10th grade
certificate, \$50
Otis Jr/Sr High School Otis
*Evaluating Forage Soybean as an Alternative Dryland Crop for
the Central Great Plains*

Colorado Geographic Alliance

Kole Van Treese 8th grade
\$100
Sargent Jr/Sr High School Monte Vista
A "Well" of a Problem

Johanna Phillips 9th grade
\$100
Monte Vista High School Monte Vista
Infested Forests and Evapotranspiration

Colorado Geological Survey &

Division of Reclamation Mining and Safety

Zach Miller & Matt O'Keefe 11th grade
Cherry Creek High School Greenwood Village
*The Removal of Copper Ions Through the Application of Natural
and Synthetic Zeolites*

Sophia Schneider 7th grade
\$150 (to be mailed later)
North Middle School Colorado Springs
Neutralization Investigation: Battery Chemicals in Landfills

Tanya Petach 10th grade
\$150 (to be mailed later)
Fairview High School Boulder
Mitigation of Soil Liquefaction with Magnetic Fields

Colorado Medical Society

Madison Hoven 6th grade
\$100
Escalante Middle School Durango
I See You

Tonya Pavlenko & Laura Gudvangen 10th grade
\$100
Palmer High School Colorado Springs
*The Internal Battle With Melanoma: Triggering an Immune
Response Using Toll Ligands*

Colorado Mineral Society

Erin McLaughlin & Jessie McLaughlin 7th grade
\$25, 2 mineral specimens, book
Sacred Heart of Jesus School Boulder
The Seawall Solution

Danielle Riggs 8th grade
\$40, 2 mineral specimens, book
Fruita 8/9 School Fruita
Cooled Fast or Cooled Slow, How Big Will The Crystals Grow?

Sean Buck 12th grade
\$25, 2 mineral specimens, book
Cherry Creek High School Greenwood Village
*Reconstructing Paleoecosystems: Community Structure
Throughout the EECO*

Zach Miller & Matt O'Keefe 11th grade
\$40, 2 mineral specimens, book
Cherry Creek High School Greenwood Village
*The Removal of Copper Ions Through the Application of Natural
and Synthetic Zeolites*

Colorado Mycological Society

Devon Enke 7th grade
certificate, \$50
La Veta Jr/Sr High School La Veta
Mycorrhizal Symbiosis - Unlocking the Potential of Soil

Colorado River Watch

Molly Graber 9th grade
\$50 (to be mailed later)
Palmer High School Colorado Springs
*Manufactured Monster: Antibiotic Resistance in the Water of
Colorado Springs*

Colorado Scientific Society

Danielle Riggs 8th grade
\$50
Fruita 8/9 School Fruita
Cooled Fast or Cooled Slow, How Big Will The Crystals Grow?

Taylor Volesky 7th grade
\$75
Cherry Creek Challenge School Denver
Acid Rain Effects on Cave Formation

Alan Seltzer 11th grade
\$75
Fairview High School Boulder
*Carbon Sinks to Carbon Sources: A Soil Analysis of the
Colorado Mountain Pine Beetle Infestation*

Zach Miller & Matt O'Keefe 11th grade
\$100
Cherry Creek High School Greenwood Village
*The Removal of Copper Ions Through the Application of Natural
and Synthetic Zeolites*

Colorado Veterinary Medical Association & CVMA Auxiliary & Auxiliary to the AVMA

Clay Patton 8th grade
certificate & gold medallion from the Auxiliary to the AVMA;
\$50 from the CVMA and \$50 from the CVMA Auxiliary
Genoa-Hugo School Hugo
Farm Fresh vs. Store Bought Eggs

Katlin Hornig 12th grade
certificate & gold medallion from the Auxiliary to the AVMA;
\$50 from the CVMA and \$50 from the CVMA Auxiliary
Sargent Jr/Sr High School Monte Vista
The Effects of Equine Association on the Initial Beneficiary Benefactor

Colorado-Wyoming Society of American Foresters

Nikki Buhrdorf 9th grade
\$100 savings bond
Hotchkiss High School Hotchkiss
Aspens in a State of SADness: A Statistical Analysis of the Decline of Populus tremula

Kayla Boren 7th grade
\$100 savings bond
St. Columba School Durango
Burn Baby Burn: A Study in Forest Fuels and Humidity

Covidien, Energy-based Devices

Jennifer Jones 6th grade
\$75 (to be mailed later)
Hoff Elementary School Keenesburg
Transfer of Bacteria from a Person to a Bottle of Water

Sophie Wright 8th grade
\$100 (to be mailed later)
Stanley British Primary School Denver
C What Happens to Your Vitamin C

Connie Liu 10th grade
\$75 (to be mailed later)
Cherry Creek High School Greenwood Village
Restoration of microRNA-200c: Effect on HEY Cancer Cell Behavior

Kelli Lynch 9th grade
\$100 (to be mailed later)
Blevins Junior High School Fort Collins
Irradiation Extermination

CSU, Department of Biochemistry & Molecular Biology

Connie Liu 10th grade
certificate, \$100
Cherry Creek High School Greenwood Village
Restoration of microRNA-200c: Effect on HEY Cancer Cell Behavior

CSU, Department of Chemistry

Gerri Roberts 8th grade
certificate, \$100 (to be mailed later)
Turner Middle School Berthoud
A Model Study of Drug Intake

Benjamin Hoffman 12th grade
certificate, \$100 (to be mailed later)
Fairview High School Boulder
Synthesis of 4-Bromo-2,2'-Bipyridine

CSU, Department of Horticulture and Landscape Architecture

Brisha Wakasugi 8th grade
\$150
Sierra Grande Jr/Sr High School Blanca
Under Pressure: Stress Gene Response in Pressure Bruised Tubers

Haydn Christensen 12th grade
\$150
Sargent Jr/Sr High School Monte Vista
Aquaponics vs. Hydroponics: A Comparison of Tilapia Effluent and Conventional Fertilizers as a Hydroponic Nutrient

Eppler Family

Samir Berrada 6th grade
microprocessor kit and digital multimeter
Cortez Middle School Cortez
The Laser Car

Minuri Gamage 8th grade
microprocessor kit and digital multimeter
Kinard Core Knowledge Junior Fort Collins
Here Comes the Sun . . .

Fort Collins Conservation District

Camrey Garoutte 8th grade
plaque, \$50
Sargent Jr/Sr High School Monte Vista
Gone With the Wind

Nakayla Lestina 9th grade
plaque, \$50
Dove Creek High School Dove Creek
Biological Control of Canada Thistle-Phase 3: Testing Local Crops for Damage by Canada Thistle Insects

Hands and Minds, Inc.

Quint Mediate 8th grade
Student Maniken® Half Skeleton compete kit including base, support leg, tools, clay and learning activities booklet (approximate value \$200)
The Classical Academy Colorado Springs
The Size Is Right: A Study in Food Servings

Jesse Soule 10th grade
Student Maniken® Half Skeleton compete kit including base, support leg, tools, clay and learning activities booklet (approximate value \$200)
Cherry Creek High School Greenwood Village
Hepatotoxic Effects of Repeat Therapeutic Doses of Acetaminophen

Human Factors and Ergonomics Society Rocky Mountain Chapter

Carissa Harlow 6th grade
\$100
Mountain View Core Knowledge Canon City
Call It Disaster: Cell Phone Use During Simulated Driving

Michael Seltzer 8th grade
\$100
Summit Middle School Boulder
Don't Think and Drive!

**Institute of Electrical and Electronics Engineers
Centennial Subsection**

Kayleigh Santala 8th grade
\$100
Arriba-Flagler School Flagler
Electromagnets II

Jesse Ellison 11th grade
\$150
Bayfield High School Bayfield
Plasma Propulsion III

Little Shop of Physics

Matthew McCausland Memorial Award

Rachel Rossi 7th grade
\$100(to be mailed later)
Miller Middle School Durango
Radio Wave Roundup

Lockheed Martin

Samir Berrada 6th grade
\$50 US savings bond
Cortez Middle School Cortez
The Laser Car

Cole Kembel 12th grade
\$100 US savings bond, nominal Lockheed Martin logo item
Brush High School Brush
Motion Sensored Controls: Advancement In A Higher Application

MAST Institute

Samir Berrada 6th grade
\$50 (to be mailed later)
Cortez Middle School Cortez
The Laser Car

Sean Wright 9th grade
\$50 (to be mailed later)
Blevins Junior High School Fort Collins
Casting Aluminum Helmet Hangers

Morris Animal Foundation

Kelsey Martin & Brandy Haller 11th grade
\$150
Woodlin School Woodrow
Give That Dog His Bone: OSA Pedigree Analysis in Irish Wolfhounds & Inhibiting OSA via Statins and B

Katlin Hornig 12th grade
\$250
Sargent Jr/Sr High School Monte Vista
The Effects of Equine Association on the Initial Beneficiary Benefactor

MWH Americas, Inc.

Sustainable Future Award

Zane Willburn 8th grade
\$100 (to be mailed later), plaque
Mancos Middle School Mancos
Water Purification Off The Grid, Phase II

Amanda Coopersmith 8th grade
\$200 (to be mailed later), plaque
Cherry Creek Challenge School Denver
Snug as a Bug: Green Insulation

Caleb Kruse 11th grade
\$100 (to be mailed later), plaque
Home Schooled Colorado Springs
Researching Calcification, and the Effects of Ocean Acidification on Marine Algae

Matthew Bull 12th grade
Forrest Pieper 11th grade
\$200 (to be mailed later), plaque
Nederland Middle/Senior High Nederland
Putting Humans to "Work": Generating Usable Electricity from Wasted Energy

National Geophysical Data Center

Casey Campbell 8th grade
\$100 savings bond (to be mailed later), certificate, plaque
La Veta Jr/Sr High School La Veta
Phytoremediation of Coal Bed Methane Produced Water

National Renewable Energy Laboratory

Raleigh Burt 11th grade
\$100, patagonia messenger bag
Sargent Jr/Sr High School Monte Vista
Optimizing Energy Extraction and Water Conservation of Geothermal Heating Systems

Rocky Mountain Association of Geologists

Danielle Riggs 8th grade
cash award to be determined and mailed later
Fruita 8/9 School Fruita
Cooled Fast or Cooled Slow, How Big Will The Crystals Grow?

Taylor Volesky 7th grade
cash award to be determined and mailed later
Cherry Creek Challenge School Denver
Acid Rain Effects on Cave Formation

Sean Buck 12th grade
cash award to be determined and mailed later
Cherry Creek High School Greenwood Village
Reconstructing Paleoecosystems: Community Structure Throughout the EECO

Seagate Technology & Science Buddies

Kathryn Wied 8th grade
Seagate's Free Agent Go storage device; opportunity to publish the project idea on the Science Buddies web site
Canon City Middle School Canon City
Pop! Goes the Hairstrand

Kelci Garcia 10th grade
 Seagate's Free Agent Go storage device; opportunity to
 publish the project idea on the Science Buddies web site
 Antonito Jr/Sr High School Antonito
Parabolic Solar Desalination for the Developing World

**Society of Women Engineers
 Rocky Mountain Section**

Jordanne Williams 8th grade
 certificate, \$75
 LW St. John Middle School Parachute
How Safe Is Your Groundwater?

**Society for Advancement of Chicanos and Native
 Americans in Science**

Jovanny Alvarez 8th grade
 \$25 (to be mailed later)
 Quest Academy Dacono
How Many Lemons Are Needed to Light Up an LED?

Jessica Constant 8th grade
 certificate, \$100
 Saint Joseph Catholic School Fort Collins
*Your's, Mine and Our's II: A Further Study into Modeling the
 Spread of Pollutants in the Atmosphere*

Taylor Huebner 10th grade
 \$50 (to be mailed later)
 Canon City High School Canon City
Does CO2 Affect Plant Efficiency?

Abbi Helfer 9th grade
 certificate, \$75
 Palmer High School Colorado Springs
Sun-Sational Solar

Sami Hourieh 8th grade
 \$50 (to be mailed later)
 Lamar Middle School Lamar
The Power of Transformers

Stacey Lyne 12th grade
 certificate, \$100
 Brush High School Brush
Improved Efficiency of Microbial Fuel Cells

**Society for Mining, Metallurgy, and Exploration
 Colorado Section**

Danielle Riggs 8th grade
 \$100 plaque
 Fruita 8/9 School Fruita
Cooled Fast or Cooled Slow, How Big Will The Crystals Grow?

**Soil & Water Conservation Society
 Colorado Chapter**

Camrey Garoutte 8th grade
 certificate, red ribbon, \$25
 Sargent Jr/Sr High School Monte Vista
Gone With the Wind

Kyle Harlow 8th grade
 \$200, plaque
 Mountain View Core Knowledge Canon City
*Hot Rods: Three Methods for Measuring the Expansion
 Coefficients of Metals*

Casey Campbell 8th grade
 certificate, blue ribbon, \$50
 La Veta Jr/Sr High School La Veta
Phytoremediation of Coal Bed Methane Produced Water

Raleigh Burt 11th grade
 \$100, plaque
 Sargent Jr/Sr High School Monte Vista
*Optimizing Energy Extraction and Water Conservation of
 Geothermal Heating Systems*

Rennie Winkelman 9th grade
 certificate, red ribbon, \$25
 Blevins Junior High School Fort Collins
Effect of Water Quality on Aquatic Invertebrates

Zach Miller & Matt O'Keefe 11th grade
 \$200, plaque
 Cherry Creek High School Greenwood Village
*The Removal of Copper Ions Through the Application of Natural
 and Synthetic Zeolites*

Tawney Bleak 10th grade
 certificate, blue ribbon, \$50
 Otis Jr/Sr High School Otis
*Evaluating Forage Soybean as an Alternative Dryland Crop for
 the Central Great Plains*

**Society of Manufacturing Engineers
 Northern Colorado Chapter 354**

Kolton Miller 8th grade
 \$200 (to be mailed later), certificate, recognition by local
 chapter
 Mancos Middle School Mancos
Bear-icade

**SPIE-The International Society for Optics &
 Photonics**

Beth Romero 8th grade
 \$100 (to be mailed later)
 Cesar Chavez Academy Pueblo
Spacing and Diffraction Patterns

Sean Wright 9th grade
 \$200 (to be mailed later), certificate, recognition by local
 chapter
 Blevins Junior High School Fort Collins
Casting Aluminum Helmet Hangers

Samir Berrada 6th grade
 \$150 (to be mailed later)
 Cortez Middle School Cortez
The Laser Car

Rachel Rossi 7th grade
 \$250 (to be mailed later)
 Miller Middle School Durango
Radio Wave Roundup

Garrett Crownover 10th grade
\$100 (to be mailed later)
Plainview School Sheridan Lake
Lightin' Up The Sound

Jessica O'Clair 10th grade
\$150 (to be mailed later)
Brush High School Brush
What Duration of Ultraviolet Light Kills Bacteria?

Kelci Garcia 10th grade
\$250 (to be mailed later)
Antonito Jr/Sr High School Antonito
Parabolic Solar Desalination for the Developing World

The Inventor's Roundtable

Kolton Miller 8th grade
\$25 (to be mailed later)
Mancos Middle School Mancos
Bear-icade

Zane Willburn 8th grade
\$75 (to be mailed later)
Mancos Middle School Mancos
Water Purification Off The Grid, Phase II

Sean Wright 9th grade
\$25 (to be mailed later)
Blevins Junior High School Fort Collins
Castings Aluminum Helmet Hangers

Kyle Myhra 11th grade
\$75 (to be mailed later)
Broomfield High School Broomfield
Spotsucker Cleaning System

United States Geological Survey

Kole Van Treese 8th grade
reference book and mineral specimen
Sargent Jr/Sr High School Monte Vista
A "Well" of A Problem

Rennie Winkelman 9th grade
reference book and mineral specimen
Blevins Junior High School Fort Collins
Effect of Water Quality on Aquatic Invertebrates

University of Colorado Health Sciences Center

Medical Scientist Training Program Award

Joe Rosenbrock 10th grade
\$50 (to be mailed later)
Brush High School Brush
Valveless Pumping

Aarthi Shankar 11th grade
\$50 (to be mailed later)
Rampart High School Colorado Springs
Proteomic Characterization of ECM to Identify Tumor Associated Biomolecules Part 2

US Department of Commerce

US Department of Commerce Internship

Isaac Brost 12th grade
alternate for the opportunity for summer employment with the
Department of Commerce with possibility for future continuing
employment

Brush High School Brush
The Rotational Phenomenon of a Simple Wing

Dominic Fuller-Rowell 12th grade
opportunity for summer employment with the Department of
Commerce with possibility for future continuing employment
Boulder High School Boulder
Dual Frequency GPS Accuracy with a Single Frequency Receiver

Xcel Energy

Environmental Stewardship Award

Jordanne Williams 8th grade
\$50
LW St. John Middle School Parachute
How Safe Is Your Groundwater?

Samantha Ensz 10th grade
\$100
Hi-Plains Jr/Sr High School Seibert
Preventing Pollutants

Innovations in Energy Award

Grant Yowell 7th grade
\$50
Genoa-Hugo School Hugo
Go Green with Thermal Energy

Matthew Bull 12th grade
Forrest Pieper 11th grade
\$100
Nederland Middle/Senior High Nederland
Putting Humans to "Work": Generating Usable Electricity from Wasted Energy

Yale Science & Engineering Association, Inc.

Emily Schnoor 11th grade
certificate, pewter medallion (to be mailed)
Sargent Jr/Sr High School Monte Vista
Catching the Electric Current

Zonta Club of Boulder County

Amelia Earhart Award

Melissa Poet 8th grade
\$100
Arriba-Flagler School Flagler
Feces to Fuel

Scholarships

Adams State College Foundation

Adams State College Foundation Scholarship

Nakayla Lestina 9th grade
one-year resident tuition and fees (approximate value \$2,500)
Dove Creek High School Dove Creek
Biological Control of Canada Thistle-Phase 3: Testing Local Crops for Damage by Canada Thistle Insects

Joshua Garcia 10th grade
one-year resident tuition and fees (approximate value \$2,500)
Monte Vista High School Monte Vista
Brain Age: Conditioning the Human Brain in Minutes a Day!

Ashlynn Miller 10th grade
one-year resident tuition and fees (approximate value \$2,500)
Lone Star School Otis
Investigating the Effects of Tissue Decay on the Underlying Soil Chemistry

Jerrica Cherry 10th grade
one-year resident tuition and fees (approximate value \$2,500)
Springfield Jr/Sr High School Springfield
Feeling The Heat?

Christy Farnsworth 11th grade
one-year resident tuition and fees (approximate value \$2,500)
Paonia Jr/Sr High School Paonia
Electrifying the World, One Loop at a Time

Kelci Garcia 10th grade
one-year resident tuition and fees (approximate value \$2,500)
Antonito Jr/Sr High School Antonito
Parabolic Solar Desalination for the Developing World

Samantha Ensz 10th grade
one-year resident tuition and fees (approximate value \$2,500)
Hi-Plains Jr/Sr High School Seibert
Preventing Pollutants

Bethany Dilda 11th grade
one-year resident tuition and fees (approximate value \$2,500)
Branson School Branson
The Golden Ratio: An Exploration of the Prevalence of Phi

Sage Thompson 10th grade
one-year resident tuition and fees (approximate value \$2,500)
Walsh Jr/Sr High School Walsh
Warning! Consume At Your Own Risk

Jessie Haugen 12th grade
one-year resident tuition and fees (approximate value \$2,500)
Sargent Jr/Sr High School Monte Vista
Slime Out: A Correlation Between the Effects of Digestive Enzymes on Pseudomonas Fluorescens Biofilm

Donald Dutro 12th grade
one-year resident tuition and fees (approximate value \$2,500)
Genoa-Hugo School Hugo
Identifying the Properties of Constructive and Destructive Interference

Haydn Christensen 12th grade
one-year resident tuition and fees (approximate value \$2,500)
Sargent Jr/Sr High School Monte Vista
Aquaponics vs. Hydroponics: A Comparison of Tilapia Effluent and Conventional Fertilizers as a Hydroponic Nutrient

Antonia Lira 11th grade
Susana Lira 9th grade
one-year resident tuition and fees (approximate value \$2,500)
Lamar High School Lamar
Analyzing High Energy Cosmic Rays

Colorado School of Mines

Colorado School of Mines Scholarships

Emily Schnoor 11th grade
25% resident tuition, four-year scholarship
Sargent Jr/Sr High School Monte Vista
Catching the Electric Current

Caleb Kruse 11th grade
25% resident tuition, four-year scholarship
Home Schooled Colorado Springs
Researching Calcification, and the Effects of Ocean Acidification on Marine Algae

Christy Farnsworth 11th grade
25% resident tuition, four-year scholarship
Paonia Jr/Sr High School Paonia
Electrifying the World, One Loop at a Time

Jesse Ellison 11th grade
25% resident tuition, four-year scholarship
Bayfield High School Bayfield
Plasma Propulsion III

William Leigh & Mark Seres 11th grade
25% resident tuition, four-year scholarship
Cherry Creek High School Greenwood Village
Phytoplankton and DMS: A Study of Environmental Alteration

Christopher Krause 11th grade
25% resident tuition, four-year scholarship
The Classical Academy Colorado Springs
Variograms: Forewarning Disaster

Antonia Lira 11th grade
Susana Lira 9th grade
25% resident tuition, four-year scholarship
Lamar High School Lamar
Analyzing High Energy Cosmic Rays

Propst Medicine & Health Scholarship

Jessie Haugen 12th grade
certificate, \$3,000 non-renewable scholarship
Sargent Jr/Sr High School Monte Vista
Slime Out: A Correlation Between the Effects of Digestive Enzymes on Pseudomonas Fluorescens Biofilm

Moving Science Forward Scholarship

Kelli Lynch 9th grade
certificate, \$2,000 non-renewable scholarship
Blevins Junior High School Fort Collins
Irradiation Extermination

Moving Science Forward Scholarship

David Wu 12th grade
certificate, \$2,000 non-renewable scholarship
Cherry Creek High School Greenwood Village
Char and Methanol Synthesis by the Destructive Distillation of Biomass – Environmental Implications

Colorado Science and Engineering Fair

Ryan Patterson Scholarship

Haydn Christensen 12th grade
one-year resident tuition and fees (approximate value \$2,500)
Sargent Jr/Sr High School Monte Vista
*Aquaponics vs. Hydroponics: A Comparison of Tilapia Effluent
and Conventional Fertilizers as a Hydroponic Nutrient*

Society for Science and the Public

American Psychological Association

Kristiana Longfield 7th grade
certificate
Hotchkiss K-8 School Hotchkiss
The Effects of Television on Children's Choices

Joshua Garcia 10th grade
certificate
Monte Vista High School Monte Vista
Brain Age: Conditioning the Human Brain in Minutes a Day!

Intel Corporation

Excellence in Computer Science Award

Dominic Fuller-Rowell 12th grade
certificate, \$200 (to be mailed)
Boulder High School Boulder
*Dual Frequency GPS Accuracy with a Single Frequency
Receiver*

Mu Alpha Theta

Bethany Dilda 11th grade
Certificate, congratulations letter for teacher
Branson School Branson
The Golden Ratio: An Exploration of the Prevalence of Phi

National Oceanic and Atmospheric Administration

Taking the Pulse of the Planet Award

Caleb Kruse 11th grade
Certificate, medallion, congratulations letter
Home Schooled Colorado Springs
*Researching calcification and the Effects of Ocean Acidification
on Marine Algae*

National Society of Professional Engineers

Innovative Engineering Award

Ethan Hahn 11th grade
certificate, lapel pin
The Classical Academy Colorado Springs
*Design and Construction of a Silent Magnetohydrodynamic
Propulsion System*

Ricoh Corporation

Ricoh Sustainable Development Award

Haydn Christensen 12th grade
certificate
Sargent Jr/Sr High School Monte Vista
*Aquaponics vs. Hydroponics: A Comparison of Tilapia Effluent
and Conventional Fertilizers as a Hydroponic Nutrient*

Society for In Vitro Biology

Aarthi Shankar 11th grade
certificate
Rampart High School Colorado Springs
*Proteomic Characterization of ECM to Identify Tumor
Associated Biomolecules Part 2*

United States Metric Association

David Wu 12th grade
certificate
Cherry Creek High School Greenwood Village
*Char and Methanol Synthesis by the Destructive Distillation of
Biomass – Environmental Implications*

United States Public Health Service

The Surgeon General's Challenge

Quint Mediate 8th grade
certificate
The Classical Academy Colorado Springs
The Size Is Right: A Study in Food Servings

Water Environment Federation

Stockholm Junior Water Prize

Molly Graber 9th grade
Certificate, nomination to the state SJWP competition
Palmer High School Colorado Springs
*Manufactured Monster: Antibiotic Resistance in the Water of
Colorado Springs*

Allie Martin 10th grade
Certificate, nomination to the state SJWP competition
Woodlin School Woodrow
*The Pink Side of Water: An Investigation of Estrogen in
Northeast Colorado Water Sources*

Lorne Muir II & Nathan Weeks 9th grade
Certificate, nomination to the state SJWP competition
The Classical Academy Colorado Springs
*The Effectiveness of Carbon Water Filters on E. coli and
Pharmaceuticals*