

OFFICIAL PROGRAM OF THE

DISTRICT 10 SCIENCE DAY

Affiliated with the Ohio Academy of Science State Science Day



SATURDAY

March 25th, 2023

MIAMI VALLEY CAREER TECHNOLOGY CENTE

6800 Hoke Road, Englewood, OH 45315

www.ohiosci.org/district-10/

2023 UMV District Science Day Sponsors

B-WISER Science Camp – College of Wooster

American Society of Mechanical Engineers (ASME)

Institute of Electrical and Electronics Engineers (IEEE)

American Institute of Aeronautics and Astronautics (AIAA)

Southwest Ohio Water Environmental Association

Ohio Tuition Trust Authority

Ohio Soybean Council

Taft Law

Martin E. English, D.V.M.

Miami Valley Career Technology Center

The Ohio Academy of Science

The District 10 Science Day Committee extends its thanks and gratitude for the generous support by the many sponsors, judges and volunteers to make this a wonderful learning experience for STEM students in the Miami Valley. ***A special thanks to:*** parents, guardians, teachers and mentors; and to Miami Valley Career Technology Center and its Superintendent, Dr. Nick Weldy and the staff and faculty for their tremendous support.

2023 District 10 Science Day

Saturday, March 25, 2023

Miami Valley Career Technology Center, Englewood, OH

District Science Day Schedule

7:30 – 8:30 a.m.	Student Check-in /Poster Set-up / Breakfast (Students be at assigned space by 8:45)
7:30 – 8:30 a.m.	Judges Check-in / Continental Breakfast
8:30 – 9:00 a.m.	Judge Orientation
9:00 – 12:00 a.m.	Judging of Projects
12:00 – 1:00 p.m.	Public Viewing of Posters / Lunch
1:00 – 2:00 p.m.	Awards Ceremony

Awards Ceremony Program

Opening: Martin E. English, D.V.M., President-Elect, The Ohio Academy of Science

Welcome: Dr. Nick Weldy, Superintendent, Miami Valley Career Technology Center

STEM Education and the Science Day Program: Angela McMurry, Director of Program Operations, The Ohio Academy of Science

Announcement of State Science Day Eligible Projects

Sponsored Awards

Closing Comments: Martin E. English, D.V.M

About District 10 Science Day

The District 10 Science Day is for students in grades 5-12 in Montgomery, Clark & Greene Counties. District 10 Science Day is affiliated with the Ohio Academy of Science and hosted by the Miami Valley Career Technology Center. Projects representing twenty-five public and private schools will be evaluated today by qualified volunteer judges, each knowledgeable in their respective fields.

Science Day Project Sponsored Awards

Sponsored Awards are awarded at the discretion of the sponsors' representatives.

For grades 5-12, individual or team, unless otherwise specified.

Ohio Soybean Council Biosciences Awards - for soybean related projects. (up to 3 awards) each \$100

Institute of Electrical and Electronics Engineers Awards - for Science Day project in any field recognized by IEEE. Five awards of \$50 each (awardees are invited to the annual Dayton Section banquet to receive their checks, certificates, and to enjoy dinner) For grades 9-12.

Southern Ohio Human Factors and Ergonomics Society collaborating with the Society for Information Display - Awards for excellence in the behavioral sciences or a project involving human factors and ergonomics.

Southwest Ohio Water Environmental Association – Award for water/wastewater specific projects 1st place-\$100, 2nd-\$75, 3rd-\$50 For grades 9-12

American Institute of Aeronautics and Astronautics (AIAA) - Award for Aerospace related projects.

American Society of Mechanical Engineers (ASME) - Awards for best projects in Mechanical Engineering. 1st Place - \$75 2nd Place - \$50 3rd Place - \$25

Taft Law - Award for Best Project in Behavioral Sciences \$100 cash award

Martin E. English, DVM - Award in Animal Science/Veterinary Medicine including research in animal health, nutrition, husbandry or related topics and veterinary medicine \$100 cash Award

College of Wooster – Buckeye Women in Science, Research & Engineering (B-WISER) Camp. - Ten camp scholarships to top 7th & 8th grade girls. value each \$100

Ohio Tuition Trust Authority – College Advantage 529 Savings Plan Scholarship - x 2 value each \$250



Miami Valley Career Technology Center

The Miami Valley Career Technology Center is the proud host of the District 10 Science Day and strongly supports STEM Education initiatives and is committed to our leaders of tomorrow.

Science Day Projects

Project Number - Name - Grade – Category – School

- 1 - Queen Akuzwe - 8 - Behavioral and Social Sciences - Bishop Leibold E And W Campus
- 2 - Presley Albert - 9 - Plant Sciences - Global Impact STEM Academy
- 3 - Gabrielle Allen - 12 - Biomedical and Health Sciences - Miami Valley Ctc
- 4 - Aiden Allison - 11 - Earth and Environmental Sciences - Global Impact STEM Academy
- 5 - Annia Ameer - 6 - Earth and Environmental Sciences - Ridgewood School
- 6 - Jaxen Anderson - 6 - Microbiology - Tippecanoe Middle School
- 6 - Sawyer Ridge - 6 - Microbiology - Tippecanoe Middle School
- 7 - Logan Arnold - 11 - Systems Software - Carroll
- 8 - Brionna Artrip - 11 - Animal Sciences - Global Impact STEM Academy
- 9 - Fadhila Ashraf - 7 - Plant Sciences - Ridgewood School
- 10 - Usayd Ashraf - 8 - Behavioral and Social Sciences - Ridgewood School
- 11 - Emerson Babian - 8 - Computational Biology and Bioinformatics - Ridgewood School
- 12 - Dorothy Back - 6 - Earth and Environmental Sciences - St Charles Borromeo
- 13 - Logan Ballard - 8 - Energy-Sustainable Materials and Design - Global Impact STEM Academy
- 14 - Grace Barlow - 8 - Material Science - Bishop Leibold E And W Campus
- 15 - Dylan Barns - 12 - Biomed and health - Miami Valley Ctc
- 16 - Marina Bell - 7 - Engineering Mechanics - Bishop Leibold E And W Campus
- 17 - Kylie Bennett - 7 - Engineering Mechanics - Bellbrook Middle School
- 18 - Kaden Bereczky - 9 - Animal Sciences - Northeastern Middle/High School
- 19 - Herbert Best - 6 - Energy-Sustainable Materials and Design - St Charles Borromeo
- 20 - Precious Bibbs - 9 - Microbiology - Global Impact STEM Academy
- 21 - Ella Bisher - 10 - Animal Sciences - Global Impact STEM Academy
- 22 - Kelsey Bisignani - 6 - Mathematics - Bellbrook Middle School
- 23 - Max Bistrek - 9 - Earth and Environmental Sciences - Carroll
- 24 - Iyanna Black - 6 - Microbiology - Ridgewood School
- 25 - Liza Bohn - 8 - Behavioral and Social Sciences - Bishop Leibold E And W Campus
- 26 - Katy Boller - 8 - Chemistry - Incarnation
- 27 - Hope Bradley - 8 - Earth and Environmental Sciences - Incarnation
- 28 - Megan Brandt - 9 - Microbiology - Archbishop Alter
- 29 - Taylor Brewsaugh - 9 - Biochemistry - Global Impact STEM Academy
- 30 - Abby Brown - 11 - Earth and Environmental Sciences - Carroll
- 31 - Ian Brown - 12 - Biomedical and Health Sciences - Miami Valley Ctc
- 32 - Caleb Bryant - 8 - Earth and Environmental Sciences - Global Impact STEM Academy
- 33 - Keith Butler - 9 - Chemistry - Archbishop Alter
- 34 - Mia Byarlay - 9 - Earth and Environmental Sciences - The Miami Valley School
- 35 - Micah Byarlay - 5 - Engineering Mechanics - Bell Creek Intermediate School
- 36 - Emma Campbell - 10 - Animal Sciences - Global Impact STEM Academy
- 37 - Lorelei Cannon Dardari - 8 - Biomedical and Health Sciences - St Charles Borromeo
- 38 - Annabell Carpenter - 8 - Chemistry - Bishop Leibold E And W Campus
- 39 - Mason Carroll - 8 - Chemistry - Global Impact STEM Academy

40 - Lexi Chelman - 10 - Microbiology - Northeastern Middle/High School
41 - Aiden Clark - 7 - Chemistry - Bishop Leibold E And W Campus
42 - Caedon Cooper - 10 - Animal Sciences - Carroll
43 - Callum Crawford - 8 - Engineering Mechanics - Global Impact STEM Academy
44 - Jackson Crinion - 6 - Chemistry - St Charles Borromeo
45 - Katherine Daugherty - 12 - Biomedical and Health Sciences - Miami Valley Ctc
46 - Preston DeBusk - 11 - Energy-Sustainable Materials and Design - Dayton Christian School
47 - Logan Denhardt - 8 - Engineering Mechanics - Dayton Christian School
48 - Beckett Detamore - 8 - Biomedical and Health Sciences - Bishop Leibold E And W Campus
49 - Allison DeVanna - 10 - Environmental Engineering - Global Impact STEM Academy
50 - Lahari Doppalapudi - 10 - Environmental Engineering - Dayton Regional STEM School
51 - Anabel Dorri Hegyi - 7 - Biochemistry - St Charles Borromeo
52 - Dolly Dourson - 7 - Chemistry - Bishop Leibold E And W Campus
53 - Chris Eckert - 7 - Systems Software - Bishop Leibold E And W Campus
54 - Kierra Elliot - 12 - Biomedical and Health Sciences - Miami Valley Ctc
55 - Isaiah Elliott - 9 - Behavioral and Social Sciences - Archbishop Alter
56 - Ava Emmer-Lovell - 7 - Engineering Mechanics - Bishop Leibold E And W Campus
57 - Bridget Ennis - 9 - Mathematics - Archbishop Alter
58 - Daniel Ennis - 6 - Engineering Mechanics - St Charles Borromeo
59 - Lucy Evilsizor - 8 - Chemistry - Bishop Leibold E And W Campus
60 - Chimdi Eze - 8 - Earth and Environmental Sciences - Incarnation
61 - Okemdi Eze - 10 - Earth and Environmental Sciences - Archbishop Alter
62 - Maya Fairchild - 7 - Chemistry - Stivers School For The Arts
62 - Shyah Hargrove - 7 - Chemistry - Stivers School For The Arts
63 - Ryan Falkowski - 7 - Plant Science - Ascension
64 - Maggie Faust - 9 - Chemistry - Northeastern Middle/High School
65 - Aidan Fermier - 10 - Animal Sciences - Carroll
66 - Sarah Fernando - 6 - Plant Science - Jacob Coy Middle School
67 - Rachel Finegan - 9 - Animal Sciences - Dayton Regional STEM School
68 - Nick Funk - 9 - Energy-Sustainable Materials and Design - Global Impact STEM Academy
69 - Jackson Gaeta - 7 - Earth and Environmental Sciences - St Charles Borromeo
70 - Brady Garland - 11 - Biomed and health - Miami Valley Ctc
71 - Abigail Getz - 12 - Animal Sciences - Global Impact STEM Academy
72 - Katlyn Goodyear - 9 - Chemistry - Northeastern Middle/High School
73 - Elijah Grant - 8 - Chemistry - Global Impact STEM Academy
74 - Phoebe Green - 10 - Biochemistry - Global Impact STEM Academy
75 - Paytyn Grimes - 10 - Engineering Mechanics - Global Impact STEM Academy
75 - Simon Black - 10 - Engineering Mechanics - Global Impact STEM Academy
76 - Abby Groth - 8 - Microbiology - Ridgewood School
77 - Caden Groth - 6 - Biomedical and Health Sciences - Ridgewood School
78 - Brynn Gutendorf - 8 - Biomedical and Health Sciences - Bishop Leibold E And W Campus
79 - Bili Hamed - 9 - Plant Sciences - Dayton Regional STEM School
80 - Aaliyah Harris - 7 - Animal Sciences - Stivers School For The Arts
81 - Sophia Harsch - 9 - Plant Sciences - Carroll

82 - Shelby Haye - 12 - Biomedical and Health Sciences - Miami Valley Ctc
83 - Kyle Heilmann - 11 - Earth and Environmental Sciences - Carroll
84 - Jian Xun Heng - 11 - Biomedical and Health Sciences - Dayton Christian School
85 - Regan Herzog - 10 - Animal Sciences - Global Impact STEM Academy
86 - Claire Holcomb - 11 - Behavioral and Social Sciences - Carroll
87 - Emma Holtzman - 8 - Chemistry - Bishop Leibold E And W Campus
88 - Jessica Houseman - 12 - Biomedical and Health Sciences - Miami Valley Ctc
89 - Mackenzie Hudson - 11 - Chemistry - Global Impact STEM Academy
90 - Brylie Jackson - 7 - Microbiology - Global Impact STEM Academy
91 - Josie Jennings - 10 - Plant Sciences - Global Impact STEM Academy
92 - Jillian Jennings - 8 - Microbiology - Global Impact STEM Academy
93 - Juliana Johnson - 9 - Microbiology - Carroll
94 - Claire Jordan - 9 - Earth and Environmental Sciences - Carroll
95 - Niko Joseph - 9 - Behavioral and Social Sciences - Carroll
96 - Emery Keirns - 7 - Biomedical and Health Sciences - Global Impact STEM Academy
97 - Nathan Keltos - 6 - Chemistry - St Charles Borromeo
98 - Ethan Keyes - 7 - Environmental Engineering - Global Impact STEM Academy
99 - Katie Klene - 9 - Behavioral and Social Sciences - Incarnation
100 - Calvin Knoedler - 7 - Engineering Mechanics - Bishop Leibold E And W Campus
101 - Grace Koelblin - 12 - Biomedical and Health Sciences - Miami Valley Ctc
102 - Alex Korenyi-Both - 9 - Earth and Environmental Sciences - Archbishop Alter
103 - Amelia Lamont - 9 - Earth and Environmental Sciences - Dayton Regional STEM School
104 - Sidonie Lauricella - 7 - Materials Science - Ridgewood School
105 - Grace Linz - 7 - Chemistry - Ascension
106 - Caroline Lipp - 7 - Biomedical & Health Sciences - St Charles Borromeo
107 - Audrey Lipp - 6 - Biomedical and Health Sciences - St Charles Borromeo
108 - Brooklynn Lisch - 8 - Chemistry - Global Impact STEM Academy
109 - Mary Helen Lober - 8 - Chemistry - Bishop Leibold E And W Campus
110 - josie Lofland - 8 - Microbiology - Bishop Leibold E And W Campus
111 - Evelyn Lorensen - 10 - Cellular and Molecular Biology - Global Impact STEM Academy
112 - Loni Lorenz - 8 - Microbiology - Global Impact STEM Academy
113 - Xavier Mabarak - 7 - Cellular and Molecular Biology - Bishop Leibold E And W Campus
114 - Moses Mabarak - 9 - Biomedical and Health Sciences - Archbishop Alter
115 - Aluel Makuoch - 7 - Chemistry - Bishop Leibold E And W Campus
116 - Braden Malone - 9 - Behavioral and Social Sciences - Northeastern Middle/High School
117 - Tim Marsh - 9 - Physics - Archbishop Alter
118 - Anthony Martin - 8 - Chemistry - Incarnation
119 - Elizabeth Maxwell - 12 - Biomedical and Health Sciences - Miami Valley Ctc
120 - David McLoughlin - 11 - Mathematics - Carroll
121 - Riley McNeal - 8 - Microbiology - Global Impact STEM Academy
122 - Lukas Mefford - 9 - Earth and Environmental Sciences - Northeastern Middle/High School
122 - Peyton Bumgardner - 9 - Earth and Environmental Sciences - Northeastern Middle/High School
123 - Izzy Mercer - 7 - Materials Science - Global Impact STEM Academy
124 - Ryder Merrill - 7 - Microbiology - Bellbrook Middle School

125 - Kathryn Mershad - 10 - Earth and Environmental Sciences - Archbishop Alter
126 - Madison Mitchell - 9 - Translational Medical Science - Northeastern Middle/High School
127 - Laila Monaghan - 8 - Translational Medical Science - Bishop Leibold E And W Campus
128 - Alexander Morales - 8 - Earth and Environmental Sciences - Ridgewood School
129 - Alayna Moreaux - 12 - Biomed and health - Miami Valley Ctc
130 - Alexia Morgan - 11 - Biomedical and Health Sciences - Miami Valley Ctc
131 - Alexia Morgan - 11 - Biomedical and Health Sciences - Miami Valley Ctc
132 - Grant Muvunyi - 8 - Physics - Bishop Leibold E And W Campus
133 - Jennifer Najem - 7 - Biomedical and health Sciences - Bishop Leibold E And W Campus
134 - Mallory Neely - 9 - Biomedical and Health Sciences - Northeastern Middle/High School
135 - Caitlin Neidhard - 10 - Behavioral and Social Sciences - Carroll
136 - Curtis Ngidari - 11 - Earth and Environmental Sciences - Dayton Christian School
137 - Trystyn Nicolai - 9 - Microbiology - Northeastern Middle/High School
138 - Makensie Nikole Funk - 9 - Biomedical & Health Sciences - Archbishop Alter
139 - Owen O'Connell - 7 - Engineering Mechanics - Bishop Leibold E And W Campus
140 - Nathan Olmstead - 6 - Energy-Sustainable Materials and Design - St Charles Borromeo
141 - Luke Oue - 6 - Energy-Sustainable Materials and Design - St Charles Borromeo
141 - Ben Egan - 6 - Energy-Sustainable Materials and Design - St Charles Borromeo
142 - Shiven Parikh - 9 - Systems Software - Dayton Regional STEM School
143 - Rhea Pasupuleti - 10 - Earth and Environmental Sciences - Dayton Regional STEM School
144 - Keeran Patel - 8 - Physics and Astronomy - Incarnation
145 - Katelyn Patterson - 8 - Microbiology - Global Impact STEM Academy
146 - Miranda Pennington - 8 - Biomedical and Health Science - Bishop Leibold E And W Campus
147 - Jason Perdue - 10 - Animal Sciences - Global Impact STEM Academy
148 - Rylee Perkins - 12 - Biomedical and Health Science - Miami Valley Ctc
149 - Kate Petrovic - 6 - Earth and Environmental Sciences - St Charles Borromeo
150 - Danielle Phelan - 9 - Behavioral and Social Sciences - Northeastern Middle/High School
151 - Lauren Phillips - 10 - Plant Sciences - Archbishop Alter
152 - Olivia Pickerrell - 7 - Chemistry - Bishop Leibold E And W Campus
153 - Charlie Pochet - 9 - Software Systems - Dayton Regional STEM School
154 - Drew Pochet - 6 - Plant Sciences - Herman K Ankeney Middle School
154 - Shannon O'Hara - 6 - Plant Sciences - Herman K Ankeney Middle School
155 - Ruth Poling - 9 - Animal Sciences - Carroll
156 - Hannah Quick - 10 - Biomedical and Health Sciences - Global Impact STEM Academy
156 - Victoria Moore - 10 - Biomedical and Health Sciences - Global Impact STEM Academy
157 - Isabella Rambo - 8 - Plant Sciences - St Charles Borromeo
158 - Nathan Reynolds - 11 - Animal Sciences - Dayton Christian School
159 - Samuel Richardson - 7 - Biomedical and Health Sciences - St Charles Borromeo
160 - Kate Riegel - 10 - Earth and Environmental Sciences - Archbishop Alter
161 - Sophia Ripley - 9 - Earth and Environmental Sciences - Northeastern Middle/High School
162 - Stephen Roddy - 9 - Animal Sciences - Northeastern Middle/High School
163 - Olivia Rodriguez - 9 - Earth and Environmental Sciences - Carroll
164 - Megan Rosenberg - 7 - Robotics and Intelligent Machines - Bishop Leibold E And W Campus
165 - Tamaria Rutledge - 7 - Engineering Mechanics - Bishop Leibold E And W Campus

166 - Will Sabin - 8 - Physics - Bishop Leibold E And W Campus
167 - Zach Sabin - 7 - Behavioral and Social Sciences - Bishop Leibold E And W Campus
168 - Isabella Santiago - 9 - Behavioral and Social Sciences - Northeastern Middle/High School
169 - Jared Sargent - 11 - Physics and Astronomy - Carroll
170 - Jayla Sartin - 9 - Earth and Environmental Sciences - Northeastern Middle/High School
171 - Luke Schumaker - 8 - Engineering Mechanics - St Charles Borromeo
172 - Emilia Scribden - 9 - Chemistry - Global Impact STEM Academy
173 - Noah Sharp - 9 - Biomedical and Health Sciences - Northeastern Middle/High School
174 - Stella Sharp - 9 - Physics and Astronomy - Carroll
175 - Corinne Simpson - 9 - Chemistry - Archbishop Alter
176 - Liam Skeans - 8 - Engineering Mechanics - St Charles Borromeo
177 - Lucas Soin - 9 - Materials Science - Archbishop Alter
178 - Anna Spohler - 11 - Environmental Engineering - Global Impact STEM Academy
178 - Noah Gathany - 11 - Environmental Engineering - Global Impact STEM Academy
179 - Brodie Strawser - 12 - Biomed and health - Miami Valley Ctc
180 - Cooper Thompson - 9 - Biomedical and Health Sciences - Northeastern Middle/High School
180 - Jacoby Newman - 9 - Biomedical and Health Sciences - Northeastern Middle/High School
181 - Lily Best - 8 - Earth and Environmental Sciences - St Charles Borromeo
182 - Elliott Tim - 7 - Materials Science - Bishop Leibold E And W Campus
183 - Neil Tivakaran - 11 - Biochemistry - Carroll
184 - Mackenzia Townsend - 11 - Biomed and health - Miami Valley Ctc
185 - Ian Truebenbach - 6 - Animal Sciences - Southeastern Jr. High School
186 - Braxten Trump - 11 - Biomedical and Health Sciences - Miami Valley Ctc
187 - Marley Turner - 7 - Materials Science - Bishop Leibold E And W Campus
188 - Mustafa Vakil - 8 - Plant Sciences - Dayton Islamic School Inc
189 - Carter Walters - 5 - Robotics and Intelligent Machines - Bell Creek Intermediate School
190 - Logan Ward - 9 - Materials Science - Global Impact STEM Academy
191 - Abby Webster - 11 - Behavioral and Social Sciences - Global Impact STEM Academy
192 - jack webster - 7 - Engineering Mechanics - Bishop Leibold E And W Campus
193 - Samuel White - 7 - Engineering Mechanics - St Charles Borromeo
194 - Nora White - 8 - Chemistry - Bishop Leibold E And W Campus
195 - Grace Whitmore - 11 - Animal Sciences - Global Impact STEM Academy
196 - Clara Wiant - 9 - Chemistry - Northeastern Middle/High School
197 - Braylon Wilcox - 5 - Earth and Environmental Sciences - Charles Huber Elementary School
198 - Kayla Williams - 10 - Animal Sciences - Global Impact STEM Academy
199 - Joshua Wright - 7 - Materials Science - Bishop Leibold E And W Campus
200 - Joseph Wright - 11 - Energy-Sustainable Materials and Design - Dayton Regional STEM School
200 - Luke Doseck - 11 - Energy-Sustainable Materials and Design - Dayton Regional STEM School
201 - Lucas Yang - 8 - Plant Science - Global Impact STEM Academy
202 - Catherine Zbinden - 9 - Chemistry - Wayne High School
203 - Siqi Zheng - 7 - Plant Sciences - Ridgewood School
204 - Adam Zimmer - 8 - Material Science - Bishop Leibold E And W Campus
205 - Erik Wagner - 8 - Physics and Astronomy - Dayton Christian School



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