

**2023 Lancaster-Lebanon
Mini-STEM and Elementary STEM Bowls
March 16 & 17, 2023**

**Participating Schools and School Districts
(Total participation: 92 students)**

# of Points Earned	Mini-STEM Bowl Results (Grade 3) (10 teams)	# of Points Earned	Elem. STEM Bowl Results (Grades 4 & 5) (14 teams)
265	1st Place: Hans Herr Elementary L-S STEM Warriors	1035	1st Place: Brecknock, Blue Ball, & New Holland Spartans I
230	2nd Place: Bear Creek School Quizzly Bears	875	2nd Place: Lititz, John Beck, Bonfield & Kissel Hill Warwick STEM Warriors I
160	3rd Place: Brecknock, Blue Ball, & New Holland Spartans	870	3rd Place: Annville Elementary Little Dutchmen-White
135	Bonfield, Kissel Hill & John Beck Warwick STEM Warriors	740	Bear Creek School Quizzly Bears
120	Mount Calvary Christian School Chargers 1	720	Lititz, John Beck, Bonfield, Kissell Hill Warwick STEM Warriors II
115	Donegal Intermediate STEMinators	660	Donegal Intermediate STEMalorians
95	Mount Calvary Christian School Chargers 2	655	St. John Neumann School Money Mustangs
70	Adamstown Elementary Eagles	615	Donegal Intermediate STEMinators
65	Donegal Intermediate STEMalorians	615	Brecknock, Blue Ball, & New Holland Spartans II
60	Bear Creek School Etown Bears	575	Octorara Intermediate Masterminds
<p align="center"><i>All students are to be congratulated for their outstanding teamwork, good sportsmanship, and knowledge of STEM!</i></p>		545	Octorara Intermediate Innovators
		460	Akron Elementary The Four Mountaineers
		400	Annville Elementary Little Dutchmen-Red
		346	Mount Calvary Christian School Chargers

Student Reflections

- Congratulate each other – be a good sport.
- Sometimes you're not going to win, but that is fine.
- I liked building the bridge because of the freedom with creativity.
- When building the bridge, our team really worked together well.
- The bridge building allowed us to incorporate what we wanted.
- I liked building the bird nest because it was a really cool idea.
- To improve my STEM knowledge, I should do research and take time to make activities for myself.
- I should read more nonfiction books. I will check them out of the library.
- I learned that Henry Ford created the assembly line.
- I learned that birds all make different kinds of nests.
- My favorite STEM-related activity is designing because you can be very creative.
- I want to learn more about animals and can make that happen by doing research.
- Teamwork works!
- I want to learn how not to be nervous in front of a crowd.
- Be confident. Have fun!
- Work together to solve problems.
- I am smarter than I think I am. Buzzers are fun!
- My hands get sweaty when I am nervous.
- I learned more about fractions.
- I learned that there are some things I am good at and some things I need to work on.
- No matter if you're first or last place, you always have fun. Even when something is hard, keep pushing through.
- I like solving hard math problems because you have to think a lot.

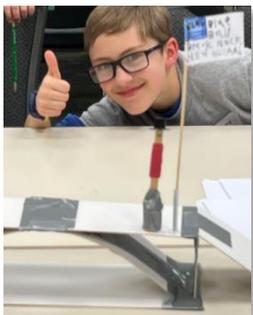
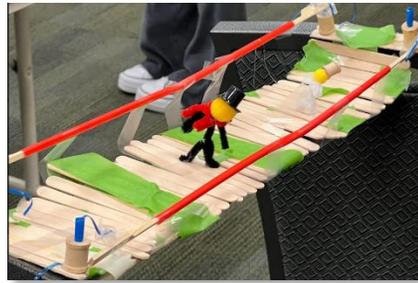
Teacher Feedback

- The STEM design challenges were well done. The bird nest design was very unique and gave kids lots of creativity.
- The day was very well organized. My students had fun from the beginning to the end, with the competition rounds and then the STEM activities.
- Nice work! It was organized and engaging. The books were a good connection.
- My students had a great day. Keep up the great work and great outlook!
- Everything was explained well, and success was experienced in some form for all.

Special thanks to

- **Dr. Charlton Wolfgang**, Associate Professor of Gifted and STEM Education, Millersville University, and his students in the Children's Engineering course who designed the STEM Design Challenges for the 2023 Lancaster-Lebanon STEM Bowl competitions. Dr. Wolfgang also served again this year as our championship round moderator for both the Mini-STEM and Elementary STEM Bowl competitions.
- **Abigail Azikhan, Rachael Hocker, and Aimee Wilson**, Millersville University students and co-creators of the STEM Design Challenge project, "Which Nest is the Best?"
- **Mollie Bomgardner and Alyssa Gaus**, Millersville University students and co-creators of the STEM Design Challenge project, "The Ultimate Bridge."
- **Lancaster-Lebanon Education Foundation** and the **Lancaster County STEM Alliance** which provided financial support for the 2023 Lancaster-Lebanon STEM Bowl competitions.





Step 1: State the problem in your own words
Write the challenge clearly and so as to
build a bridge to hold
at least 100 pennies with at
least 3 listed materials
(not tape, glue, or scissors)