STEM Wars 2025 Grade School Competition Criteria – Please contact Shannon Sauder at ssauder@swcsk12.0rg with questions.

Please note: Each school may bring a maximum of 20 students. Your team will move through a variety of competitions. We try our best to ensure that your whole team can move together. Each competition criteria will list the time allotted for this activity and the number of participants. Not all students on your team will compete in ALL areas. Some competition areas are made ahead of STEM Wars and will be brought with you to the competition (noted in blue below.) When not competing, check out other exhibits maker faire, presenters, science posters, career/tech fair. Schedules posted after the **registration closing date of: Friday, April 11, 2025**

Competition Area	Participants	Time	Made Ahead/ Description
Marble Run	2-4 (You can have 3 separate teams)	10 min.	Students will be given a box of materials, the goal is to build a marble run of a given length (start tape/end tape) with only the material given. First team in the heat to finish wins. Examples of materials to practice with- cardboard, tubes, tin foil, blocks, popsicle sticks, paper.
Robotics	4-6 (You can have 2 separate teams)	15 min.	Students will be using Dash robots and iPads, using the Blockly platform in Wonder. These will be provided, as well as the competition mats. The challenge could consist of **ANY** of the three components: 1. Speed- First finished 2. Accuracy- most accurately hitting the coordinates 3. Fewest lines of code to complete the task
Catapult	4 max (You can have 3 separate teams of 4)	10 min.	BUILD AHEAD AND BRING WITH YOU Catapults are built ahead of the competition and brought with. The **only** materials to be used are: 1. One standard plastic spoon 2. Standard sized popsicle sticks 3. Elmers white school glue 4. Rubber bands Students will have an accuracy challenge and will try to get pennies into a bucket. Teams with the most pennies hitting the target win.
Science Poster	Unlimited- One poster per school	Due Day of	MAKE AHEAD AND BRING WITH YOU Science Poster Criteria- Problem: Chautauqua Lake has harmful algae blooms Create an informational poster that informs the public ways they can help reduce algae blooms in the lake. Lable with index card on the back- school name/participants Judged by Chautauqua Lake Association
Maker Faire	Unlimited- 3 Entries per school	Due Day of	MAKE AHEAD AND BRING WITH YOU If you are passionate about making this is for you.... let your creativity run free- open ended no constraints- digital or physical entries accepted.
Hack-a-thon	4-6 (1 team- for the day)	Entire Day	This small team will work in the hack-a-thon designated space for the duration of the competition, in the morning they work a solution to a problem and create a prototype. In the afternoon they will present their solutions. This will be digital design work- think websites, apps, posters, banners...the over arching topic will be cyber bullying... the specific problem will be given to the hackers at the competition.
T-shirt Design	One design per school	Due Day of	MAKE AHEAD AND WEAR- MAKE AHEAD AND BRING WITH YOU Design your own team shirt Your design should include: -Your school name or mascot -An aspect of this theme: 'Creativity is intelligence having fun." (Einstein) *Please bring one extra shirt for display and judging