Career and Tech Fair

March 24th 2026 (Snow Date March 26th 2026)

Location: Frederick High School

Doors will Open for Students at: 4:45 PM Teachers may arrive @ 3:30

Most competitions (including awards) should be completed by 7:00)

- Volunteer Sheet
- <u>Teacher Presentation</u>
- <u>Tech Fair Participation</u> (teachers who are attending)
- **Student Permission Form**
- Student Event Signup

2025 Tech Fair Hotsheet (280 Contestants) / 20 Per School - March 13th Deadline For Registration

Competition	Classes	Who	Before the Tech Fair		
All Wound Up	(Any 6th) Engineering Exploration	2 students per school competing as a TEAM	Students should have been taught how to create an All Wound Up vehicle with different materials prior to coming to the event. Students should be prepared to build at the Tech Fair. Teachers from each school should provide their student competitors with the following materials by bringing them to the fair: Circle cutters, hot glue guns, hand tools, and utility knives.		
Energy Bar	(Any 6th) Agribusiness	2 Students per school competing as a TEAM	In the "Energy Bar Exploration" competition, middle school students will develop the concept, market, and brand a healthy energy bar using readily available ingredients. They begin by exploring nutrition guidelines, creating their "World's Unhealthiest Energy Bar," and then proceed to design Nutrition Facts labels. Students present their energy bar products, showcasing their understanding of nutrition, marketing, branding, and presentation skills through creative presentations and product development. Students will bring their box designed and four bars wrapped for marketing.		
Movie Magic	(Any 6th) CS Explorations 1	2 Students per school competing as a TEAM	Using their new knowledge of events, responses, sequences, and initialization, students will recreate and animate a scene from a movie or TV show provided by the judges using Scratch. Translate a script into Scratch blocks and features, add backdrops, and characters, and replicate dialogue from the movie or show to bring their scene to life. (Bring A Charged Chromebook)		
Design Challenge	(Any 6th)	2 Students per school competing as a TEAM	Students should have practice with the Engineering Design Process and adhering to criteria and constraints to solve problems. Students should be prepared to design at the Tech Fair. The specific challenge is not revealed until the night of the Tech Fair.		
Games & Animation	(Any 7th) CSI	2 Students per school competing as a TEAM	Students should have completed <u>CS Discoveries Unit 3</u> . Students will be asked to code "something" that builds off the skills they would have used in Unit 3. Note: We will try to make this challenge simple enough that all students will be able to be successful as long as they have had some basic experience with the concepts in Unit 3/Animations & Games or Scratch. (Bring A Charged Chromebook)		
Design Challenge	(Any 7th) STEM Innovators	2 Students per school competing as a TEAM	Students should have practice with Engineering Design Process and adhering to criteria and constraints to solve problems. Students should be prepared to design at the Tech Fair. The specific challenge is not revealed until the night of the Tech Fair.		
Budget Challenge	(Any 7th) Pathways to Success	2 Students / Individual competition	Students will complete a 3 month budget simulation using the Personal Finance Lab (60 minutes to complete). The game will provide the ranking for the students. It is an engaging learning experience that displays their financial literacy skills with real-life scenarios and consequences. Students will compete individually!!!		
Applied CS	(Any 8th) Applied CS/ CSE 3	2 Students per school competing as a TEAM	Teams program their Finch Robots to navigate a maze, simulating a package delivery route with obstacles. Robots must use all sensors effectively to avoid hazards, find alternate paths, and deliver a "package" to a designated delivery zone within the maze. (Bring A Charged Chromebook & a Finch Robot)		
<u>Hovercraft</u>	(Any 8th) Applied Engineering	2 Students per school competing as a TEAM	Students should have experience building a successful hovercraft and come prepared to the Tech Fair to <u>duplicate their success and build</u> <u>a hovercraft at the Tech Fair.</u> Make sure students know how to <u>solder</u> . Materials will be provided at the tech fair.		
Shark Tank Jr	(Any 8th) Applied Business and Marketing	2 Students per school competing as a TEAM	Students will be participating in a county-wide ETSY (Jr. Shark Tank) competition, where a team of 2 will represent the school by developing a simple product or service and present the business plan at the tech fair. This is an exciting opportunity to showcase your creativity, business knowledge, and marketing skills! Each team will submit their business plan before the competition and present a 1 to 2 minute elevator speech at the tech fair Student Presentation Template Discontinue the Presentation Template) Each Team will Submit their presentation 5 school days prior to the competition		