## Parents Guide to Enrichment Opportunities for Gifted & Other Ready FCPS Elementary Students Updated: Fall 2022



Discovering, Uncovering, & Growing Gifted & Advanced Learner Potential

# STEM Enrichment Opportunities General Enrichment Programs for GT students

Finding opportunities to enrich students - whether they are gifted all around or have an interest and dedication in a specific area -can be daunting. Not because there aren't many opportunities, but because there are so many. But enrichment yields great benefits. According to Rimm "... programs present a delightful benefit: They permit gifted students to meet and work with each other away from the stresses and problems of daily school requirements." (Rimm, 2017).

Additionally, a critical part of developing students with gifts and talents is to support their general background knowledge and experiences.

As important as it is that students have an opportunity to explore areas of their own interest and choosing - it is equally important to not overschedule students. Enrichment should focus on building on their strengths and interest - not seen as an opportunity to shore up perceived weaknesses (Ruf, 2011). It is important to balance supporting their interests, but not pushing them. (Gearey, 2016) While summer can be a great time to allow students to delve deeper into an area of interest that feels fun to them, just be sure to make sure they are ok with how it's going and don't feel overwhelmed or stressed. (Rohan n.d.). Don't forget all the benefits that free play and downtime can offer a student as well. (Shafer 2018).

The following opportunities are curated for your convenience from reliable sources, web searches, and careful cross-referencing program reputation - however, this does not mean the programs are all endorsed or vetted by FCPS. These programs are programs that would meet the needs and interests of elementary students scoring high in the quantitative domain or who seek enrichment in STEM related programs. Emphasis was placed on either local convenience or nationally recognized programs. These offerings do not include enrichment programs that - while being fun and engaging - may not offer the level of rigor appropriate for a highly abled student (such as day camp theme weeks & parks and rec programs).

🌠= Office of Advanced Academics endorsed - opportunities that are of particular note because of affordability and/or reputation for high quality programming

🔆 = Summer camp only, not a school year program

A = Most programs generally require an adult to remain on-site/participate with child

🔼 = Caters to the needs of GT Students - generally requires an application process with test scores

\$ = Very low cost or free

Additional Camps for Students with specific interests and/or programs tailored to the needs of GT students: Gifted Summer Programs: Listed by Topics of Interest - Davidson Institute

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In Person Opportunities

<u>Virtual Opportunities</u>

**Summer Program** 

Competitions & Group/Team
Opportunities

### In Person Enrichment Opportunities

	Local In Person Opportunities (within Frederick County) - STEM focused										
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes:			
FCC Kids on Campus	Kids on Campus Classes - Frederick Community College	Pre-K - 5	Variety of special interest classes, including STEM	FCC Campus	Varies	Vaires		Various special interest and skills courses for kids			
Frederick County Recreator	Frederick County Parks & Recreation	Pre-K - 5	Variety of special interest classes, including STEM	Various locations throughout the county	Varies	Vaires	_	Various special interest and skills courses for kids			
A\$ FCPL STEM Programs	FCPL STEM Clubs for kids	K-5	STEM	Library branches throughout the county	Varies: 30min - 2 hrs.	Free or nominal cost	Registration requirements vary by program	Programs utilizing the library's "STEM Lab"			
A\$ FCPS Earth Space and Science Lab	Earth and Space Science Lab	Pre K - 5 Siblings & Family	Earth & Space Science Focused evening programs and summer camps	210 N. Madison St. Frederick, MD 21701	Evening Programs: 45 min  Camps: 1 week	Evening Program: \$6.00 per person Summer Camp: TBD	Evening Program: Tickets must be pre-purchased  Summer Camp: Registration until filled	Family programs focused on Earth-Space Science topics			
A\$ Catoctin Mountain National Forest Visitor Center	Programs - Catoctin Mountain Park (U.S. National Park Service)	All ages	Ecology, conservation, and related topics; History	6602 Foxville Road Thurmont , MD 21788	Varies	Nominal or Free	None	May require adult supervision			

	Extend	ed Local Area In	Person Opportunitie	es (adjacent countie	s, Washing	ton DC, Baltimor	e) - STEM focused	
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes
Maryland Science Center - Evening Programs	On-Site Evening Programs   Maryland Science Center	All ages	STEM	Maryland Science Center, Baltimore MD	2hrs or more	\$25-\$50 per person	Registration - no application	Various types of programs for different aged students
A National Aquarium - Special Events	Special Events	All ages	Marine biology and ecology	Maryland Science Center, Baltimore MD	2hrs or more	Varies	Registration - no application	Various types of events for different aged students
ASmithsonian Nighttime Adventures	Smithsonian Nighttime Adventures	8-14 plus parents	Varies	Various Smithsonian Museums	4 hours	\$70 per person	Tickets purchased in advanced	Requires parent supervision
A\$ Gettysburg National Battlefield and Cemetery Visitor's Center	Ranger Programs at Gettysburg - Gettysburg National Military Park (U.S. National Park Service)	All Ages	Focus is history - but does include geology	Gettysburg, PA	Varies	Nominal to free	Some events require pre-registration	History and geology programs led by rangers

	Regional In Person Opportunities (Mid-Atlantic) - STEM or GT focused								
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes	
	K-12 Learner Programs   W&M School of Education	K-12	Varies - includes STEM options	College of William & Mary Williamsburg, VA	1 Day Saturday Programs (	\$150 per course for Saturday Program - Lunch Included	Application with test	Tailored to meet needs of IWGT Well known program More affordable Customizable	

	Regional In Person Opportunities (Mid-Atlantic) - STEM or GT focused								
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes	
Center for Gifted Youth - LIU	Center for Gifted Youth   Long Island University	K - 9	Varies - includes STEM	Long Island, NY	10 Saturdays: 3 hrs. Each day	\$2,200	1 ''	Saturday enrichment courses for GT students	

		Additi	onal Opportunities	for Gifted Students	(within US)	- GT focused		
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes
Saturday for GT Students	Super Saturday   Youth Programs   GER2I - Purdue University College of Education	K-12	Varies - includes STEM options	Purdue University, West Lafayette, IN	1 Day Saturday Programs	\$60- \$75 per ½ session	Application with test scores required	Tailored to meet needs of IWGT Well known program More affordable Customizable
☑ Institute of Educational Advancement Academy	IEA Academy - Schedule and Details	Ages 5-14	Math, Science, Humanities		5 week sessions - 2 days a week	\$300 per 60 min class \$425 per 90 min class	Application required	Rigorous material tailored to needs of IWGT  Does not require formal gifted testing
∠ UC Berkeley Talent Program - Explorations	Elementary Division 2022   UC Berkeley ATDP	K+	Varies - includes STEM	UC Berkeley, Berkeley, CA	4 days a week for 3 weeks	\$500+	Application required	Enrichment courses for GT students

# Virtual Learning Opportunities

	Virtual Courses and Camps - STEM or GT focused									
Program	Link	Grade availability	Focus	Learning Environment	Duration	Cost	Application Process	Notes		
IWXM Virtual	K-12 Learner Programs   W&M School of Education	K-12	Varies - includes STEM options	Online /Virtual - Blended Learning - includes Live Instruction	I nrs over 3	\$150 per course for Summer Program	Application with test scores required	Tailored to meet needs of IWGT Well known program More affordable Customizable		

			Virtual Courses	and Camps - STEN	1 or GT focu	sed		
Program	Link	Grade availability	Focus	Learning Environment	Duration	Cost	Application Process	Notes
Northwestern Center for Talent Development	Online Programs   Northwestern Center for Talent Development	<u>Pk - 3</u> <u>4 - 8</u>	Varies - includes STEM options	Online /Virtual - Blended Learning - includes Live Instruction	<u>Varies</u>	Range \$75 -\$675	Application	Wide variety of <u>options</u> Tailored to meet needs of IWGT Well known program Affordable Price Range
Center for Talented Youth Summer Camps	Summer Overview   Johns Hopkins Center for Talented Youth (CTY)	Grades 2-5	Varies - includes STEM options	Online /Virtual - Blended Learning - includes Live Instruction	1 or 3 Week camps	<b>+ +</b>	scores required	Rigorous Tailored to the needs of IWGT Well known program
Summer Gamps	CTY Online Programs Overview   Johns Hopkins Center for Talented Youth (CTY)	Grades 2-5	Varies - includes STEM options	Online /Virtual - Asynchronous or Self-Paced w/instructor	Self-paced Courses - determined by student	Individually Paced courses: \$919 - \$1,399		well known program
Selfand Center of Carnegie Mellon Remote Lessons for Kids	Remote Lessons for Kids - Gelfand Center - Carnegie Mellon University	K-5	STEM	Online /Virtual - Asynchronous or Self-Paced w/instructor	n/a	Free	n/a	Free On-demand enrichment Not supervised not interactive
<b>∑</b> S Purdue Online Courses	GER2I Open Online Courses - Purdue University College of Education	All Ages	STEM	Online /Virtual - Asynchronous or Self-Paced w/instructor	3-4 weeks, Paced	l Free	Application with test scores required	Limited offerings
∠ UC Berkeley Talent Program - Explorations	Explorations 2022   UC Berkeley ATDP	K-11	Varies - includes STEM	Online /Virtual - Blended Learning - includes Live Instruction	3 Weeks (1 Live meeting each week)	Per Course - begins at \$40 on up	Application	Limited offerings currently

	Virtual Courses and Camps - STEM or GT focused									
Program	Link	Grade availability	Focus	Learning Environment	Duration	Cost	Application Process	Notes		
Institute of Educational Advancement	Spyglass: Online Workshops - Institute for Educational Advancement  IEA Academy - Schedule and Details	Ages 8-18	Varies - includes STEM options	Online /Virtual	Varies by course	I some Free	Application with test scores required	Affordable Low commitment		
Summer Institute for the Gifted (SIG) - Online Elementary Programs	Online Courses for SIG Elementary Students	Ages 6-12	Varies - includes STEM options	Online /Virtual	2 week program 8 hrs live per week 10 hrs independent	3,444	Application with test scores required	Tailored to meet needs of IWGT Students can choose up to 4 "classes"		
iD Tech	iD Tech Camps	Ages 7-19	STEM - coding, game design, robotics, math, creative design	Online /Virtual - Blended Learning - includes Live Instruction	Varies	1:1 \$70+ per single class	Registration - no application	Deep dive into coding and tech skills, options for creative expression		
STEMed Labs	Programs   STEMed Labs	Ages 7-13	Science Topics Math Enrichment	Online /Virtual	Varies	l Varies	Contact for more information	Affordable Easy time commitmentment		

	Learning at Home Resources -STEM or GT focused								
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes	
	Renzulli Learning Home Edition	K - 12, although not specified	Varies - includes Math options	Online /Virtual - Resources, no instructor	n/a	\$5/year	none	Parental monitoring required Not interactive - no direct instruction	

	Learning at Home Resources -STEM or GT focused								
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes	
Challenge Math	Challenge Math Online: An Online Program for Gifted, Talented and Promising Math Students	2-6	Problem Solving	Online/Virtual	Varies - options for full year	\$20-\$50	Registration	Assignments are emailed each week with detailed solutions	
A Maryland Science Center	For Parents & Homeschoolers Maryland Science Center	K-5	STEM	Online /Virtual	Resources for parents	Free	In/a	Resources for parents as well as activities for kids	
A Smithsonian Institute	Fun Stuff for Kids and Teens   Smithsonian Institution	All Ages	Varies by Museum, but includes STEM topics	Online /Virtual	Varies	Varies, some programs are free	None - but most require registration	Resources for parents as well as activities for kids	

# Summer Programs

	Local & Regional Summer Day Programs - STEM or GT focused									
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes		
* S AEOP at Ft. Detrick	Gains in the Education of Mathematics and Science (GEMS)	Rising 5th grade/MS	Math and Science	Fort Detrick, Frederick MD	1 Week	Free	• •	Pays a \$125 Stipend to cover transportation and other costs		
Center for Talented Youth Summer Camps	Summer Overview Johns Hopkins Center for Talented Youth (CTY)	Grades 2-5	Varies - includes STEM options	Gilman School, Baltimore MD Sandy Springs Friends School Sandy Springs, MD	1 or 3 Week camps	\$1000+	Application with	Rigorous Tailored to the needs of IWGT Well known program		

	Local & Regional Summer Day Programs - STEM or GT focused								
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes	
College of W&M Saturday and Summer Enrichment	K-12 Learner Programs   W&M School of Education	K-12	Varies - includes STEM options	College of William & Mary Williamsburg, VA	1 Day Saturday Programs (	\$150 per course for Saturday Program - Lunch Included	Application with test scores required	Tailored to meet needs of IWGT Well known program More affordable Customizable	
★Maryland Science     Center- Summer     Camp MSC	Camp MSC   STEM Summer Camp   Maryland Science Center	All Ages	STEM	Maryland Science Center, Baltimore MD	1 Week	\$450	Registration - no application	Engaging program with access to MSC resources, open to any student	
Smithsonian Summer Camp	Smithsonian Summer Camp and Virtual Adventures	K - 11	All areas, including STEM topics	Various Smithsonian Museums	1 Week	\$384	Registration	In person and virtual options available	
<b>☀</b> ID Tech	Baltimore Summer STEM Camps at Towson   Coding & More   2022  U Maryland Summer Camps 2022   STEM, Coding, Robotics   Kids & Teens   iD Tech	Age 7+	Coding and Computers	Towson, UMD	1 week	TBD	Registration	Coding and robotics	

	Regional Residential Summer Camps STEM or GT focused								
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes	
Camp Burgundy Junior Program Summer Camp	Burgundy Center for Wildlife Studies	Age 8-10	Ecological Sciences	Residential Camp: Capon Bridge, WV	1 week	\$1,055	Registration	Family engagement opportunity Affordable	

		Addition	al Summer Learn	ing for Gifted Stude	nts (within U	JS) - GT focused		
Program	Link	Grade availability	Focus	Location	Duration	Cost	Application Process	Notes
	Super Summer   Youth Programs   GER2I - Purdue University College of Education	K - 4	Varies - includes STEM options	Purdue University, West Lafayette, IN	1 week, 9:30	Two 1Week Sessions offered \$315 for 1 week \$600 for both weeks	Registration	Tailored to meet needs of IWGT Well known program No application More Affordable
<b>☼</b> ∑Yunasa Summer Camp	Yunasa Summer Camps - Institute for Educational Advancement	Ages 10+	Needs of GT Students	<b>Residential Camp:</b> Colorado & Michigan	1 week	\$1,700	Application with test scores required	Tailored to meet needs of IWGT
	CBK Summer Programs	Rising 4th+	Varies	Residential Camp: Colorado Springs, CO	1 week	\$2000	Application with test scores required	Summer camp for GT students
Altus  Math-Epsilon Camp	Epsilon Camp	Ages 7-11	Math focused	University of Colorado, Colorado Springs, CO	1 week full day program Noon-9pm	\$2,900	Application with test scores required	Highly rigorous Focus deeply on math
<b>☼</b> CUC Berkeley Talent Program - Explorations	Elementary Division 2022   UC Berkeley ATDP	K+	Varies - includes STEM	UC Berkeley, Berkeley, CA	3 Weeks, 4 days a week	\$500+ per course	Application with test scores required	Summer enrichment program for GT students
☆ Center for Gifted Youth - LIU	Center for Gifted Youth   Long Island University	2 - 9	Varies - includes STEM	Long Island, NY (non-residential)	4 Weeks (19 days)	\$3,950	Application with test scores required	Summer enrichment program for GT students

#### Competitions & Group/Team Opportunities

Check to see if your local school has one of the following programs. If not, work with local/district administration, PTA, and/or community members & affiliates to bring it to your area.

\*may be entered by an individual

Non-competitive team opportunities

	STEM Competitions - Free/Low Cost							
Organization	Website	Registration Deadlines	Cost	Structure	Focus/Description			
ExploraVision K-3 Division 4-6 Division	<u>ExploraVision</u>	Team Registration: End of January: Project Deadline	Free - Teams of 2, 3, or 4	Projects are submitted and prizes awarded on a regional & national level	ExploraVision challenges students envision and communicate new technology 10 or more years in the future through collaborative brainstorming and research of current science and technology			
Sprint at Fort Detrick - 5th grade (through MS)	<u>Junior Solar Sprint (JSS)</u> <u>AEOP</u>	<b>Team Registration:</b> Registration Opens September - April	Free	Local competition with opportunities to move on to national competition	Solar Car Building			
\$ Science Olympiad	Maryland Science Olympiad  Elementary   Science Olympiad	<b>Team Registration:</b> Mid March	No National/Local Fees Competition Fee \$100/team Does require materials	Single competition at local level	At the K-6 level, Elementary Science Olympiad (ESO) program can come in the form of a competitive tournament, a hands-on science Fun Day or an expert-filled Science Olympiad Fun Night			
\$ Science Bee*	National Science Bee	Administer Online qualifying exam mid January	Free for local qualifying exam \$40 for Regional if qualifies \$125 for National if qualifies	Individual Competition Regional and National events	Qualifying test - 5 mc on general science knowledge Regional & National competition are buzzer-based -Can also compete in Academic Bee- NOTE: 2023 Nationals will be held in Arlington, VA			
\$ History Bee, \$ Geography Bee	National History Bee & Bowl  MS & ElemDivisions –  International Geography Bee	Administer Online qualifying exam mid January	Free for local qualifying exam \$40 for Regional if qualifies \$125 for National if qualifies	Individual Competition Regional and National events	Qualifying test - 5 mc on general science knowledge Regional & National competition are buzzer-based -Can also compete in Academic Bee- NOTE: 2023 Nationals will be held in Arlington, VA			

	STEM Competitions - Free/Low Cost							
Organization	Website	Registration Deadlines	Cost	Structure	Focus/Description			
\$ Academic Bowl	<u>Academic Bow</u> l	Varies	Fee for Regional Qualifiers	Team Competition	NOTE: 2023 Nationals will be held in Arlington, VA			

	Team Problem Based Learning								
Organization	Website	Registration Deadlines	Cost	Structure	Focus/Description				
Destination Imagination Elementary - 3 -5	Destination Imagination  Maryland Destination  Imagination	Team Registration: Opens in Fall Projects should be complete by February	\$110 Team Registration \$25 pp Manager Background MD Fee \$30 Tournament Fee \$50 + Fees & Materials Avg. Total: \$450	Teams of up to 7 compete Regional to National Tournaments (Rising Star is non-competitive)	Destination Imagination (DI) provides experiential, project-based learning in a competitive environment, that helps with problem solving, creativity, collaboration, and communication. Students Choose from 7 Challenges to compete in				
Odyssey of the Mind	Odyssey of the Mind  Maryland/DC Odyssey of the  Mind	Team Registration: Opens in Fall Register in early January for state tournament	\$240-290 per competing group \$190 for additional groups at a school	Teams of 3-7 may compete: Regional to Association to National Tournaments	Teams of students select a problem, create a solution, then present their solution in a competition against other teams in the same problem and division.				
Rec Foundation: VEX Online Challenges	Online Challenges   REC Foundation	<b>Team Registration:</b> Opens in Mid October	Free with VexIQ Team Registration	Teams complete a project and submit it digitally	Various digital/media challenges related to the <u>VEX</u> <u>IQ</u> Challenge (see below)				

	Math Competitions							
Organization	Website	Registration Deadlines	Cost	Structure	Focus/Description			
\$ Challenge 24 Club*	24 Challenge® Math Program	n/a	Free - does requires "24 Game" Cards	Tournaments set up locally - no governing body	Challenge 24 is a math fluency game			
Math Kangaroo*	<u>Math Kangaroo</u>	Early Dec for schools Mid Dec for individuals	Free to Register School	One day competition - online or paper in pencil if school registered as a site	Math Competition with an emphasis on problem solving and logic			

	Math Competitions							
Organization	Website	Registration Deadlines	Cost	Structure	Focus/Description			
Noetic Math*	Math Contest for Elementary and Middle School Students   Noetic Learning	Fall Test: Mid October Spring: Mid March	\$69 for class \$29 for individual student	Twice yearly online or paper & pencil math competition (held at home school)	Problem solving			

	Robotic/Coding/Engineering							
Organization	Website	Registration Deadlines	Cost	Structure	Focus/Description			
First Lego League Explore - grades 2-4: Robotics	<u>FIRST in Maryland</u>	Team Registration: Begins in May and Closes in Early October	\$125: Yearly Team Registration First time registrations: \$265 for Lego SPIKE Set	No formal competitions - but local or regional "festivals" are organized to share and celebrate designs	Lego Modeling Challenge - Challenge problem posed and students present solution with a model and poster, but does require coding or robot building			
First Lego League Challenge - grades 4-8: Robotics	FIRST in Maryland  FIRST LEGO League Game and  Season	Team Registration: Begins in May and Closes in Early October	\$250: Yearly Team Registration \$100 Yearly Build Set First time registration: \$450 for Lego SPIKE Prime	Regional/Affiliate Competitions organized - no National Track for ES	Lego Robotics Challenge - must use Mindstorm or SPIKE Prime to solve the Challenges. Culminates in a regional competition.			
VexIQ Grades 3 - 8: Robotics	VEX IQ Challenge   REC Foundation	Team Registration: Based on local event rules	VEX IQ Kit (reusable) \$649	Teams of 4-5 work together to build and compete in local/regional events	Competitive Robot building - teams build and code robots to perform a challenge task - leads to national competition			
\$ Computer Science League: Coding	American Computer Science League	Team Registration: December 31	\$100per team of 3+ or more + additional study materials	Online competitions/tests -top scorers invited to Online Finals	4 Online tests/competitions of Computer Science material with top scorers being invited to a National competition			

#### Works Cited

Gearey, R. (2016, January 13). How parents of talented children hold the line between supporting and pushing. Retrieved April 02, 2021, from https://www.washingtonpost.com/lifestyle/on-parenting/how-parents-of-talented-children-hold-the-line-between-supporting-and-pushing/2016/01/12/10d3b c3c-a80c-11e5-bff5-905b92f5f94b\_story.html

Rimm, Sylvia B.; Siegle, Del B.; Davis, Gary A.. Education of the Gifted and Talented (2-downloads) (What's New in Ed Psych / Tests & Measurements) (p. 128). Pearson Education. Kindle Edition.

Rohan, A. (n.d.). Overscheduling activities can cause burn-out for children and parents - news. Retrieved April 02, 2021, from https://www.uab.edu/news/youcanuse/item/7579-overscheduling-activities-can-cause-burn-out-for-children-and-parents

Ruf, D. (2011, September 14). Some do's and don'ts for raising your gifted kids. Retrieved April 02, 2021, from https://www.sengifted.org/post/some-do-s-and-don-ts-for-raising-your-gifted-kids

Shafer, L. (2018, June 12). Summertime, playtime. Retrieved April 02, 2021, from https://www.gse.harvard.edu/news/uk/18/06/summertime-playtime

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