

# Learning Lab Winter 2025

Learning Lab classes are hands-on, high interest enrichment classes for students. Classes challenge students academically and creatively. Students will make new friends while exploring topics in-depth and developing new skills. Class sizes are limited to ensure optimal student/teacher interaction. Excellent teachers are chosen for expertise in their area and their skill working with bright students. Classes are open to all.

### **Learning Lab Dates:**

Saturdays - February 1, 8, 15, 22; March 1, 8

### Learning Lab Location:

Wydown Middle School, 6500 Wydown 63105

### Learning Lab Tuition & Payment:

Classes are \$120/six-week class, payable online or by check. Tuition is refundable (minus a \$15 withdrawal fee) for classes dropped more than two weeks before the start date. Members' priority registration good until December 24, 2024.

**For More Information:** Contact the GRC office at (314) 962-5920 or info@giftedresourcecouncil.org



### Class Schedule

| SESSION                           | N 1: 9:30 - 11:00                               | SESSION             | N 2:   | 11:15 - 12:45                         |
|-----------------------------------|---|---------------------|--------|---------------------------------------|
| Ages 4 - 5                        | "TINKER" Toys                                   | Ages 5 - 6          | Story  | book STEM                             |
| K - 1 <sup>st</sup>               | Storybook STEM                                  | K - 1 <sup>st</sup> | It's a | Hard Rock Life                        |
| 2 <sup>nd</sup> - 3 <sup>rd</sup> | It's a Hard Rock Life                           | K - 3 <sup>rd</sup> | Checl  | kmate! Beginning                      |
| $2^{nd}$ - $4^{th}$               | Everyday Electricity: Advanced                  | $2^{nd}$ - $3^{rd}$ | Game   | e On!                                 |
| $3^{rd}$ - $4^{th}$               | LEGO Spike Robotics                             | $2^{nd}$ $-4^{th}$  | Every  | yday Electricity: Beginning           |
| $3^{rd}$ - $5^{th}$               | Genre Journeys & Writing Wonders                | $3^{rd}$ - $5^{th}$ | Winte  | er Wonderland Art Studio              |
| $3^{rd}$ - $5^{th}$               | Disaster Defenders: Engineering for the Extreme | $3^{rd}$ - $8^{th}$ | LEG    | O Mindstorms Robotics: Advanced       |
| $3^{rd}$ - $8^{th}$               | Cryptography & Codebreaking                     | $3^{rd}$ - $8^{th}$ | Digita | al Storytelling: Beginning Podcasting |
| 3 <sup>rd</sup> - 8 <sup>th</sup> | Checkmate! Advanced                             | $4^{th}$ - $8^{th}$ | Leger  | nds, Lore & the Wizarding World       |
| 3 <sup>rd</sup> - 8 <sup>th</sup> | LEGO Mindstorms Robotics: Beginning             | $5^{th}$ - $8^{th}$ | LEG    | O Spike Robotics                      |
| 3 <sup>rd</sup> - 8 <sup>th</sup> | Digital Storytelling: Advanced Podcasting       |                     |        |                                       |
| 4 <sup>th</sup> - 5 <sup>th</sup> | Game On!  |                     |        |                                       |

## Learning Lab Details

Eligibility: All children are eligible to participate in Learning Lab classes. They do not need to be enrolled in gifted programming at their schools.

Dismissal: Children must be picked up promptly at the end of class. If your child has signed up for two classes in a row, he or she will be supervised during the short break between

classes, and you will pick up at the end of the second class.

Photos: Pictures will be taken of Learning Lab classes, and may be used for promotional purposes. If you do not want

Notification: If the class your child signed up for is full or

cancelled, you will be notified and given the opportunity to

your child's photo used, please contact the office in writing before the start of classes.

sign up for an alternate class.

PLEASE COME INSIDE to pick up your child. We will not dismiss children to go outside alone.

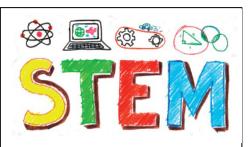


### It's a Hard Rock Life

2<sup>nd</sup> - 3<sup>rd</sup> grades: 9:30 - 11:00 K - 1st grades: 11:15 - 12:45

Be amazed at the unseen wonders just beneath our feet! How do tectonic plates float on top of molten rock? Explore the formation of mountains, volcanoes and ocean trenches. Investigate caves, and create/excavate your own fossils. Learn about the rock cycle and construct a geode and unique rock of your own. Geology rocks!

Instructor: Kara Viviano



### Storybook STEM

K - 1st: 9:30 - 11:00 Ages 5 & 6: 11:15 - 12:45

Challenge yourself with STEM! This hands-on class will have you designing, building, testing and experimenting with a variety of materials. We'll look at air dynamics, water buoyancy, qualities of light and more! You'll create different mazes, test shapes, and build bridges. Design and build a boat! The floor is lava can you build a platform to keep your stuffies safe?? STEM challenges will be based on a different story each week.

Instructor: Beth Crites



### **LEGO Mindstorms**

Beginner 3<sup>rd</sup> - 8<sup>th</sup>: 9:30 - 11:00 Advanced 3rd - 8th: 11:15 - 12:45

LAST CHANCE! If you're a fan of the amazing Mindstorms robots, this may be your last chance to take a class. The software for these runs on an OLD operating system, so while the kits are still good, we're phasing out classes because the laptops we use with them are becoming irreparable.

Beginner: Learn the basics of LEGO Mindstorms EV3 robots! Consider a realworld problem, create your hypothesis, program your solution and test your results! Build a rover-type robot to handle some basic tasks and experiment with other features of the kits. Problem-solving skills and creativity using robotics technology prove that the possibilities are endless.

Advanced: If you've taken at least a beginning Mindstorms class, go further! Learn more and work on harder challenges, based on your skill level. Build and program working robots which respond to your commands as well as information from their environments. Working with a partner, you can even design your own robot from scratch! You'll learn to control your creation using multiple sensors, various moving parts, and complex programs that allow the robot to assess its environment and make decisions.

Instructor: Lisa Hummel





LEGO Spike Robotics 3<sup>rd</sup> - 4<sup>th</sup> : 9:30 - 11:00 5<sup>th</sup> - 8<sup>th</sup>: 11:15 - 12:45

GRC has some brand-new LEGO Spike Prime kits (with expansions) that we're excited to get started with. Get your building and coding on with these colorful new kits. You'll use the engineering design process to meet a different challenge each week, then use that knowledge to create your own build. The 3<sup>rd</sup>-4<sup>th</sup> grade class will focus on inventions, and the 5th - 8th class will focus on life hacks. Both should be a fun introduction to our new coding kits.

Instructor: Hannah Noack-Ruebling



### Winter Wonderland Art Studio

3<sup>rd</sup> - 5<sup>th</sup>: 11:15 - 12:45

It's cold! This is the perfect time to bundle up and work on some creative winter-themed art and craft projects. You'll start your winter wonderland with some fun painting, including working with salt, pinecones and rocks. You'll make your own birdfeeder - perfect for feeding feathered friends during the cold. Come enjoy doing art with mixed media and take home some great winter projects!

Instructor: Angela Rhodes



Disaster Defenders: Engineering for the Extreme 3<sup>rd</sup> - 5<sup>th</sup> grades: 9:30 - 11:00

Using engineering design methods, we're going to try and build disaster-proof structures! How about a building that can withstand an earthquake? St. Louis is surrounded by rivers - let's try our hands at a flood barrier. You'll also build a hurricane-resistant home, a seawall barrier to protect from a tsunami, and a landslide-resistant slope. You'll need all your structural and environmental engineering skills to tackle these tough challenges!

Instructor: Lisa Pascoe



### Checkmate!

Advanced 3<sup>rd</sup> - 8<sup>th</sup>: 9:30 - 11:00 Beginner K - 3<sup>rd</sup>: 11:15 - 12:45

Beginner: If your child is just learning chess (or wants to learn!), this class is the perfect place to start. Learn the basics of chess, how to begin the game, strategies such as pins and forks, how to queen a pawn and how to checkmate with Queen and King or Rook and King at the end of the game, all while playing and having fun.

Advanced: Learn advanced concepts in chess, including openings to produce swift checkmating attacks or the win of material, learn how to plan ahead in chess and create positions where tactical themes can be used, all while playing and having fun.

Benefits of the game for all levels: Problemsolving skills, coping with the consequences of your decisions, and good sports behavior.

Instructor: Stephen Randoll



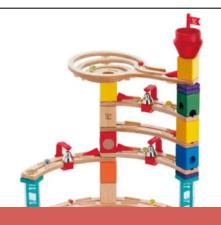


### Game On!

4<sup>th</sup> - 5<sup>th</sup> grades: 9:30 - 11:00 2<sup>nd</sup> - 3<sup>rd</sup> grades: 11:15 - 12:45

Let's play games! Actively develop your critical thinking and problem-solving skills through playing various board games. We'll use games like Book Us, Set, Mancala (and more!) to practice strategic decision-making, analyze potential outcomes, and adapt to changing conditions within the game. Board games also develop patience, turn taking, teamwork, following rules and good sportsmanship! Get in the game!

Instructor: Michelle Joyce



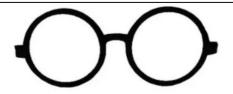
"TINKER" Toys Ages 4-5: 9:30 - 11:00

Back by popular demand with all new challenges, like Teetering Towers, Mouse Houses, and Constructed Portraits! This super-fun building class lets our youngest learners explore a variety of high-interest, open-ended building sets.

Children's literature is a springhoard for

Children's literature is a springboard for their designs in this play-based building class, with a strong emphasis on supportive social-emotional growth and understanding, including productive struggles that center on embracing mistakes and 'failing forward.'

Instructor: Stephanie Elliott



Legends, Lore & the Wizarding World 4th - 8th grades: 11:15 - 12:45

So, you know about Hogwarts,
Dumbledore, Hagrid and Weasleys. You
can debate the merits of the Firebolt over
the Nimbus Two Thousand and One in a
crucial Quidditch match. You know Harry
Potter. But have you ever wondered about
words like trifle, hippogriff, Patronus and
"Expelliarmus!", or why Harry's life and
adventures interest so many children and
adults? Now you can get answers! You'll
use a unique mixture of trivia, costume,
drama and simulations to explore the

mysteries of J.K. Rowling's books. See how she employs myth, English culture, ancient lore and languages to weave together the fascinating tales of the education of

fascinating tales of the education of everyone's favorite student wizard. Note: Students should have read at least two of the Harry Potter books.

Instructor: Emily Thiele



### **Everyday Electricity**

Advanced 2<sup>nd</sup> - 4<sup>th</sup>: 9:30 - 11:00 Beginner 2<sup>nd</sup> - 4<sup>h</sup> grades: 11:15 - 12:45

Beginning: Do you like experimenting with science and seeing what will happen? Have you ever wondered how a lightbulb works or why a battery has a plus side and a negative? Uncover the basics of electricity, explore how to create different types of circuits, and learn about switches. We'll even discover surprising objects that will complete and power a circuit.

Advanced: Go even further! Explore complex circuits, resistance and fuses. Learn how to draw accurate circuit symbols. If the class meets learning goals quickly, you'll also explore electric motors and maybe even design your own electric experiments! Advanced students should have taken the Everyday Electricity class in the fall or have studied an electricity unit in school.

Instructor: Tracy Bednarick-Humes



## Genre Journeys & Writing Wonders

3<sup>rd</sup> - 5<sup>th</sup> grades: 9:30 - 11:00

Do you love to read fantasy, mystery, history, and adventure? Have you thought of writing something yourself? Learn tricks of the trade and develop your own stories. How do you use a 'hook' in different genres to captivate and intrigue your readers? Create some fun book styles, like a fantasy pop-up page and a hidden message book. Explore a variety of writing styles that will stimulate your imagination. We'll share our stories in a class book – you'll go home a 'published' author by the end of our session!d share all the hard work!

Instructor: Emily Thiele



## Digital Storytelling: Podcasting

Advanced 3<sup>rd</sup>- 8<sup>th</sup> grades: 9:30 - 11:00 Beginning 3<sup>rd</sup> - 8<sup>th</sup> grades: 11:15 - 12:45

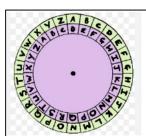
Back by popular demand!
Are you passionate about podcasts and love discussing a variety of topics?
Beginners, learn what it takes to produce your own podcast, from scripts to shareable productions. We'll investigate a variety of tools and technology for our creative process.

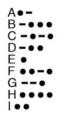
Advanced, keep working on your project from last fall—or start a new one! (Or if you have some previous experience, the advanced class is right for you.)

All will practice performing and discover how to generate enough content for a series. Additionally, we'll cover how to find content that respects copyright laws and doesn't infringe on others' ideas. Whether you want to sign up solo or bring a cohost, join us for a fun and engaging journey into digital storytelling!

Instructor: Chuck Baker







## Cryptography & Code Breaking

3<sup>rd</sup>- 8<sup>th</sup> grades: 9:30 - 11:00

Are you a master code breaker? Would you like to be? Experiment with different kinds of codes – like the Caesar Cipher, Hieroglyphics, Binary Codes, and Morse Code – and try your hand at each of them! You'll get a mini-history of each code and how it was used – and by whom. Then you can create your own code! Your problem-solving skills will be challenged as you unlock the captivating world of cryptography.

Instructor: Angela Rhodes

### **Instructors**

Chuck Baker, M.S., gifted teacher, Maplewood-Richmond Heights Middle School

Tracy Bednarick-Humes, Ed.D., coordinator of gifted programming, Lindbergh School District
Beth Crites, M.A., teacher, Sts.
Joachim and Ann Catholic School
Stephanie Elliott, M.Ed., elementary

and gifted teacher

Lisa Hummel, M.A., middle school science teacher, Affton School District Michelle Joyce, M.Ed., gifted teacher, Mehlville School District

Hannah Noack-Ruebling, M.A., gifted teacher, St. Charles School District

**Lisa Pascoe**, M.Ed,. Board certified gifted teacher, Missouri Virtual Academy

Stephen Randoll, Ph.D., history professor St. Charles Community College, Rated USCF National Expert Angela Rhodes, M.S., gifted teacher, St. Louis Public Schools

**Emily Thiele**, M.Ed., Gifted specialist, Mehlville School District

Kara Viviano, B.A., elementary teacher, Hazelwood School District

## Parenting Classes – Winter 2025

Thanks to a generous donor, our parenting classes are FREE TO ALL this fall & winter!

We're still working on scheduling our line-up for speakers for winter.

We'll get these published as soon as possible. In the meantime, if you have a topic you're dying to hear more about, please just let us know!



## **GRC** Membership

Your membership will help us improve existing programs, extend offerings and reach more children. You also receive benefits like priority registration and program discounts. It's quick, easy and tax-deductible (as allowed by law). Sign up by adding the appropriate amount to the total on the Learning Lab form or joining online. Memberships are valid for one year.

### Wise Philanthropist (\$1,000+)

- Priority registration for all programs
- FREE parenting classes (\$160 value)
- FREE Learning Lab course
- \$50 discount off a Summer Academy
- Learning Lab scholarship in your name at your request
- Use of GRC library
- GRC logo lapel pin

### Brilliant Benefactor (\$500 - \$999)

- Priority registration for all programs
- FREE parenting classes (\$160 value)
- FREE Learning Lab course
- \$50 discount off a Summer Academy
- Learning Lab scholarship in your name at your request
- Use of GRC library

### Talented Patron (\$250 - \$499)

- Priority registration for all programs
- FREE parenting classes (\$160 value)
- \$10 off two Learning Lab courses
- \$50 discount off a Summer Academy
- Use of GRC library

#### Sharp Sponsor (\$150 - \$249)

- Priority registration for all programs
- FREE parenting classes (\$160 value)
- \$10 off two Learning Lab courses
- \$25 discount off a Summer Academy
- Use of GRC library

### Intelligent Friend (\$100 - \$149)

- Priority registration for all programs
- FREE parenting classes (\$160 value)
- \$10 off two Learning Lab courses
- Use of GRC library

### Gifted Member (\$60 - \$99)

- Priority registration for all programs
- FREE parenting classes (\$160 value)
- Use of GRC library

#### **Imaginative Institution (\$100)**

- For schools and other institutions
- Recognition in newsletters and on website

## Registration Form – Winter 2025

(Registration is available by sending in the form below with a check or credit card information or by registering online at www.giftedresourcecouncil.org – credit card payments will be charged a service fee.)

| Child   | 's name·                          | eredit card payme                                |           | Ü  | Grade/Scho                        | ol:  |  |  |  |
|---|-----------------------------------|--|-----------|--|-----------------------------------|--|--|--|--|
|   |                                   | Address (Street/City/State/Zip):                 |           |  |                                   |  |  |  |  |
|   |                                   |  |           | referred phone:  |                                   |  |  |  |  |
| Parent name: Pre  |                                   |  |           |  | •                                 |  |  |  |  |
|   |                                   |  |           | •  |                                   |  |  |  |  |
|   | ( )                               | ations/employer:                                 |           |  |                                   |  |  |  |  |
|   | .,                                | CONTACT (if parents can't be reached):           |           |  |                                   |  |  |  |  |
|   |                                   |  |           | Phone:   |                                   |  |  |  |  |
|   |                                   | er conditions:                                   |           |  |                                   |  |  |  |  |
|   |                                   | rn about GRC?                                    |           |  |                                   |  |  |  |  |
|   | •                                 |  |           |  |                                   |  |  |  |  |
|   | • `                               | optional, but useful for GRC when applying       |           |  |                                   |  |  |  |  |
|   |                                   | dian or Alaskan Native Asian F                   |           |  |                                   | •  |  |  |  |
| Na  | tıve Hawa                         | iian or other Pacific Islander   Middle I        | ≟astern/N | lorth  | African [                         | Other or additional info:                  |  |  |  |
| Please  | e select yo                       | ur child's class choice(s) from the list(s) belo | ow.       |  |                                   |  |  |  |  |
| SESS  | ION 1: 9                          | :30 - 11:00                                      |           |  | SSION 2: 11:15 - 12:45            |  |  |  |  |
|   | Ages 4 - 5                        | "TINKER" Toys                                    |           |  | Ages 5 - 6                        | Storybook STEM                             |  |  |  |
|   | K - 1 <sup>st</sup>               | Storybook STEM                                   |           |  | K - 1 <sup>st</sup>               | It's a Hard Rock Life                      |  |  |  |
|   | $2^{nd}$ - $3^{rd}$               | It's a Hard Rock Life                            |           |  | K - 3 <sup>rd</sup>               | Checkmate! Beginning                       |  |  |  |
|   | $2^{nd}$ - $4^{th}$               | Everyday Electricity: Advanced                   |           |  | $2^{nd}$ - $3^{rd}$               | Game On!                                   |  |  |  |
|   | $3^{\rm rd}$ – $4^{\rm th}$       | LEGO Spike Robotics                              |           |  | $2^{nd}$ - $4^{th}$               | Everyday Electricity: Beginning            |  |  |  |
|   | $3^{\rm rd}$ – $5^{\rm th}$       | Genre Journeys & Writing Wonders                 |           |  | $3^{rd}$ - $5^{th}$               | Winter Wonderland Art Studio               |  |  |  |
|   | $3^{\rm rd}$ - $5^{\rm th}$       | Disaster Defenders: Engineering for the Extreme  |           |  | $3^{\rm rd}$ - $8^{\rm th}$       | LEGO Mindstorms Robotics: Advanced         |  |  |  |
|   | $4^{th}$ - $5^{th}$               | Game On!   |           |  | $3^{\rm rd}$ - $8^{\rm th}$       | Digital Storytelling: Beginning Podcasting |  |  |  |
|   | $3^{\rm rd}$ - $8^{\rm th}$       | Checkmate! Advanced                              |           |  | 4 <sup>th</sup> - 8 <sup>th</sup> | Legends, Lore & the Wizarding World        |  |  |  |
|   | 3 <sup>rd</sup> - 8 <sup>th</sup> | Cryptography & Codebreaking                      |           |  | 5 <sup>th</sup> - 8 <sup>th</sup> | LEGO Spike Robotics                        |  |  |  |
|   |                                   | LEGO Mindstorms Robotics: Beginning              |           |  |                                   |  |  |  |  |
| Ш   | 3 <sup>rd</sup> - 8 <sup>th</sup> | Digital Storytelling: Advanced Podcasting        |           |  |                                   |  |  |  |  |
| Tuition   | ı is refund                       | able (minus a \$15 withdrawal fee) for classe    | s dropped | d  | Total Fees Enclosed:              |  |  |  |  |
|   |                                   | reeks before the start date. Members' priorit    |           |  | Class(es) - \$120 each:           |  |  |  |  |
| registra  | ition good                        | until December 24, 2024. All others taken        |           | Membership:  |                                   |  |  |  |  |
| first-co  | me, first-s                       | served basis.                                    |           | (optional)   |                                   |  |  |  |  |
| Are you a current member of GRC?  Yes No  |                                   |  |           |  | TOTAL:                            |  |  |  |  |
| Would you like to become a member?  Yes No  |                                   |  |           |  |                                   |  |  |  |  |
|   |                                   | vel?   |           | Payable by check to: Gifted Resource Council or credit card (transaction fee charged): |                                   |  |  |  |  |
| Α   | i winch le                        | vei:   |           | Credit card #:   |                                   |  |  |  |  |
|   | _                                 |  |           | Exp. Date:   |                                   |  |  |  |  |
| Return form & payment to: Gifted Resource Council<br>10425 Old Olive St. Rd., LL1 |                                   |  |           |  | Security code:                    |  |  |  |  |

Name on card: \_

10425 Old Olive St. Rd., LL Creve Coeur, MO 63141