

**2023-2024**

# **FRIENDS OF MOUNTAIN BROOK ROBOTICS**

*Friends of Mountain Brook Robotics* is our community partner campaign for the Mountain Brook Junior High and Elementary Schools robotics programs. By being a part of *Friends of Mountain Brook Robotics*, you provide students with hands-on opportunities for innovative thinking, problem solving, teamwork and communication skills. Your investment in our local robotics program educates and fosters the importance of robotics and STEM curriculum within the schools and community.

Please consider making a tax-deductible donation to Mountain Brook Junior High and Elementary Robotics as a one of our *Friends of Mountain Brook Robotics*. We offer tiered levels of benefits for your business to show our appreciation and to highlight your support for robotics as an integral part of the educational experience.

## **FRIENDS OF ROBOTICS LEVELS**

### **★ DIAMOND \$1,000**

- >Presenting sponsor for our upcoming local robotics tournaments, "Bots in the Brook" on January 10 and January 31, 2024
- >Logo/name included in all correspondence and promotions of events
- >Digital promotional materials sent to 150 Mountain Brook Robotics families in email blast
- >All benefits of previous levels

### **★ GOLD \$750**

- >Social Media Recognition on multiple Mountain Brook School platforms
- >Logo/Name on Mountain Brook Robotics State and World participant T-shirt
- >All benefits of previous level

### **★ GREEN \$500**

- >Logo/Name on banner used at all robotics tournaments, including state, regional and world competitions
- >Recognition on Mountain Brook School Robotics websites

**We are grateful for your donation and support of Mountain Brook Robotics.**  
**Please make checks payable to Mountain Brook Junior High Robotics and mail to MBJH:**  
**205 Overbrook Rd; Birmingham, AL 35213**

*Mountain Brook Junior High is a not-for-profit 501(c)(3) education institution. Federal ID 63-6005319.*  
*This may be used for income tax purposes, No goods or services were provided in exchange for this donation.*  
*Please consult with your tax professional. Sponsor benefits are non-transferable and are to be used by the sponsoring business only.*

# ABOUT MOUNTAIN BROOK ROBOTICS

Mountain Brook Robotics is led by Sherri Whitehead, a Project Lead the Way teacher at Mountain Brook Junior High. During the Stem Technologies (competitive Robotics team) class, students have daily practice in designing, building and programming VEX IQ robots while working as a team in a student-centered learning environment. Junior High students not involved with the robotics team still have the opportunity to learn and grow in STEM areas through Project Lead the Way classes such as Automation & Robotics, Designing & Modeling, Computer Science for Innovators & Makers and App Creators.

Each of the 4 Mountain Brook Elementary Schools have a competitive after school robotics program for grades 4th-6th with teachers/coaches supporting students in a hands-on, sustainable, and cost-effective STEM environment using VEX IQ robot kits and instruction. Students at all Mountain Brook Elementary Schools learn more about robotics during their STEM specials in K-6th. STEM teachers use VEX I23 with K-2nd grade students, VEX GO with 3rd-4th grade students, and VEX IQ with 5th-6th grade students. These platforms give all students a great foundation in the Design Process that engineers use. Students can build and code to problem solve with hands-on materials instead of watching something move on a screen. The lessons are connected to science, math, and technology.

## WHAT DOES A ROBOTICS TOURNAMENT LOOK LIKE?

Mountain Brook Robotics attends competitions in cities all over Alabama as well as the surrounding states. During each tournament, teams can compete in the Skills Challenge as well as the Teamwork Challenge. In the Teamwork Challenge, an alliance composed of 2 randomly chosen teams work together to score as many points as possible in a one-minute match where both teams receive the same score. Each tournament begins with the teams completing qualifying matches which will determine their final match pairing. Teamwork Champion is crowned when two teams achieve the highest score of the finals matches.

While the Teamwork Challenge is all about collaboration with others, the Skills Challenge is every team for itself. The Skills Challenge consists of each team trying to achieve the highest score of the tournament by combining their robot driver skills score with the number scored while in autonomous mode. In Autonomous mode, the robot drives itself utilizing the code the students designed. Each team has 6 chances to score in the Skills Challenge – 3 for driver skills and 3 for autonomous. A team's single highest driving score is added to their highest autonomous score to determine their skills score for an event. The Skills Champion is the single highest scoring team.

Besides the Teamwork and Skills Champions, the highest award of the tournament is the Excellence award. This award is based on judges' interviews, the teams' engineering notebook, and the overall success of the team during the competition –in both teamwork and skills, as well as their coding program. Other awards are given rewarding innovation, design, and sportsmanship. As awards are won throughout the season, teams qualify for the VEX IQ State Championship and beyond that, the VEX IQ World Championship. Mountain Brook Schools have taken robotics teams to the VEX IQ Alabama State tournament and VEX World Championship for the past 10 years at the elementary and middle school levels. These are great experiences for our students because they get to meet children from all over our state and world that have the same interest. They learn many life lessons at these events while having fun and winning trophies.



# RECENT ACCOLADES

## ELEMENTARY SCHOOL:

2022-2023 World Championship Division Teamwork 3rd Place  
2022-2023 World Championship Division Judges Award  
2022-2023 Alabama State Skills Champions  
2022-2023 Alabama State Teamwork 2nd place  
2022-2023 Alabama State Innovate Award  
2022-2023 Alabama State Think Award  
2022-2023 Alabama State Amaze Award  
2021-2022 World Championship Division Teamwork 3rd Place  
2021-2022 World Championship Division Energy Award  
2021-2022 World Championship Division Think Award  
2021-2022 Alabama State Teamwork Champions  
2021-2022 Alabama State Teamwork 2nd place  
2021-2022 Alabama State Skills Champions  
2021-2022 Alabama State Excellence Award  
2021-2022 Alabama State Design Award  
2021-2022 Alabama State Amaze Award

## JUNIOR HIGH:

2022-2023 Alabama State Teamwork Champions  
2021-2022 Alabama State Teamwork 3rd Place  
2021-2022 Alabama State Teamwork 4th Place  
2021-2022 Alabama State Design Award  
2021-2022 Alabama State Amaze Award