# MBCI NASA Center FICHIK MALATO ALHÍHA!

January 2023

NASA Teacher **MBCI Enhancement Center October Activities** 

Stennis Space Center **First Robotics Competition Kickoff** 

Jose Cruz

NASA Center Staff Tracey Hartness NASA Center Coordinator NASA Center Assistant

January 14

January 7

January 21

MBCI NASA CENTER Team 590 Robotics Meeting

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**Team 590 Robotics Meeting** 

January 28 CCHS First LEGO League Robotics Tournament







**FIRST** 

ROBOTICS

**COMPETITION** 

#### KICKOFF JANUARY 7, 2023 PRESENTED BY Novelis

Stennis Space Center First Robotics Competition

Kickoff

STENNIS SPACE CENTER

Mentor from the CCHS robotics team headed to NASA's Stennis Space Center for the First Robotics Competition (FRC) Kickoff. The FRC kickoff marks the beginning of the FRC season. During the kickoff, members from FIRST revealed the FRC game, CHARGED UP, and handed out teams' kit of parts. The NASA Center staff are proud mentors of the Chahta Warriors Team 590. Team 590 is divided into four sub teams: safety, programming, engineering, and presenting. Programmers are mentored by a professional in the field and are responsible for using a variety of programming language to ensure the robot functions properly. Engineers are responsible for building a robot from scratch under the guidance of a mechanical mentor. This group of young inspiring engineers work closely with the programmers in order to develop a functioning robot. Part of the First Robotics Competition is to present how Team 590 has impacted the community, and ensuring safety is always most important.

### MBCI NASA CENTER TEAM 590 ROBOTICS

After the kickoff, robotic teams all over the country, and some international teams as well, have 6 weeks to build and program a functioning robot to play the FRC game. As the first official meeting for Team 590, members had to sit through a lecture about safety in a shop environment, tool safety, and the importance of personal protective equipment. Throughout the day, team members had to take and pass a safety test. Programmers ensured that all laptops were updated and downloaded the latest software from FIRST. While the engineers started to brain storm ideas on how to constructed a robot to compete in this year's FRC game.





## MBCI NASA CENTER TEAM 590 ROBOTICS

The 2nd meeting involved our programmers' brainstorming ideas with our engineers for an ideal robot. Engineers went right to work on building a chassis for the robot. The engineers started by building a chassis that met the parameters defined in the FRC rulebook. Also, a small group of engineers built a mock playing field in order to practice placing the game elements on different levels.

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#### Choctaw Tribal Schools FIRST LEGO League Robotics Tournament

The Choctaw Tribal Schools held the 20th Annual FIRST LEGO League (FLL) Tournament on Saturday, January 28, 2023, in the Choctaw Central High School Gymnasium in Choctaw. Eleven teams representing elementary and middle schools of the Choctaw Tribal Schools participated in this wonderful and exciting event. This year's theme was "Super Powered" as teams learned about different types of energy sources, storage, distribution methods, and ways in which energy is consumed. During the opening ceremony, members of the Choctaw Veterans Color Guard posted the American and Tribal flags as Deidre Tubby sang the National Anthem. Pastor Thomas Ben offered the invocation and reigning Choctaw Indian Princess Cadence Nickey welcomed all in attendance. Director of Schools Dr. Randall Grierson and Tribal Chief Cyrus Ben offered brief remarks encouraging the teams to do their best by exhibiting values of gracious professionalism and cooperation (showing that learning is more important than winning). Alice Keats served as emcee as she introduced the judges, referees, and participating teams.

Every fall, FLL releases a challenge based on a real-world scientific topic. Each challenge has four parts: the Robot Game, Robot Design, Innovative Project, and Core Values. Teams program their autonomous robot to score points on a themed playing field while developing a solution they have identified, all guided by the FLL Core Values. This season's game was about collecting energy units from different sources around the field and distributing them to where the energy will be stored or consumed. Points are scored for releasing energy units from the models and delivering energy units to target destinations.

At the conclusion of three robot performance rounds, five awards were presented to the following teams:

Core Values Award - Native Pines (Standing Pine Elementary School);

Innovative Project/Project Presentation Award - The Able Gamers Group II (Pearl River Elementary School);

Robot Design Award - Smash Clan (Bogue Chitto Elementary School);

Robot Performance Award - Tucker T'Bots (Tucker Elementary School);

Champion's Award - Network Robot (Tucker Elementary School).

Congratulations to Network Robot as they advance to the Mississippi FIRST LEGO League Tournament next month (more details will be provided soon).

Thank you to all volunteers who donated their time, energy and talents to the Choctaw Tribal Schools' FLL Tournament. Thank you also to the coaches and technical mentors for the countless hours spent teaching, facilitating and encouraging the students in this program. Your contributions will have a lasting impact on our "engineers of tomorrow".







