



Date: August 27, 2019

Subject: E1 Welcome to CITY SHAPER

Dear Mississippi *FIRST*® LEGO® League Teams:

This is the first email blast (E1) from Mississippi *FIRST*® LEGO® League to Mississippi *FIRST*® LEGO® League teams for the CITY SHAPER season. You are receiving this email because you are listed as a purchaser, coach or assistant coach for a registered or temporarily registered *FIRST*® LEGO® League team for the upcoming season. INTO ORBIT coaches who have not paid registrations yet are also receiving this email. All email blasts from the Mississippi *FIRST*® LEGO® League region will be archived on the website [here](#).

Welcome to the CITY SHAPER season! As challenge sets are received, returning teams will notice changes to this year's materials

1. The challenge mat is shorter, but there is no need to build a new table. The extra space at the west end of the challenge mat is HOME. HOME will be the place to store equipment, to handle the robot and also be part of a new inspection process before the match. To fully understand this new area and its uses, please refer to the official CITY SHAPER Game Guide [here](#).

2. Teams can earn bonus points if their equipment fits in the Small Inspection Area of HOME. Fitting in this area earns the team 5 extra points per completed mission. Exceptions: Mission 14 doesn't apply, but Mission 2 earns 10 extra points instead of 5.

3. Expect in a second shipment two TEAM MEETING GUIDES and ten ENGINEERING NOTEBOOKS. The TEAM MEETING guides will assist coaches in facilitating their team meetings. Pages five through nine provide valuable information on how to use the guide: what materials you need for your team, available resources, and software installation and robot lessons. The ENGINEERING NOTEBOOKS are for your team members to work in during the season. Something new you will find in the ENGINEERING NOTEBOOK are project sparks that connect the ROBOT GAME to the INNOVATION PROJECT. These materials are additional resources to assist you, so use them as you see fit.

4. Teams can use any programming language that allows their robot to move autonomously. **NO** form of remote control is allowed.

5. Judging will be based equally on these four areas: Robot Design, Robot Performance, Core Values and Innovation Project. All are worth 25% of a team's overall rating. There is no longer a requirement for a robot's score to be in the top 40% to be considered for the Champion's award. Also gone is the requirement for a robot performance score to be in the top 75% in order to advance to the next level of competition.

6. It is so important to read and understand the Game Guide. It is equally important to read the Challenge Updates on a weekly basis. Both can be found [here](#).

Other information needing special mention:

1. There are revised build instructions for the Drone mission model. Please check the [revised build instructions](#) if you built the Drone mission model prior to August 21, 2019.
2. The wording of the robot missions in the student Engineering Notebooks differs *slightly* from the wording of the missions in the Game Guide. Please be aware of these differences and use the Game Guide as the final authority. Please refer to the Game Guide for the most complete wording.

Side by side comparison of the wording difference in Mission 10:

Engineering Notebook wording of Mission 10

Game Guide wording of Mission 10

Mission 10 Steel construction
→ If the Steel Structure is standing: 20

Mission 10 Steel construction
→ If the Steel Structure is standing, and is Independent, and Supported only by its hinges as shown: 20

Remember that there is a web site at www.msfirstfill.org with Mississippi specific information. Under the Coaches' Corner tab you can find information and links to challenge documents. The Season Calendar tab provides a timeline of the City Shaper season in Mississippi. Some key dates to note would be registration closing on September 30, 2019 and teams being notified of qualifier assignments on October 2, 2019. Qualifier assignments are permanent after October 11. If there is a problem with an assigned date, please notify me by October 11. Qualifier fees are due by November 8, 2019. Specific information about the qualifiers can be found under the EVENTS tab. The Mississippi CITY SHAPER Championship is scheduled for February 15, 2020 at the Muse Center in Pearl, Mississippi.

FYI -On August 15, 2019, FIRST TV on Twitch aired a live CITY SHAPER viewing party. Go [here](#) to watch the recording. The entire broadcast is 1:32 minutes. I have created a timeline of content:

00:04:30 Alisha MacIntyre, Head of Program Development at LEGO Education, talks about FIRST LEGO League programs

00:05:07 Discovery Edition for 4-6 year olds.

00:11:35 Boomtown Build FIRST LEGO League Jr. for 6-10 year olds overview.

00:14:09 CITY SHAPER FIRST LEGO League Team Meeting Guides and Engineering Notebooks

00:16:09 Inspirational Video about FIRST

00:18:08 FIRST LEGO League Video

00:21:00 Project Manager, Randall Hicks and Mechanical Engineer, Mike Grenier, talk about how the mission models on the ROBOT GAME field can provide ideas for the INNOVATION PROJECT, "project sparks." Project Sparks use mission models on the playing field to help teams think about new ideas for the INNOVATION PROJECT. Mission 11 also links the ROBOT GAME to the INNOVATION PROJECT. Teams build a model representative of their project using the provided white and red bricks.

00:26:44 INNOVATION PROJECT expert Lelli Van Den, Einde, Ph.D. Structural Engineering talks about being a structural engineer and her specialty of building structures that withstand natural disasters - specifically earthquakes.

00:28:54 Senior Designer, Lee Magpili mentions the new HOME area, the shorter field mat and the launch area. He talks about the sensor line that is connected to the launch area which will encourage

teams to use their sensors. Lee talks through the robot game missions and the ideas behind them. Remember that you can view individual videos of the missions and the Challenge Kick-Off video [here](#).
00:42:27 Architect Rok Kobe explains the Roman architect and engineer Vitruvius's design principals of durability, utility, and beauty.
00:46:14 Lee Magpili continues speaking about the missions on the challenge mat. He ends with the Crane Mission. Lee provides a demo of an EV3 robot completing the Crane Mission. Teams will have to modify the program provided so that the EV3 returns either to HOME or continues on to another mission. Lee mentions that the code in the Crane Mission can be applied to other missions.
01:03:04 Q&A with LEGO Staff- They answer a variety of questions. A few questions answered address the precision tokens; the HOME area and the different inspection areas in HOME.

Teams are still in the process of registering. Currently, there are forty-one paid registrations and twenty-seven temporary registrations. I foresee Mississippi exceeding the 102 teams it had during the INTO ORBIT season. Last year the Mississippi program grew 18%. Growth would not be possible without all of the amazing coaches who are providing teams with this one of a kind experience. Thank you coaches and volunteers.

First and foremost, I am here to support you. If you have a question about anything *FIRST* LEGO League related, I will do my best to assist you.

With high-fives and admiration,

Teresa Lanum
Mississippi *FIRST*® LEGO® League Partner
tal anum@gmail.com, 601-212-9763

Reminders

- **Robot Game and Innovation Project Updates:** Check for updates every week [here](#).
- **Assistant Coach:** All teams are required to have two coaches who have completed the Youth Protection Screening. If you have an assistant coach and he/she is not listed on your team profile, that coach is **not** receiving any communications from me or *FIRST*. Log into your DASHBOARD and review your primary team contacts. Remove coaches no longer coaching and invite current coaches.
- **Consent and Release Forms:** At all events teams must hand in a Team Roster which lists the team members and coaches. The Team Roster also shows that the Consent and Release forms have been electronically signed. If you are not using the electronic consent and release forms, to assist your team parents with completely filling out the paper forms, highlight the sections that parents need to complete. Keep a copy of all signed paper consent and release forms, so if your team advances to Championship you won't have to fill them out a second time. If you don't advance please shred these documents as they contain personal information about your students.
- **Review the Participation Rules** [here](#).