Judge Training Script

This script is for a 60-minute judge training, led by the Judge Advisor. Judge training should take place prior to the event or on the morning of tournament day. Training is mandatory for all judges.

==XXX== – indicates event-specific information to be filled in by Judge Advisor

Time	
Welcome and Thank-You	Welcome, everyone, I'm ==XXX== and I'm going to be leading the training today. Let me start by saying thank you. Thank you for giving up your time, thank you for volunteering, thank you for being awesome. Judging at a *FIRST*® LEGO® League event will be one of those experiences that is life affirming – a day that will make you realize how amazing and talented these young team members are. It is a day that you will never forget. We have ==XXX== teams competing in our competition, and they have all been working hard since the start of their season, getting ready to showcase and demonstrate their amazing work to you, the judges.
The Judge Role	It's a big job, but as a judge, you have to be lots of different things to our teams – you have to be a friendly face that greets them as they enter the judging space, you have to be reassuring and positive and acknowledge all of the amazing work they have done, and you have to listen carefully to what each team shares so that you can give them suggestions for what to work on next. In each case, you will be a supportive mentor while all the time judging the teams against the criteria to assess how they have progressed. It is a big job, an important job, and one that can make or break a teams' day or season. Your actions could inspire the next generation of thinkers, and all I can say again is thank you (and good luck). Over the next ==XXX== minutes we are going to look at *FIRST* LEGO League Challenge for this season, discuss the schedule for the event, talk about expectations for the day, and what you have to do. We'll also answer your questions and calm your nerves if you are a new judge.
What the Teams Have Been Doing	Let's start by having a look at what *FIRST* LEGO League is all about. *FIRST* LEGO League was created to inspire young people to experiment and grow their critical thinking, coding, and design skills through fun, hands-on STEM learning and robotics. The whole program is built on the *FIRST* Core Values of discovery, impact, inclusion, innovation, teamwork, and fun. Teams have been working toward today since the start of the season and will arrive full of hope and optimism – they are excited to see what they can do but also to meet other teams and learn together. Teams at our tournament will have a few things to do: they will compete in three Robot Game matches, attend a judging session where their Robot Design and Innovation Project will be evaluated, and demonstrate their Core Values during every aspect of the competition. The four core areas – Robot Game, Innovation Project, Robot Design, and Core Values – will each be scored and combined to determine individual award winners and Champion's Award winners, but more on awards later. It is important to consider the expectations of the teams – some will come with the single mindset of winning the Champion's Award, and some will have the goal of advancing to the next level of competition. Some will come aiming for an award in a specific area. And some teams will be here for the experience of competing for the first time. Newer teams may have different goals than more experienced teams, but one thing is for sure: They all want to do their best and produce their top performances.

Interacting with the Teams	You have a tough job as a judge because you must learn a lot about a team in a short amount of time and then make sure they leave the judging session feeling like they did their best, have been inspired, and received some useful feedback to help them improve. Your role today is both to judge and to mentor. You will offer support and encouragement, but also ask questions and challenge teams when you feel it is needed. Look for the positives. Think carefully about what you say and remember that teams will pick up on your tone and body language as much as the words you say.
	While we hope all teams will be excited for their judging session, it is perfectly normal for teams to feel nervous or even shed a few tears. Judges should do their best to calm a team's nerves by bringing positivity to the session, creating a supportive and encouraging environment. This is also important when considering the makeup of the teams you are judging. They could be as young as 9 years old, or they could be teenagers. They could be a small team with just 2 or 3 members or have a maximum of 10 members on their team. They could also have specific needs to address physical, developmental or behavioral differences. Tailoring your actions, language, and behavior can help settle each team's nerves.
	If a team begins to unravel in one or more judging areas, it is the judges that can save the day and turn things around for the team. By simply being a calm and supportive presence or by offering advice about what to try next, the judges can enable the team to leave the judging session feeling confident in their work. Even though things may go wrong, teams should always get valuable feedback with specific examples to improve on for next time. Again, there are many factors to consider, but don't worry. Smile and just be yourselves – these teams look up to you as a role model and will feed off your energy. If you need support, I will be stopping by the judging rooms periodically to help with any problems along the way.
	Next, we will go into more detail about the tournament day and judging session flow. If you have any questions, then I ask you to please save them until the end as I may answer what you want to know as we go through.
10-minutes	
The Robot Game	This year's *FIRST* LEGO League season is called <mark>XXX</mark> and teams have been exploring topics related to <mark>XXX</mark>. You can find more information about the theme in the **Season Challenge Overview**. Let's have a quick look at the Robot Game field so we can see the missions the teams have been trying to solve. This will help when judging Robot Design. It will give you some insight into the teams' mission strategy and the decisions they made about mechanical design, but you do not need to be an expert on each of the missions.
	*Show all judges the Robot Game table, give a quick overview of the game rules, and talk through some of the missions for that year using the **Robot Game Rulebook**. If time allows at the end of the training, you may also play the **Robot Game Mission Video**.*
	As you can see, there's a lot to do in 2.5 minutes. Teams try to score as many points as possible during their match. They get three attempts at the competition, and only their highest score counts. Some teams will attempt all the missions, while others will attempt just a few. Your job will be to learn how they worked together and how they designed and improved their robot according to their own unique mission strategy. The referees will score how well their robot performed, so judges will focus on the engineering design process.
Core Values	I have mentioned Core Values a few times, so let's have a look at this aspect of *FIRST* LEGO League. The ***FIRST* Core Values** are: discovery, impact, inclusion, innovation, teamwork, and fun, and they are the foundation of all *FIRST* programs. Teams apply their Core Values to their work on their Robot Design and Innovation Project as well as through *Gracious Professionalism*®, which will be evaluated at the Robot Game by the referees. We will come back to this a little bit later when we discuss the awards.
	We expect everyone at the event today - including you all - to demonstrate these Core Values in their actions at our event.

The Innovation Project	The next aspect of *FIRST* LEGO League is the Innovation Project. This is where the teams must identify a specific problem connected to the season theme and then research it thoroughly to understand the problem and any existing solutions before designing their own innovative solution, which they need to present to the judges. You can find more information about this season's project prompt in the **Season Challenge Overview**. Teams are provided with some inspiration to help them choose their project. They may select one of the sample problems that was listed in their program materials, or they may have chosen a different problem to explore. When you get a look at the Robot Game, you will notice all the LEGO models on the competition field are related to the theme and may have sparked the teams' imagination. Teams may present on a problem that you see in the mission models, or they may have chosen their own unique problem to explore. No project topic is off-limits as long as the team can explain how they arrived at the problem based on their research, so make sure to ask them questions if you are unsure. *Pick out a couple of models and show the connection to the theme. This could be how the team was inspired to think up their innovative solution.* Some teams may come with a functional prototype to share, while others may present a sketch or model. Remember that the focus of judging should be on the process they used to select a problem and innovate an impactful solution, not on the final product.
Event Schedule	Each team will spend 30-minutes in judging and the session will follow a standard outline, which we will look at later in this training. Teams will expect a schedule for the day with three Robot Game time matches and one judging session. Each team will have a dedicated pit area for the day, but they are encouraged to move around and meet the other teams. Coaches have been told what time the event begins and know to collect their team schedule on arrival when they check in. This leads us very nicely into the schedule for our event. *Pass out or show event schedule* As you can see from the schedule, the event starts at XXX, so all judges should plan to be here at XXX. The event ends at XXX, and I would strongly recommend you stick around for the awards ceremony – it's great to celebrate with the teams and see all the excitement about what they have achieved. You can see the Robot Game matches are running on XXX-minute intervals. They will be facilitated by our referees. The judging sessions are XXX minutes long and run from XXX to XXX. You can also see that lunch is at XXX (and will be provided for you in XXX). You can also see what room your judging pod will be assigned to. Some of you have been nominated as the lead judge in your pod – we'll further explain your role when we go through the judging session flowchart. It is important that every session runs on time as best as possible. This message will be echoed to the teams as well. Lead judges, one of your jobs will be to ensure your group sticks to their schedule. If a team misses their session, notify me right away so we can check on that team and adjust the schedule if needed. You have some free time built into the day which is a great time to wander, watch a Robot Game match, visit team pits, and soak up the atmosphere. As I said earlier, tournament day can be inspirational, so please enjoy sharing your wisdom and being a role model to the teams.
20-minutes	
Rubrics	*Show or give out **Rubrics** to each judge.* This is the rubric that is used to evaluate each team. I will refer to these more as we go through the session, but we will come back to them at the end.

The Judging Session	Now, I'd like to take us through the 30-minute judging session and what that will look like. (Give out/show **Judging Session Flowchart**) As you can see, the flowchart is broken down into sections. It is important that every aspect gets its fair share of allocated time, but also the session can't be fully rigid. If one aspect runs over by 30 seconds because the team was in full flow, then that is okay, but don't let it happen for too long. Otherwise, the other aspects of the session will not get the time they need. You can see that the sections in order are: Welcome, Innovation Project presentation, Q&A, Robot Design explanation, Q&A, and then a final opportunity for Q&A before providing feedback. After the feedback section, the team leaves, giving you time to finalize the rubrics as a pod. Each pod will have a lead judge, whose job will be to keep time and ensure the session moves from one section to the smoothly. The lead judge may also be responsible for submitting the final rubric at the end of the session. The other judges may have responsibility for filling in a specific rubric page and leading the Q&A for the respective section, but all judges will ultimately work together to score and provide feedback on all judged areas. Now let's talk about each section in more detail. Some teams may enter with a cheer or chant, but others may not. After they enter, the session starts with a welcome by the lead judge, who will also introduce the judges (not their whole résumé – just first names are sufficient, but you may also share your profession if you would like). Give the team time to set up their materials, but as they do so, there are suggested ice breaker questions you may ask to get a feel for the team and their experience, as well as to help settle them into the session. When the team is ready, you can let them start their 5-minute live Innovation Project presentation. Don't interrupt them unless they are massively running overtime, in which case you can raise your hand and let them know that you need to move on. It may sound obvious, but it is critical that judges actively listen, make eye contact with the team members, be interested in what they share, and respond in a positive manner. One judge may be responsible for filling in a particular rubric page, but ALL judges in a pod should have input into scoring. Use the time while they are presenting to start gathering your thoughts about how they meet the rubric criteria. After they have finished presenting, you can use the Q&A time to collect information to plug any gaps on your rubric or to dig a bit deeper on some points. There are sample questions in the session script to help with specific lines on the rubric if you need them. Next, the session moves on to Robot Design. This section is usually more varied as teams choose to explain their robot and code differently. Some may have presentations, some may have information boards, and some may plan to just talk through the aspects of their robot and the design process they used. Let them do what they have planned, keep an eye on the time, and listen while starting to think about which column they fit into on the rubric. Again, use the Q&A time to probe and ask questions (remembering back to the Robot Game missions and the problems they needed to solve). Ask about their coding too, if they haven't covered it, and make use of the sample questions to help where needed. If they have not prepared anything, dive right into the questions to elicit the information you need to complete the rubrics. After both the Innovation Project and Robot Design areas are finished, the next section is more open ended. As time allows, teams may choose to share final information about their team and judges should ask any remaining questions about their work and season to help you complete the rubrics. Again, there are suggested prompts in the script. Remember, you are a team. It may be XXX job to fill in the Innovation Project rubric, but you will all see and hear the presentation and be present for the Q&A. Therefore, you will all have valuable input that will help when scoring the team and don't worry about asking for help from the other judges if you are not sure how to mark one of the criteria. You might also find it helpful to keep notes on each team you see, so please feel free to ask for scratch paper or extra blank copies of the rubrics.

Judging Session Script and Questions	*Show or give out **Judging Session Script and Questions** to each judge.* There is a judging script with recommended questions that you should use to help you better understand a team's work. The questions have been written to match what the teams have been working on in their team meeting materials and we recommend that you start with these questions before asking any additional questions of your own. If the team answers any of the provided questions during their presentation, you do not need to ask the question again. You should just move on to another question or reserve that time for feedback at the end of the session. We are aiming for a natural, relaxed experience in the judging room, so please make eye contact with the students as often as possible. Smile and encourage them as much as you can. Avoid trying to "surprise" teams by asking unrelated or overly difficult questions. Remember that these are children who may still be developing their skills in these areas or could be quite nervous – and that is okay!
Feedback to Teams	Once you have asked all your questions, there is time for you to give feedback to the team. Feedback is often the most beneficial part of judging, so please be specific and encouraging with your comments. Check first if there is something the team wants to hear feedback on, but otherwise you will need to share at least one positive comment on something the team did well and at least one constructive comment on what they might work on for each area. If a team was under-prepared for one or more areas of judging, use this opportunity to ask about and celebrate what they DID accomplish. Remember, you are here to inspire. The script is useful for this part of the session. It makes sense for the lead judge to invite feedback about the Innovation Project first and then on Robot Design, followed by general Core Values comments. The team will really value this input, so be clear with your language and always check they understand the points you are making. Don't forget you can use the guidance in the script if you need help with phrases and sentence starters.
Completing the Rubrics	Let's talk in more detail about using the rubrics. *FIRST* LEGO League is a global community, and all teams are evaluated using the same rubrics. The teams have seen these rubrics, so they should know what to expect. Hopefully you've had a look while I've been talking, but if not, have a look now. On the Innovation Project and Robot Design rubrics, you can see that there are five categories – Identify, Design, Create, Iterate, and Communicate – which follow the engineering design process. There is a descriptor in the colored line of each category that describes what the teams have to achieve. This is broken down and further explained in the criteria given in the two white lines underneath. You will also notice that five criteria from each page are marked with a gear-shaped icon. These criteria indicate that they will count toward a team's score in that area (either Innovation Project or Robot Design) as well as their Core Values score. The specific Core Value being evaluated on those lines are marked in the script and questions list, so pay special attention to a team's answers for these criteria and ask for more information if you need to. You are expected to give a score for every criterion (each row) by ticking the check box in the most appropriate column. There will be 10 scores each on the Innovation Project and Robot Design rubrics. Scoring is on a scale of 1-4: 1 is BEGINNING, 2 is DEVELOPING, 3 is ACCOMPLISHED, and 4 is EXCEEDS. It is important that the four levels of achievement on the rubric are fully understood and that only what a team shares during judging is considered when completing the rubrics. Regardless of the age, size, or experience of the team, they must fully demonstrate that they meet the criterion described in a level before being awarded that score. If they do not, they remain on the lower level. BEGINNING (1) refers to a team that shows little or no evidence of their achievement in this criterion or has not yet achieved everything they need to for a "DEVELOPING" score. The

words you will see on the rubric used to describe this level are:
- Minimal/Minimally
- Unclear
- Limited

DEVELOPING (2) refers to a team that shows they have made progress toward accomplishing this criterion but still gives simple or inconsistent evidence in support. The words you will see on the rubric used to describe this level are:
- Partial/Partially
- Inconsistent
- Simple

ACCOMPLISHED (3) refers to a team that clearly shows they have accomplished this criterion and gives clear evidence in support. The words you will see on the rubric used to describe this level are:
- Consistent
- Clear
- Detailed

EXCEEDS (4) refers to a team that goes above and beyond the accomplished expectation for this criterion. This could be demonstrated in a variety of ways, so is not prescribed anywhere on the rubric. This is for those moments that make you step back and think "Wow!"

A couple of points on the scoring. You are comparing teams against criteria on the rubrics. One team might be better at one aspect than another, but if they both match only the criterion needed for a 2 score, then they are both scored a 2. It is not possible to award half points. Remember to measure each team against the criteria on the rubric only and not against other teams or the level that you personally feel they should have achieved. Be analytical and fair, and everything will work itself out.

The trickiest aspect of this is ensuring that Judge A in Pod 1 is marking the same as Judge B in Pod 2. The only way we can do this is by using the rubrics exactly like I have described. Like a mark for a test, different teachers can mark the test, but they always use the same criteria. A 1 remains a 1 until the team fully meets the criteria for a 2. Remember, you don't have to give the same score for both criteria in a rubric category.

The other point to note is the awarding of a 4. Please do not mistake a good 3 as a 4. A 4 needs to go beyond the scope of the rubric and really show how the team has exceeded the criterion stated. If the team is just a really great 3, then they are a 3. If you award a 4, you need to add a short comment to explain how the team has specifically exceeded this criterion.

You will also notice that the feedback page of the rubric has some check boxes on the bottom. If your event uses any of the optional awards, tick the boxes if you feel that the team is a candidate for one or more of these awards. Use the descriptions to help you decide. You can tick more than one box per team, but you don't have to tick any. Only do so if you think the team should be considered.

I will be floating around at the event and can help with those tough calls, but please remember you are a judging team. Chat with each other, voice your opinion, and then make the decision and move on.

You will hand in or submit your rubrics once they are complete, and the scores will be collected and entered in our **Official Judging Spreadsheet** or the **Event Hub**, which will do all the number crunching for us. This presents us with our leader board for each award that we will use during award allocations. Don't forget there will be input from the Robot Game scores and the referees' *Gracious Professionalism* scores will make up part of the team's Core Values score. Combined, all scores will give us the overall picture of the teams.

Awards	As you can see from the schedule, we are all due to assemble back in <mark>XXX</mark> in <mark>XXX</mark> room so that we can check the scores and rankings for any issues before we allocate awards.
	*Give out/show **Awards List***
	There are various awards being given out at this event. The Champion's Award goes to the overall winning team who has excelled in all areas. We also have area awards – Robot Performance for the robot game, Innovation Project, Robot Design, and Core Values. Our event will give out <mark>XXX</mark> awards. We spread the awards out so as many different teams as possible are recognized, so don't be surprised if a team wins a different award than you were expecting. The overall aim is to reward the best teams with awards. If we can say we have done that, everyone will be happy.
	The event will finish with the closing ceremony, where we celebrate the amazing work of all the teams and hand out the awards. I would highly recommend you stay for that. It is great to see how proud the teams are of what they have achieved.
	This training covered a lot of information, but hopefully you feel prepared to serve in this role. I am more than happy to answer any questions or respond to any comments if you have any.
45-minutes	
Questions	Over to you. What questions have you got?
	Allow judges to ask questions about any of the material covered in the training.
	Remember, the event starts at <mark>XXX</mark> on <mark>XXX</mark>. I will be there to support you and talk through any last-minute changes or updates to the schedule of events.
	Thank you so much for judging, and I hope you are as excited as I am for our event. I can't wait for you to see what these amazing teams will do!
60-minutes	
Additional Training	*If time allows, you may also do the following training activities with the judges:* • Separate judges into their pods. Have them discuss the schedule, roles, and rubrics. • Watch **Judging Scenarios** training video or share example scenarios for judges to practice scoring and discuss as a group. • Practice giving positive and constructive feedback using feedback starters in the **Judge Script and Questions**. Ask judges to come up with their own feedback starters to use. • Review **Season Challenge Overview**. • Watch **Robot Game Missions** video.