

TEAM MEETING GUIDE













FIRST® LEGO® LEAGUE GLOBAL SPONSORS



The **LEGO** Foundation

Introduction

Welcome to FIRST® LEGO® League Explore!

In *FIRST*[®] LEGO[®] League Explore, teams focus on the fundamentals of engineering as they explore real-world problems, learn to design and code, and create unique solutions made with LEGO[®] bricks and powered by LEGO[®] Education SPIKE[™] Essential.

FIRST LEGO League Explore is one of three divisions by age group of the *FIRST* LEGO League program. This program inspires young people to experiment and grow their confidence, critical thinking, and design skills through hands-on learning. *FIRST* LEGO League was created through an alliance between *FIRST*[®] and LEGO[®] Education.



FIRST	FIRST	FIRST
LEGO	LEGO	LEGO
LEAGUE	LEAGUE	LEAGUE
DISCOVER	EXPLORE	CHALLENGE

FIRST® IN SHOWSM presented by Qualcomm and MASTERPIECESM

Welcome to the *FIRST*[®] IN SHOW[™] season presented by Qualcomm. This year's *FIRST* LEGO League challenge is called MASTERPIECE[™]. Children will learn about how people's passion for the arts are shared through STEM (Science, Technology, Engineering, and Math).

During each session, they will experience the engineering design process. There is no set order for this process, and they may go through each part several times in a single session. This means that during a session, children will be exploring the theme and ideas,



PRESENTED BY Qualcom

creating solutions, testing them, iterating and changing them, and then sharing what they've learned with others.



Working in Teams

Children work together in teams of up to six members using pieces from the LEGO Education SPIKE™ Essential set, and an Explore set. They will collaborate and communicate to build, learn, and play together.

Children should be encouraged in every session to work with their teammates, listen to each other, take turns, and share ideas and pieces.



Explore Story



Explore

Welcome to MASTERPIECESM! The children will explore how people share their hobbies and interests in creative and captivating ways. They will learn about different places where people share their talents or go to enjoy a show. Experts from a variety of backgrounds are involved in every step of putting on a show from stage managers to performers. They'll learn how to share their own interests and build a place of their own design.

Create and Test

The children will build stages where different types of performances can take place. They will explore coding and motorizing their team model. They will add lights and sounds to their model to make it stand out and be engaging for the audience.

Share

The children will record their ideas and designs in their *Engineering Notebooks*. They will share their builds and what they learned with others. Finally, they will participate in the festival, where they share their team posters and team models with reviewers, families, and friends. Most importantly they will...



Playful Learning in Action

FIRST® Core Values

The *FIRST*[®] Core Values are the cornerstones of the program. They are among the fundamental elements of *FIRST*[®] LEGO[®] League. By embracing the Core Values, children use discovery and exploration of the theme in each session and learn that helping one another is the foundation of teamwork. It is important that the children have fun. The more playful the sessions are, the more motivated the children will be.



We are stronger when we work together.



We enjoy and celebrate what we do!



We respect each other and embrace our differences.



We explore new skills and ideas.



We apply what we learn to improve our world.



We use creativity and persistence to solve problems.

Team Roles

Here are sample team roles to use during the sessions. Everyone could experience each role multiple times throughout their *FIRST* LEGO League Explore experience. Using roles helps the team function more efficiently and ensures that everyone on the team is engaged. Some roles, like the builder and coder, could be filled by multiple children during a session when the experience is designed for a pair of children.



What Does the Team Need?

LEGO® Education Set

LEGO[®] Education SPIKE[™] Essential Set

Note: Other LEGO Education sets such as WeDo 2.0 are also allowed.



MASTERPIECE[™] Explore Set

Each team will get one MASTERPIECESM Explore set. Leave the LEGO[®] pieces in their plastic bags until the sessions in which they are needed.

Two printed books contain the building instructions

for the Explore model. Bags marked 4 include enough pieces to build two additional basic stage models.



Electronic Device



Your team will need a compatible Bluetooth-enabled device like a laptop, tablet, or computer. Scan the QR code to view system requirements and download software.

Scan me for system requirements and software download



Team Poster Supplies

Each team will need a large poster board and various art supplies and materials in Sessions 10-11.



	Basic Stage	Minifigures	Music Concert Pieces	Motor and Hub Pieces	Prototyping Pieces
Bag	1	1	2	3	4
Book	1	1	2	2	-
R					



Tips

• The prototyping pieces and baseplates are used throughout the sessions to build solutions to the design challenges.

Management Tips



FACILITATOR TIPS

- Determine your timeline. How often will you meet and for how long? How many meetings will you have before your festival?
- Set team guidelines, procedures, and expected behaviors for your meetings.
- Get into the mindset that the team will be doing the work. You will facilitate their journey and remove any major obstacles.
- Guide your team as they work independently through the tasks provided in each session.
- Use the guiding questions in the sessions to provide focus and direction to the team.
- Jobs are listed in some sessions that connect to the Career Connections pages in the back of the *Engineering Notebook*.
- Teammates should be encouraged to work with each other, listen to each other, take turns, and share ideas.

MATERIAL MANAGEMENT

- Place any extra or found LEGO pieces in a cup. Have children who are missing pieces come to the cup to look for them.
- Wait to dismiss your team until you look over their LEGO set.
- The lid of the LEGO set can be used as a tray to keep pieces from rolling away.
- Use bags or containers to store any unfinished builds or assembled models.
- Designate a storage space for the built mission models and mat.
- The Material Manager role can help with the process of clearing away and storing materials.



- Read the *Engineering Notebook* carefully. The team will share the notebooks and work on them collaboratively.
- The notebook contains relevant information and guides the team through the sessions.
- The tips in this *Team Meeting Guide* will direct you how to support each session.
- As facilitator, help guide the team members in the performance of their roles during each session.
- Team roles are outlined in the *Engineering Notebook*. Using roles helps your team function more efficiently and ensures that everyone on the team is involved.





8 Team Meeting Guide | Getting Started

Pre-Session Checkpoint

Read the student *Engineering Notebook* and this *Team Meeting Guide* before starting the sessions. They are full of very useful information to guide you through this experience. Use this checkpoint to help you get started and guide you toward success.

- Ensure you have received all materials needed to implement the program. See page 6 for what you need.
- Identify the space you will use and where to store materials between sessions.
- Think about your final event. Do you need to register for your partner event or are you having your own classroom festival? See page 30 for more details.
- Create a plan for how you will use the program. How often during the week will you do it? How many weeks will it last?
- Make sure you have a Bluetooth-enabled device with the SPIKE[™] app installed.
- Unpack the SPIKE[™] Essential set (if not already done) and sort the LEGO[®] elements into the tray before Session 1. Make sure the hub is updated and fully charged or has batteries in it.

- Familiarize yourself with the contents of the Explore set.
- Explore the *FIRST*[®] Core Values. These are the essential foundation of *FIRST*.
- Watch the *FIRST*[®] LEGO[®] League Explore season videos on the official *FIRST* LEGO League YouTube channel.
- The team could complete the Getting Started activities in the app so that they gain experience in building and coding before starting the sessions.
- Share theme-related vocabulary with the team. Words could include *performance*, *exhibit*, *artifacts*, *visual effects*, *special effects*, and *audience*.
- Encourage the team to use the Team Progress page found in their *Engineering Notebook* throughout the sessions to help them keep track of their goals.

Session Checkpoint

- Session 1 Team learned about each others' hobbies and interests.
- Session 2-3 Team built the Explore model.
- Session 3 Team generated ideas for how technology can help share what they love to do.
- Session 4-6 Team demonstrated they can build and code the SPIKE Essential models.
- Session 8-9 Team designed and built their team model.
- Session 10-11 Team prepared their team poster and are prepared for the festival.

Scan me for helpfu resources

• The team will use discovery to explore the MASTERPIECESM theme and explain how people share what they love to do.

Session 1

• The team will build a place to share a hobby or interest.

Introduction (10 minutes)

Let's Discover

- Read the definition for **discovery** to the team. (see <u>page 5</u>)
- Talk about what discovery is. Have the team provide examples of this Core Value.
- Extension: Draw yourself using **discovery** on the Core Values page in the *Engineering Notebook.*



10 Team Meeting Guide | Sessions

Hobbies and Interests



Share (10 minutes)

Have the team:

- Share what they did in the session.
- Explain their hobbies and interests.
- Share how they use art or creativity in their interests.

Guiding Questions How do you share what you love **Hobbies and Interests** to do? Activity 2 Tasks (15-20 minutes) Where do you go when you want Your team needs: Explore how people share what they love to 4 to learn about something new? do Llove skateboarding! Help Does the Explore story give you Talk about places in your community where me show my friends people share what they love to do. any ideas for Izzy? how fun it is! Challenge Discuss the creative ways Izzy could get her friends interested in skateboarding. Use the prototyping pieces to build a place where Izzy could share her love of skateboarding. **Session Tips** Share your ideas. 1771 4 Children can set goals and share their progress in their Engineering Notebook. Pages 6-7 can be used throughout the season. 5 Give the team the LEGO® prototyping pieces (bags labeled 4) to create their My ideas: designs. Do NOT open any other bags. 6 At the end of each session, children should share what they have accomplished. Cleanup Anything built with the prototyping pieces should be taken apart. • Place the prototyping pieces

 Place the prototyping pleces back in the Explore box or in a container labeled "Prototyping Pieces."

- The team will build the basic stage and minifigures in Bag 1.
- The team will explore different jobs in the arts and tools or objects used.

Introduction (10 minutes)

Go Team

- Read the definition for **teamwork** to the team. (see <u>page 5</u>)
- Talk about what teamwork is. Have the team provide examples of this Core Value.
- Extension: Draw scientists using **teamwork** on the Core Values page in the *Engineering Notebook*.

Guiding Questions

- What do you think could happen on the stage?
- What do the icons on the mat represent?
- What would you showcase on the stage?



10

Engineering Notebook | Sessions

Session 2



Session Tips

- 1 You will find the estimated timing in the lesson for each page's tasks. This is to assist with children's self-regulation.
- 2 The team will need Book 1 and Bag 1 from the Explore set.
- 3 The team will add the music concert pieces to the basic stage in Session 3.

Extension

- Explore different jobs and careers related to the arts.
- Research what it takes to become and expert in one of the jobs that was discussed.

Behind the Scenes



Complete the Core Values page throughout the sessions during the Introduction activities.

Share (10 minutes)

Have the team:

- Share what they did in the session.
- Share what they learned about the experts in the Explore story.
- Demonstrate how the different minifigure items could be used.
- Describe their scene for the Explore story.

Guiding Questions How would the characters in the **Behind the Scenes** Explore story use the minifigure Activity 2 Tasks (15-20 minutes) items? Your team needs: Follow the building instructions in Book 1 to What scene are you going to make the minifigures. create on your stage? Explore the minifigure items. Re-read the Explore story (p. 4-5). Explain how the characters might use one or more of the items to help them in their job. Challenge Using the minifigures and stage, build 6 another scene for the Explore story that shows the stage being used in a different **Session Tips** wav. Share your scene and explain what is Which experts happening. 4 The team could also think of could help make my skateboarding show other jobs that are related to more exciting? concert venues, museums, or theaters. 5 Challenges are provided for the team to go further with the session tasks. My ideas: 6 The team can build their stage model on the mat to help contain the materials. Cleanup • The basic stage should stay assembled. Anything built with the prototyping pieces should be taken apart.

MASTERPIECESM 11

2

 The team will add the music concert pieces to the basic stage.

Session 3

 The team will identify different ways sound is used to help make an impact on an audience.

Introduction (10 minutes)

Let's Have Fun

- · Read the definition for fun to the team. (see page 5)
- Talk about what fun is. Have the team provide examples of this Core Value.
- Extension: Have everyone draw a picture of an example of fun on the Core Values page in their Engineering Notebook.

Guiding Questions What kind of music do you like to Session 3 listen to? Activity 1 Tasks (15-20 minutes) What instruments do you see in Follow the building instructions in Book 2 to Your team needs: the music concert pieces? build the music concert pieces. What kind of technology is used in Add the music concert pieces to the basic stage you built last session. the music industry? Place the concert stage on the mat near the music notes Discuss how sound or music is used to help performers entertain their audience. **Session Tips** 1 The team will need Book 2 and Bag 2 located in the Explore What kind of set. technology is used in the What music industry? The children can decide how to instruments have you seen arrange the performers on the being played stage. during a 3 Questions in the *Engineering* Notebook are meant to start a discussion or generate ideas. Extension Interview someone in the music Scan me to see a video of the music concert model! industry (i.e., singer, songwriter, music teacher). Collect sounds using a recording app and ask the children to 12 Engineering Notebook | Sessions identify them.

Sound All Around



The MASTERPIECESM Explore story page provides the season theme and the problem the team will solve.

Share (10 minutes)

Have the team:

- Share what they did in the session.
- Demonstrate how the concert stage works.
- Explain how sound is used to make an impact for an audience.
- Show different examples of sounds icons on the mat.



Guiding Questions

- What pieces of technology do you see that were added to the stage?
- What technology would you like to add to the stage?
- What sounds would you feature on your stage?

Session Tips

- 4 Examples of the technology include the lights, speakers, and other music equipment.
- 5 Share photos of music venues in your community that the children may have seen before.
- 6 Children can find more information on the careers mentioned in the *Engineering Notebook* on pages 30-31.

Cleanup

MASTERPIECESM

13

- The stage can remain assembled. Bag 4 contains enough pieces for two additional stages. Another stage will be needed in Session 7.
- Anything built with the prototyping pieces should be taken apart.

• The team will build the LEGO[®] model from the lesson and explore motor coding blocks.

Session 4

• The team will identify creative ways stages are used in a theater.

Introduction (10 minutes)

Let's Innovate

- Read the definition for innovation to the team. (see page 5)
- Talk about what innovation is. Have the team provide examples of this Core Value.
- Extension: Draw an innovator using **innovation** on the Core Values page in the Engineering Notebook.



- Can you build and code the LEGO model using motor blocks?
- How do you change the program so the LEGO model moves in a different way?
- What kind of technology is used in a theater?



Session Tips

- 1 Walk the team through how to access their appropriate lesson in the app.
- 2 If your team is new to coding, you could have them complete the getting started tutorials.
- 3 The team will only use their LEGO Education SPIKE™ Essential set for this session. They won't use anything from the Explore set or Explore model.

Extension

- Research the theaters that exist in your community and discuss what kind of performances take place there.
- Identify who the audience is for different types of theaters.

14 Engineering Notebook | Sessions

Theater Technology



The Team Journey page on the back cover of the *Engineering Notebook* provides an overview of the team experience.

Share (10 minutes)

Have the team:

- Share what they did in the session.
- Show the motor coding skills they learned.
- Explain how technology is used to make an impact for an audience.
- Show different examples of theater icons on the mat.

Theater Technology Activity 2 Tasks (15-20 minutes) Your team needs: Modify the SPIKE model from the previous task so that it represents a rotating stage. Open the SPIKE[™] Essential app Change the program to make the stage rotate every 10 seconds. Try it out! Challenge Build two different scenes on your rotating A rotating or 5 What stage. The scenes can be about what you revolving stage responsibilities does a love to do! can make it easier stage manager have in 6 to move props or Place your stage on the mat. You could use a theater? scenery. Find out more on the theater icons as building locations! page 30! Share the scenes you built and explain how you coded the model. 🚾 education 🔌 🎬

MASTERPIECESM 15

Guiding Questions

- Can you add something to your model so it looks like a stage?
- Can you modify the program to make it rotate every 10 seconds?
- What will your team feature on the stage?

Session Tips

- 4 The team will determine how to change motor direction and motor speed.
- 5 Teams should use pieces from the SPIKE™ Essential set to build their stage.
- 6 Teams can use the minifigures found in the SPIKE Essential set.

Cleanup

- Everything built in this session should be taken apart and returned to the LEGO[®] Education SPIKE Essential set.
- Return minifigures to the Explore set.
- Fold the mat and store it in a place where it won't get damaged.

 The team will build the LEGO[®] model from the lesson and explore the use of lights and sensors.

Session 5

 The team will identify how lights and sounds are used to make a museum exhibit interactive.

Introduction (10 minutes)

Be Inclusive

- · Read the definition for inclusion to the team. (see page 5)
- · Talk about what inclusion is. Have the team provide examples of this Core Value.
- Extension: Draw an engineer showing inclusion on the Core Values page in the Engineering Notebook.



• How do you change the program

- so the LEGO model plays a different light?
- Can you code the model to make a different sound?
- What kind of technology is used in a museum?

Session Tips

- 1 The team will learn about and use light and sound blocks.
- The team should focus on light blocks in this activity. They will experiment with sound blocks in the next activity.
- 3 There are different sensors provided in the LEGO Education SPIKE[™] Essential set that the team could try to incorporate.

Extension

· Have the team complete another lesson from the SPIKE Essential app like the Trash Monster Machine.

Museum Exhibit



Share (10 minutes)

Have the team:

- Share what they did in the session.
- Show the sensor coding skills they learned.
- Demonstrate how they modified the model and code so that light and sound is triggered by a sensor.

Museum Exhibit Activity 2 Tasks (15-20 minutes) Your team needs: Modify the SPIKE model from the previous task so that it represents a museum exhibit. Open the SPIKE[™] Essential app. Change the program so that it displays a new light pattern. Try it out! model? Challenge Change the program so that the model will A light show play a sound when someone approaches could help Izzv's vour exhibit. skateboard skills Share what you built and explain how you really stand out! coded the model. How could I use technology like this in a museum exhibit? Check out page 31. Draw your ideas! 6 Cleanup Modify the program to create a unique light pattern! **MASTERPIECESM**

1

Guiding Questions

- Can you modify your model so it looks like something you would see in a museum?
- Can you activate your light pattern with a new sensor?
- Can you use light and sound in the

Session Tips

- 4 The team could build anything they might find in a museum (i.e., sculpture, artifact, exhibit).
- 5 The team will apply the coding concept of light, sound, and sensor blocks.
- 6 The Ideas space can be used to write down the coding steps planned or which coding blocks the team will change.
- Everything built in this session should be taken apart and returned to the LEGO Education SPIKE Essential set .
- For easier material management, keep the pieces from the Explore set separate from the SPIKE Essential set.

- Session 6 The team will build the LEGO[®] model
- from the lesson and code the robot to drive
- The team will apply their coding and building skills to change the existing robot into a vehicle with a camera.

Introduction (10 minutes)

Have an Impact

- · Read the definition for impact to the team. (see page 5)
- Talk about what impact is. Have the team provide examples of this Core Value.
- Extension: Draw an inventor having an impact on the Core Values page in the Engineering Notebook.



Guiding Questions

- How do you change the program so the LEGO robot moves differently?
- · Can you modify the robot so that it drives with four wheels?
- What kind of technology is used to create visual effects?

Session Tips

- The team will create their first 1 mobile robot. Make sure the team watches where the robot drives so that it does not fall if placed on a table.
- 2 The team could code the robot to drive to different icons on the mat.
- The team could practice 3 coding the robot to turn.

Extension

- Identify popular vehicles in movies and attempt to recreate them.
- Modify the vehicle so that it drives with three wheels.

Visual Effects



Share (10 minutes)

Have the team:

- Share what they did in the session.
- Show how they have applied coding skills learned in previous sessions to make a moving camera.
- Share how their moving camera was built.

Guiding Questions

- How can you modify the robot design so that it hold a camera?
- Can you code the robot to stop at specific icon on the mat?
- Can you code the robot to drive at different speeds?

Session Tips

- 4 You may want to limit the team to only using pieces from the LEGO[®] Education SPIKE[™] Essential set.
- 5 The team can practice positioning the robot so that it reaches a specific icon.
- 6 You could place an obstacle on the mat to encourage teams to code their robot to turn.

Cleanup

MASTERPIECESM

- Make sure the pieces used from the LEGO Education SPIKE Essential set are returned.
- If any materials from the Explore set were used, make sure they are returned.



MASTERPIECESM 21

• The team will combine the basic stage model with the motor and hub.

Session 7

• The team will apply all their coding and building knowledge to create their own stage.

Introduction (10 minutes)

Discovery Build

- Have the team provide examples of how they have used **discovery** throughout the sessions.
- Have the team create a build from the prototyping pieces representing this Core Value or examples of the team using **discovery**.





Share (10 minutes)

Have the team:

- Share what they did in the session.
- Show how they have applied coding skills learned in previous sessions to make their model move.
- Demonstrate how their stage engages an audience.



Guiding Questions

- Who will be coming to watch the show or interact with the exhibits?
- Can you use the ramps in your design?
- Can you code the stage to flash lights, play sounds, and move?

Session Tips

- 4 Help the team identify an audience and think about what their needs will be when attending the show.
- 5 The team could be challenged to modify their model based on a different spot on the mat.
- 6 Identify places in your school or community that are designed to be accessible to all people.

Cleanup

- Make sure unused pieces from the LEGO[®] Education SPIKE[™] Essential set are returned.
- The motor and hub can remain attached to the stage model.

Sessions 8&9

- The team will draw their team model design and label its required parts.
- The team will create a team model to showcase a talent or interest that uses technology in creative ways.

Introduction (10 minutes)

Teamwork and Fun Builds

- Have the team provide examples of how they have used **teamwork** (Session 8) and **fun** (Session 9) throughout the sessions.
- Have the team create a build from the prototyping pieces representing this Core Value or examples of the team using **teamwork** and **fun**.

Guiding Questions

- How will you plan out your design for your team model?
- What do you think is the most important part of your team model?
- How will your team model help you share your interests with others?

Session Tips

- 1 The team will need all parts of their Explore model and the mat.
- 2 Each team member could build a part of the team model using a baseplate.
- 3 The team model can use extra LEGO[®] bricks, minifigures, baseplates, and other LEGO elements. You may NOT use glue, paint, or art supplies.



- Create a detailed, labeled drawing of your team model and all its parts.
- Research theaters in your community and build their features into the team model.



Team Model



Share (10 minutes)

Have the team:

- Share what they did at the end of each session.
- Explain the program and how the motor, sensor and light are used in the model.
- Review the list of required parts and identify them on the team model.
- Demonstrate how the team model works.

Guiding Questions • What the strengths and the Build a team model that Team Model represents a unique way to share weaknesses of your design? your team's hobbies and interests with others. How can you motorize part of your Requirements team model? Be sure to include a hobby Include all parts Motorize How does your team model show or interest, a light or sound of the Explore the Explore feature, and an audience. model. model your interest or hobby in a new or unique way? **Session Tips** Use LEGO coding. 4 The team model should be able to fit on a table and be easily transportable. Be made of only LEGO[®] elements. Use the MASTERPIECE[™] mat. 5 The team will apply coding Label the required parts of concepts throughout the your team model. sessions to create their programs. 6 The team should incorporate all parts of the Explore model into their team model as well as the Explore mat. Cleanup The team model will remain assembled from this point forward until the event. Check that any unused pieces from the LEGO® Education

MASTERPIECESM 23

SPIKE[™] Essential set are

returned to it.

Sessions 10 & 11

- The team will create a plan for what they will include on their team poster.
- The team will design and create their team poster.

Introduction (10 minutes)

Innovation and Inclusion Builds

- Have the team provide examples of how they have used innovation (Session 10) and inclusion (Session 11).
- Have the team create a build from the prototyping pieces representing this Core Value or examples of the team using **innovation** and **inclusion**.



- What different topics did you explore?
- What did you create and build?
- Can you showcase what you did in previous sessions on your poster?

Session Tips

- 1 You will need to provide a large poster board and various art supplies. A trifold poster board works well.
- 2 The goal is for the team to create the poster themselves. You can support them and provide insight.
- 3 The team can look back at the Team Journey and Core Values pages in their Engineering Notebooks.

Extension

- Look back at the extensions in Sessions 1-4 to further explore the season theme.
- The Multimedia Resources also have additional activities you could do with your team.



Team Poster

Team Poster

4



Here's your chance to capture ideas for your team poster.

Sample Topics: Explore, Create, Test, Share, Core Values, Team Journey

~

0.0

6

Share (10 minutes)

Have the team:

5

MASTERPIECESM

25

- Share what they did at the end of each session.
- Show their team poster design.
- Explain their team journey.
- Demonstrate how they will present their team poster.

Guiding Questions

- How can you show your team journey on the poster?
- What will you include on your team poster?
- How will each person on the team share about the poster?

Session Tips

- 4 Sample topics for the poster are provided for the students. They can choose to include whatever they want!
- 5 Provide extra scrap paper for the team to draw and write their ideas for their team poster.
- 6 Two boxes would fit on each fold on a trifold poster board.

Cleanup

- Make sure you have a safe place to store the poster, especially if it needs to lay open to dry.
- You may need extra time at the end of each session to clean up the art supplies.

- The team will reflect on their MASTERPIECESM experience.
- The team will create a plan for what to share at their final event.

Introduction (10 minutes)

Impact Build

Session 12

- Have the team provide examples of how they have had an **impact** throughout the sessions.
- Have the team create a build from the prototyping pieces representing this Core Value or examples of how the team has had an **impact**.

Guiding Questions

- Can you explain the code you created for your motorized part?
- How does your team model relate to the MASTERPIECESM theme?
- Can you share about your team's journey?

Session Tips

1

Go over the



reviewing sheet and reviewing questions with your team.

2 Ask the team the reviewing questions and practice the responses they would give the reviewers.

3 If you are not attending an official festival, you can still run your own festival or have an informal sharing event.

Extension

- Present your presentation to another team, class, or group of adults.
- Ask for feedback to make improvements before your final event.



Prepare for Event



Share (10 minutes)

Have the team:

Let's celebrate how well we all worked together!

It is much more fun when

everyone on the team is included.

- Practice their team poster presentation.
- Practice their team model presentation.

Prepare for Event

Consider what you will share at the event.

 e.any our describe your team model? e.by barre what you love to do. • What did you leam about the season challenge? • How did you use Core Values? • What part of your team model is motorized? • What part of your team model is motorized? • What did you include in your team poster? • How did you code your motorized part? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey?<th> • An you describe your team model? • Splain how your team used innovation and creativity to share what you love to do. • What did you use Core Values? • How did you use Core Values? • Nota tid you core your motorized part? • Nota tid you include in your team poster? • How did you code your motorized part? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does team j</th><th></th><th></th>	 • An you describe your team model? • Splain how your team used innovation and creativity to share what you love to do. • What did you use Core Values? • How did you use Core Values? • Nota tid you core your motorized part? • Nota tid you include in your team poster? • How did you code your motorized part? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does the poster show your team journey? • How does team j		
<complex-block> 4 • • • • • • • • • • • • • • • • • • •</complex-block>	<complex-block></complex-block>	Can you describe your team model? Explain how your team used innovation and creativity to share what you love to do.	What did you learn about the season challenge? How did you use Core Values?
 What part of your team model is motorized? How did you code your motorized part? What did you include in your team poster? How does the poster show your team journey? 	<complex-block></complex-block>	4	
		What part of your team model is motorized? How did you code your motorized part?	What did you include in your team poster? How does the poster show your team journey?

MASTERPIECESM 27

Guiding Questions

- How will you present your poster and model at the event?
- How do we show Core Values?
- What does your team need for the event?

Session Tips

- 4 Every question on this page doesn't need to be answered. They are just to help your team feel ready for the event.
- 5 You could have the team practice their presentation by presenting to others before their event.
- 6 Your team could register for an Explore festival or you can run your own festival.

Cleanup

- · Make sure the team model and team poster are stored and ready to be transported to the event.
- Check that you have the device, charging cord, and fully charged battery for the event.

Event Preparation

FIRST[®] LEGO[®] League Explore events are called festivals.

The main goal of an event is for the team to have FUN and to feel that their work is valued.

Remind the team that the festival is a learning experience and the goal is to have fun!

Encourage the team to interact with other teams to share what they have learned and to support each other.

Determine what type of event you're attending and who the organizer of your event is. Find out the requirements and details for the event you are attending.

If you purchased a Class Pack, the event will be your responsibility. Check out the *Class Pack Event Guide* for more details!

Have the team prepare a checklist of materials needed for the festival.

Review the time and location where you are meeting for the festival and how long they are expected to stay – share this with families. Encourage families to attend if this is possible.



Events Complete and All Done?

Here are some tips for wrapping up after the last event your team will participate in:

- Clean up and take apart the team model. Make sure SPIKE™ Essential elements go back to their set.
- Inventory the SPIKE Essential set to make sure all the pieces are there.
- Decide what to do with Explore set elements.
- Allow time for the team to reflect on their experience.
- Hold a team celebration and give out certificates!



Scan me for event resources and examples of posters/builds





LEGO, the LEGO logo and the SPIKE logo are trademarks of the/sont des marques de commerce du/son marcas registradas de LEGO Group. ©2023 The LEGO Group. All rights reserved/Tous droits réservés/Todos los derechos reservados. *FIRST*[®], the *FIRST*[®] logo, and *FIRST*[®] IN SHOWSM are trademarks of For Inspiration and Recognition of Science and Technology (*FIRST*). LEGO[®] is a registered trademark of the LEGO Group. *FIRST*[®] LEGO[®] League and MASTERPIECESM are jointly held trademarks of *FIRST* and the LEGO Group. ©2023 *FIRST* and the LEGO Group. All rights reserved. 20082301 V1