Team Roles

Here are sample team roles to use during the sessions. Everyone on the team 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 will be filled by multiple children during a session. For example, the builder and coder roles can be duplicated where the experience is designed for a pair of children.

**Journey Recorder**
Captures the team’s journey by taking pictures or video. This media can be used for the team poster.

**LEGO Element Finder**
Locates the specific LEGO elements needed for each build step.

**Facilitator**
Guides the team through the sessions and their learning to achieve session outcomes.

**Material Manager**
Gathers materials needed for session and returns materials at end of session.

**Builder**
Assembles the LEGO builds following the building instructions.

**Team Captain**
Shares team progress with facilitator. Ensures session tasks are completed.

**Coder**
Operates the device and creates the programs in the app.
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.

- **Teamwork**: We found we were stronger when we worked together.
- **Inclusion**: We respected each other and embraced our differences.
- **Discovery**: We explored new skills and ideas.
- **Fun**: We enjoyed and celebrated what we did!
- **Impact**: We applied what we learned to improve our world.
- **Innovation**: We used creativity and persistence to solve problems.
Session 1

Outcomes
- The team will build the truck and create new truck designs.
- The team will use discovery to explore the CARGO CONNECT™ theme and how cargo is transported to different destinations.

Introduction (10 minutes)

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

Guiding Questions
- How can you load cargo and transport it to different areas?
- How do packages get delivered to your front door?

Session Tips
1. The team will need Book 1 and Bag 1 located in the Explore set.
2. Most of the tasks in each session should be done together by the team.
3. Writing and drawing space is provided in each session for each child to capture their thoughts and ideas.

Tasks (20 minutes)
- Talk about Ruby and Jacob’s questions.
- Use the space below to capture your inventive ideas!
- Follow the building instructions in Book 1 to make the truck.
- Look at the mat and discover how the truck works!
**Tasks (20 minutes)**

- Circle the routes the truck can take on the mat image.
- Draw your design of a truck that transports cargo.
- Label what products are in the cargo the truck transports.
- Share your creation with your team!
- Work as a team to build your amazing truck designs using the LEGO® prototyping pieces (Bag 4).
- Place your built trucks on the mat and show how they work.

**Let’s Explore**

**Your team needs:**

![Images of boxes and materials]

**DESIGNS**

Draw your designs!

**Share (10 minutes)**

*Have the team:*

- Share what they did in the session.
- Explain how cargo is transported to and from their community.
- Describe their truck designs.
- Demonstrate how their solutions work on the mat.

**Guiding Questions**

- What routes do cargo trucks use for transportation?
- Where do you see trucks doing deliveries in your town?

**Session Tips**

4. Give the team the LEGO® prototyping pieces (Bag 4) to create their designs. Do NOT open Bags 2 or 3.
5. Place the mat on top of a table or the floor for the team to interact with the mat.
6. Max the dog will give session reflection questions for the team.

**Cleanup Pointers**

- The truck should stay assembled, but everything else should be taken apart.
- Place the prototyping pieces back in the Explore box or in a container labeled “Prototyping Pieces.”