FIRST LEGO LEAGUE DISCOVER

CLASS PACK GUIDE

FIRST

LEGO education

Getting Started Checklist

Thank you to all the teachers and youth leaders who will be delivering the *FIRST*® LEGO® League Discover Class Pack to your students.

Please read the *Engineering Notebook* (this guidebook is given to the students) and the *Team Meeting Guide*. They are full of very useful information to guide you through the program. After completing the sessions, your students will be prepared to participate in an event that recognizes the magnificent achievements made by the teams.

We've created a checklist to guide you toward success. Use this to help you get started.

- ☐ Ensure you have received all materials needed to implement *FIRST* LEGO League Discover.
- ☐ Identify the space where you will meet and how you will store materials between sessions.
- ☐ Pick a date and location for your event. Share this information with families if they are invited to attend.
- ☐ Create a plan. How often during the week will you do the program? Will you complete a whole session at once or split the tasks across different meetings?
- ☐ Be sure all materials are unpacked and organized before starting Session 1. You may want to place the pieces into durable plastic storage bins. Get your children familiar with all materials.
- ☐ Share information about the program with families, including what the children will work on, and then send one Discover More Set home with each child after Session 1. Scan the QR code to visit the Family Engagement page.

Family Engagement Resources

- ☐ After completing the sessions, have the children participate in an event to celebrate their achievements.

Classroom Implementation

Flexible Implementation

First and foremost, use your professional judgment to augment this program to meet the needs of your students, class space, class timing, and additional curricular requirements. Set student expectations for participation in the program based on the student growth mindset of holistic and STEM skills.

Working in Teams

The sessions in the guidebooks have guided tasks for each student team. Here are the reasons behind this design:

- It ensures an equitable experience for every student in all aspects of the program.
- It provides additional opportunity for collaboration and communication.
- Small groups promote deeper learning of content and build holistic skills to share out learning with other team members.
- Fewer materials are needed, and they can be used by more students.
- Having smaller groups allows for students to get hands-on time with building and exploration.

How to Run Differentiated Groups

- Physically split the space to facilitate working in small groups.
- Establish norms for movement and talking in small groups.
- Be comfortable with talking and movement within groups.
- Orient students to daily goals for learning using the student outcomes for each session listed in the *Team Meeting Guide*.
- Have individual check-ins with each team at the start of class.
- Determine the length of time for daily tasks ahead of class and share with students.
- End each class with whole group sharing using the guiding questions outlined in the *Team Meeting Guide* as inspiration.

Classroom Management

Teacher Role

The role of the teacher in a *FIRST*® Class Pack environment is that of a facilitator and a coach. Your teaching style should include a focus on developing holistic skills, building STEM confidence, embracing challenging activities and using play, discovery, and exploration.

Important things to consider when using the facilitator mindset is to:

- Reinforce *FIRST* Core Values.
- Ask guiding questions to get students thinking.
- Be comfortable with not having all the answers.
- Let students learn for themselves through problem-solving.
- Create opportunities for students to have ownership of the learning process and outcomes.
- Reflect on student and team goals and how they are working to achieve them.
- Guide students to the resources to help them achieve their goals.
- Celebrate mistakes and see learning opportunities.

Student Growth Mindset

As you guide students through their experience, having the right mindset is important. Creating student ownership of learning can assist with this. Ownership can be achieved by allowing students to focus on the skills they are developing and what they want to achieve and to use their problem-solving skills.

There are no right or wrong solutions, just different ways of solving problems. There is plenty of opportunity for students to enjoy their successes and learn from their mistakes.

As a teacher, if you can establish perseverance and resilience as traits to celebrate and be grateful for, students will be more likely to strive for them. Students need to be challenged just enough that it stretches their minds and creativity without overwhelming them.

Promote inquiry by using open-ended questions that lead to more student discovery and investigation. Use the *FIRST Inspires Inquiry Poster* as a resource for inquiry questions you can use with your students.

Scan to download Class Pack posters.

Class Pack Posters

At the end of the their experience, all teams should participate in an event. All children should participate in the celebration. The celebration could be held in your usual meeting space, a classroom, a library, or anywhere else that has appropriate room for the teams to spread out, build, and have fun.

WHAT IS THE EVENT?

BEFORE THE EVENT:

- Choose a time and space for the event.
- Read the **Running Your Event** section to understand what teams and spectators will do during the event.
- Send invitations to families, caregivers, teachers, and friends.
- Find and assign volunteer reviewers who will listen to what the children have learned and provide encouraging feedback.
- Print the reviewing prompts and award certificates.

Event Materials

DURING THE EVENT:

- Lay out the mats so teams can build on them. You could push two mats together so teams can work together.
- Hand out reviewing prompts and assign at least one adult reviewer to each pair of teams.
- Get the children excited for the final challenge.
- Ensure the reviewers talk with the children.
- Hand out certificates at the end.
- Have fun and celebrate children's achievements.

AFTER THE EVENT:

- Teach the other STEAM Park lessons.
- Continue to teach other STEM activities related to the theme.
- Find opportunities to use the vocabulary learned through the experience.

Sample Event Schedule

Detailed Schedule

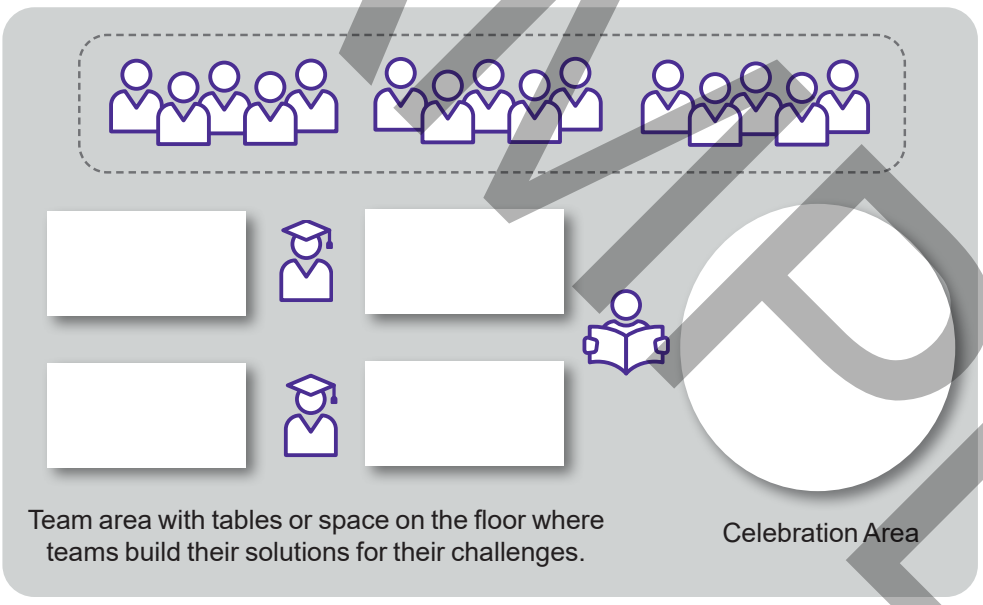
8:30-9:00	Setup
9:00-9:15	Welcoming the Teams
9:15-9:20	Transition
9:20-9:50	Final Challenge
Reviewing of teams occurs during the challenges	
9:50-10:00	Transition
10:00-10:15	Celebration
10:15-10:30	Cleanup

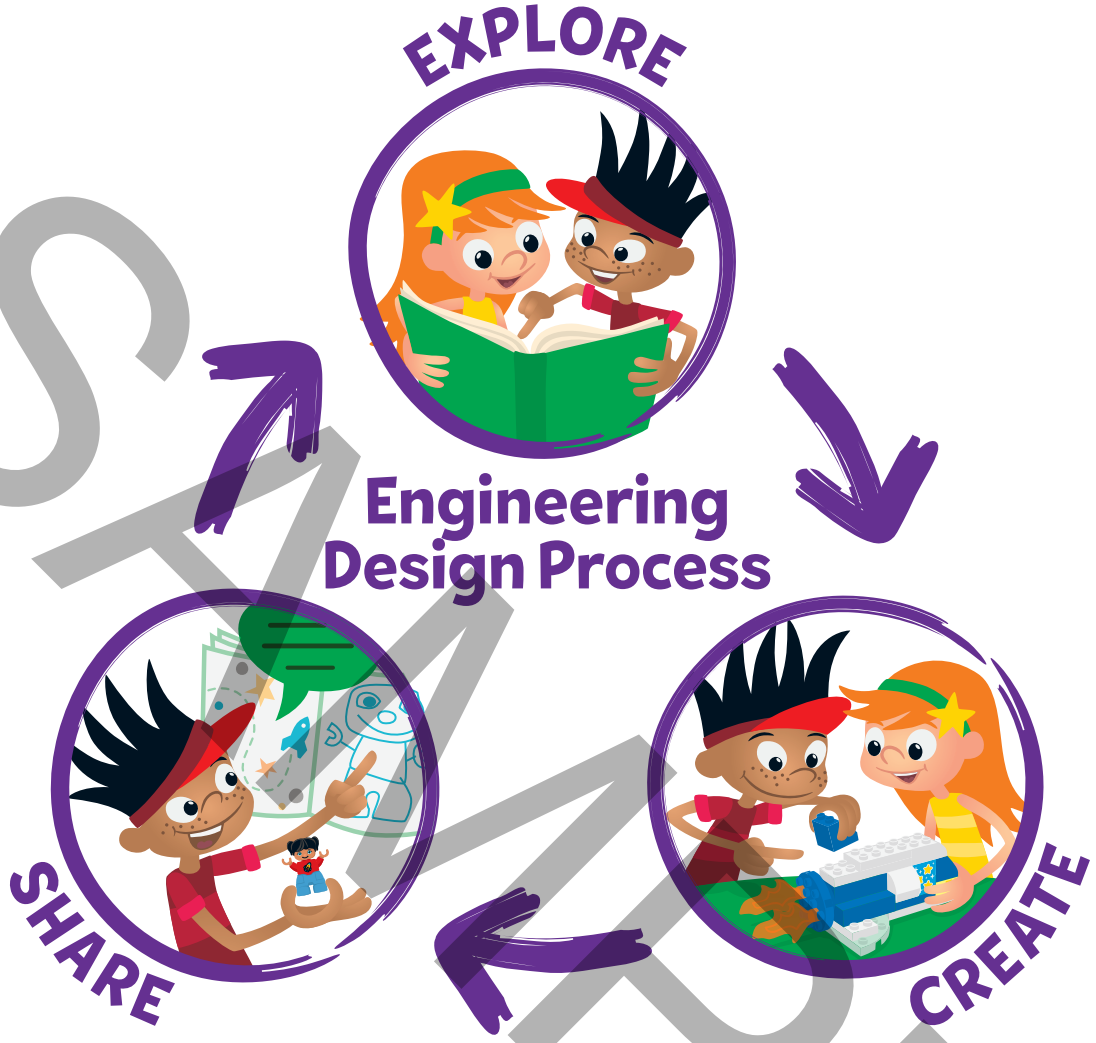
All times are flexible and can be changed to suit your school schedule.

An event can be delivered across multiple class periods, after school, or on the weekend.

Event Setup

Layout of Your Space





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