

**FIRST
LEGO
LEAGUE**

EXPLORE

CLASS PACK GUIDE



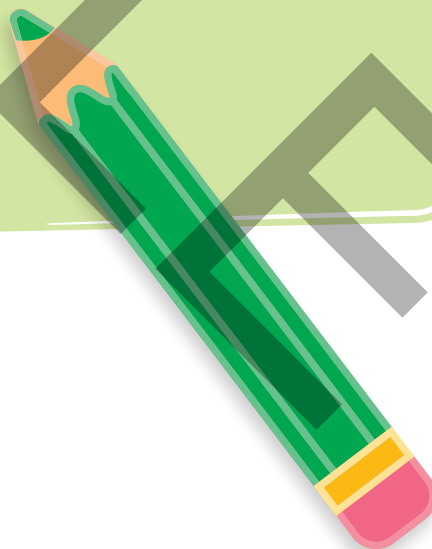
Getting Started Checklist

Thank you to all the teachers and youth leaders who will be delivering the *FIRST*® LEGO® League Explore 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 12 sessions, your students will be prepared to participate in an event that celebrates 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 run the program. See page 6 for list.
- ☐ Identify the space where you will implement the program and store materials. Think about the robot sets and any assembled models that may need to stay together.
- ☐ Think about the size of the event you want to have. Your event could be in your classroom or be a bigger event for the whole school.
- ☐ Create an implementation plan and timeline for how you will use the program. See pages 7-8 for implementation tips.
- ☐ Determine who will be participating in the program. Is it your entire class? Will the same materials need to be shared by different classes or other teachers?
- ☐ Determine how you will place the class into teams. The recommended team size is no more than 4 students.



Material Needs

Look over the following list for what materials and space you will need in your classroom. It is recommended that students work in teams of four.

Each team will need space to design, build, and code as well as to participate in teamwork activities. Access to an electronic device is important for each team to have for a successful program implementation.



For each student:

- 1 *Engineering Notebook**

For each team

(Recommend no more than 4 students):

- LEGO® Education SPIKE™ Essential Set
- 1 Explore Set
- 1 electronic device (see *Team Meeting Guide* for specific details)
- Team poster board and art supplies*

Classroom/Meeting space:

- Small workstations/tables for each team (enough space for LEGO® building, electronic device, and assembled models)
- Portable or permanent storage
- Internet access (optional)
- Power outlet access

*Items with an asterisk are consumable each time a team goes through this experience.

Storage and Material Management

Before you get started with the *FIRST*® LEGO® League Explore content, you might want to play a game where the teams identify pieces in their robot sets. It is recommended that students organize their LEGO® sets to help in taking ownership of materials. This would allow you to start processes and procedures for keeping the sets organized.

After you have gathered or purchased all of the materials your students will need, you could use plastic storage tubs or other containers to create a kit for each team in your class. You could store the *Engineering Notebooks* and the robot and Explore sets inside the kit for each team ensuring that each team is responsible for their materials and they won't get mixed up with others in the classroom.

Alternatively, you could also assign and label each robot set and Explore set with the team name and/or number so the students know what materials to grab each time. Be sure to check the battery levels of your hardware devices and charge them as needed between sessions.

After you have all the kits assembled, you will need a place to store them. Beginning in Session 8, each team may need a sturdy board or container (such as a large plastic container, a cardboard box, a wooden board, etc.) to protect, store, and potentially transport their team models. Beginning with Session 10, each team will need a poster board to create a team poster. You will also need to identify a place to store the posters.



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:

- Ensures equitable experience for every student in all aspects of the program.
- 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, coding, and exploration.

How to Run Differentiated Groups

- Physically split 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.



Running Your Event

Purpose: The Class Pack event is the culmination and celebration of the teams' work throughout the program.



PREPARATION (60 minutes before event)

Teacher:

- Set up the space.
- Print your event materials: awards list, reviewing sheet and reviewing questions for your reviewers.
- If you have space, set up seating for spectators, team members, and families.
- Allocate each team an area with a table where they will sit and work during the event and display their team model and poster.
- Get materials ready for additional activities (if desired) for teams to do during the reviewing time.

Teacher/Reviewer:

- Decide where the teams will present their work and whether this will be to the whole class or just to the teacher and/or volunteer reviewers.
- Make sure you have copies of the reviewing sheets and questions (one per team).
- Look at the formative assessment the teacher has recorded to understand the progress each team has made since the beginning of the program.
- You may want to have additional activities for the teams to do while other teams are being reviewed. This could include free building with LEGO® pieces or STEM-related activities.

Scaling up from the Classroom

- If you have more than 5 teams, you can scale up the size of your event and use a bigger room.
- The teams could do their presentations to reviewers in a separate room.
- You could provide STEM-related activities for teams.
- If there is sufficient capacity invite parents or other classes so teams can share the excitement with them.
- You could hold this event as a STEM night and invite the whole school and parents.

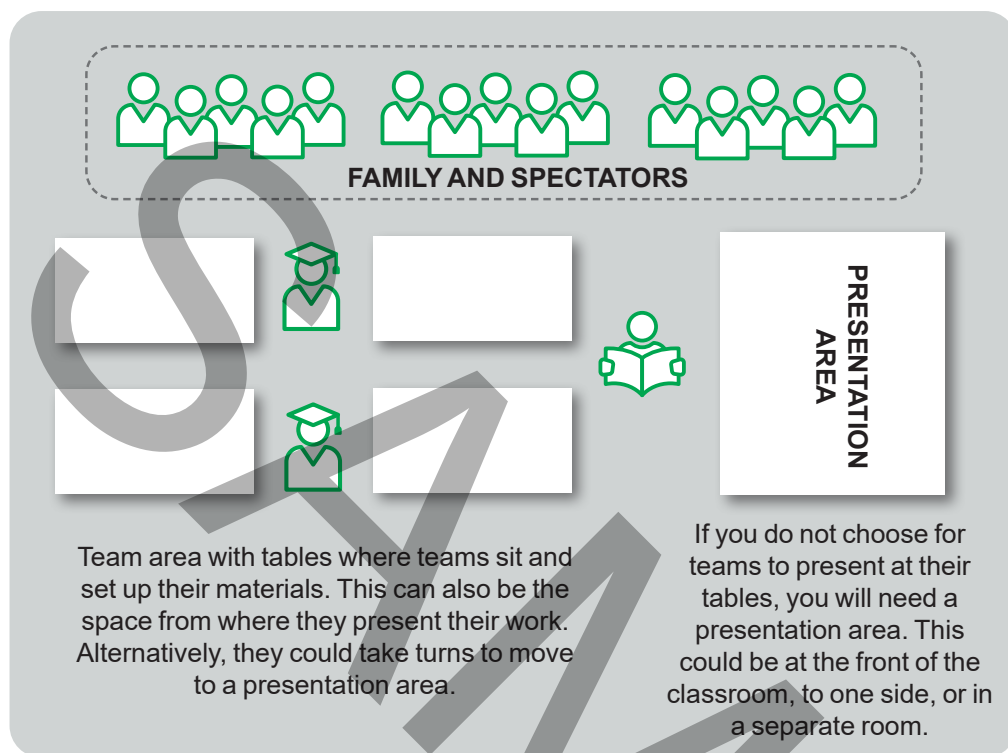


**Event
Materials**



Event Setup

Layout of Your classroom



Staff

- 1 teacher can run this event.
- 2-3 volunteers would be useful if they are available. These could be teachers, school staff, older students, or parents.
- The teacher/reviewer needs a simple understanding of the program and the reviewing sheet.



Time

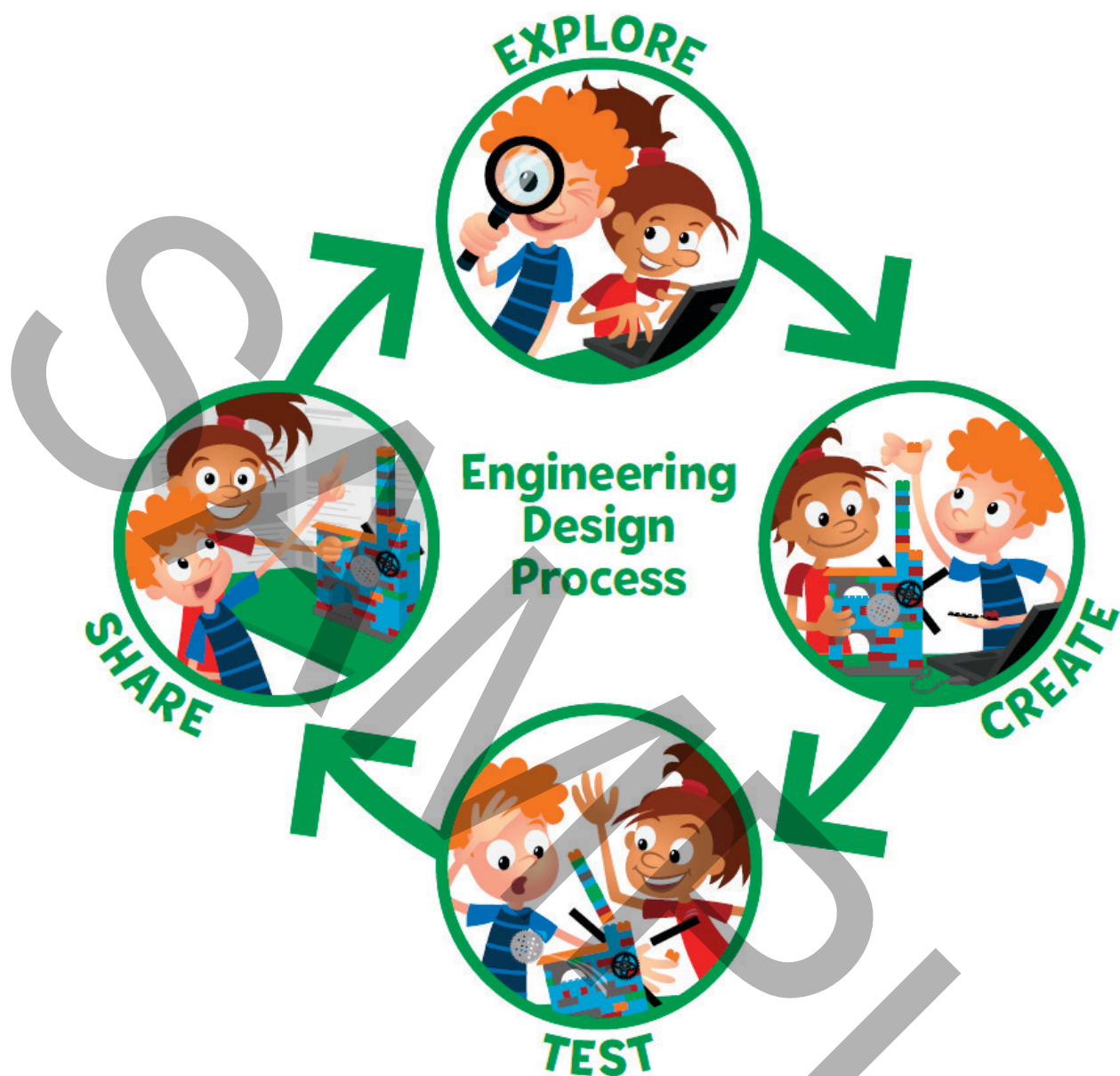
- When: During lessons in the school day, during an assembly, or after school.
- Timing: 2-3 hours depending on number of teams competing. This could be split over two different lessons.

Space

- The event space could be a classroom, school hall, or other large room.
- A private space for the teacher and volunteers to deliberate the awards could be helpful.

Awards and Certificates

- An award list is provided to recognize teams' achievements.
- Certificates or even small prizes are all very popular.



LEGO, the LEGO logo, and the SPIKE logo are trademarks of the/sont des marques de commerce du/son marcas registradas de LEGO Group. ©2025 The LEGO Group. All rights reserved/Tous droits réservés/Todos los derechos reservados. *FIRST*® and the *FIRST*® logo are trademarks of For Inspiration and Recognition of Science and Technology (*FIRST*). LEGO® is a registered trademark of the LEGO Group. *FIRST*® LEGO® League is a jointly held trademark of *FIRST* and the LEGO Group.