

Team Coordinator Guide

indi Sphero Robotics Missions

Welcome to the **TEAM Alliance Team Coordinator Guide for indi Missions**! This guide is designed to help you confidently lead your team through the competition season.

IN THIS GUIDE:

- Register and Manage Your Team
- Introduce the indi Missions
- Guide Productive Working Sessions
- Register and Prepare for Competitions



Team Coordinator Guide

indi Sphero Robotics Missions

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Welcome to Sphero Robotics Missions

Dear Team Coordinator,

Thanks for leading a team with this year's Sphero Robotics Missions (SRM)!

At [TEAM Alliance](#), we believe in a global community (you!) where students have a lifelong sense of confidence and excitement in technology. Each of the Mission Objectives are carefully designed to encourage your students to become better coders, problem solvers, and teammates.

SRM events provide an opportunity for student teams to compete against other students at Qualifying Events in their region, with the top teams qualifying to participate in a Championship Event.

[indi Missions](#) is a U9 program so students must be under the age of 9 as of August 31 of the year the season starts.

SRM Event Formats

- **In-Person Events:** Teams, volunteers, and officials are present at the same physical venue to participate in completing Mission Objectives.
- **Live Remote Events:** Teams participate from separate locations and perform Mission Objectives live under the supervision of event volunteers using video conferencing. This format is *included in the **In-Person** team registration* for teams that cannot attend a physical venue.
- **Online Submission Events:** Teams work on their Mission Objectives at home, school, or in their extracurricular club and submit them to be evaluated online by Evaluators within a specified window of time. This format is included in the Online Submission team registration only.

Here is a [handy guide for comparing the In-Person/Live Remote and Online Submission event formats](#), or feel free to contact TEAM Alliance if you have questions.

SRM Event Types

There are two types of Events that are included in your season registration:

1. **Qualifying Events:** An SRM event that qualifies teams for Championship Events.
2. **Championship Events:** An SRM state, regional, or national event that serves as the culminating competition for teams that qualify through designated Qualifying Events. In the U.S., Championship Events are typically state-level, but may include multiple Championship Events within a single state or combining multiple states into a regional Championship Event. Internationally, regional or national Championship Events are used where geographic considerations apply.

Review the *Championship Advancement Criteria* in the [indi Mission Manual](#) for more information on how to qualify for a Sphero In-Person or Online Submission Championship Event.

As a Team Coordinator, you do not need to be a programmer or a teacher to support students through the event. Instead, you'll act as a facilitator as the [Student-Powered™](#) teams work to explore, solve problems, and tap into their creativity. This Team Coordinator Guide gives you the tools and structure to support your students in preparing for the *Mission Objectives*.

How to use this Guide

This Team Coordinator Guide is designed for **In-Person and Online Submission SRM teams**. Most of the information is relevant to both event formats, but there are some sections customized to each event format type. Keep an eye out for these two icons for sections that are specific to either In-Person or Online Submission Formats.



Pages 4 - 6



Pages 7-9

1. Season Checklist - Print out the Season Checklist and it becomes a great resource so nothing is dropped.
2. Team and Competition Tips - The Team Roles and Competition Resources sections give you best practices on how to coordinate the student roles, get the equipment you need, lay out the field, and what to expect while competing this season.
3. Your First Robot Meetings - Remove the guesswork and follow the plans laid on in this Guide.
 - a. *Intro Sessions* - Fun ways to introduce the season's Missions and learn the robot
 - b. *Learning Sessions* - Based on the Intro Sessions, pick the Learning Sessions that your team needs. This is an opportunity to skip around if you have experienced students!
 - c. *Mission Sessions* - Tips on how to break down the steps to success for a Mission and prepare for competitions.
4. Competition - The team made it this far, time to compete!



SRM In-Person Season Checklist

Use the following checklists to stay on top of the competition requirements and timeline for In-Person and Live Remote Events.

Registering for the Sphero Robotic Missions

- ☐ Log into your account on myTEAMEvents.org. If this is your first time as a Team Coordinator, you may need to [create an account](#) and add your organization.
- ☐ [Register](#) and [pay](#) for your team(s), and select the In-Person and/or Online Submission option.
- ☐ **In-Person SRM Season Registration:** [Register](#) for an In-Person or Live Remote SRM Qualifying Event.

Preparing for the Sphero Robotic Mission

- ☐ Review the details of each *Mission Objective* in the [indi Mission Manual](#).
- ☐ Identify and recruit students to form a team. The recommended team size is three to five students. Once students for each team are selected, add them to the [Student Roster](#) and send the required digital TEAM Alliance Participation Waivers to their parent/guardian.
- ☐ Gather robots. The team needs two indi robots for the Missions.
- ☐ Designate 1-2 coding devices for the Sphero Edu Jr app to customize how indi responds to colors, if desired. indi can be used in a screen-free environment and programming indi with the Sphero Edu Jr app is not a requirement for a successful solution to each Mission Objective.
- ☐ Install the Sphero Edu Jr. app on the coding devices (optional)
- ☐ Learn more at <https://sphero.com/pages/apps>
- ☐ Get to know the parts in the [Sphero Craft Pack](#) (optional).
- ☐ Identify a room that students can use for team meetings and to set up the competition *Mission Field* on the [Code Mat](#). The *Mission Field* is **two (2) indi Folding Code Mats side by side**. The total size is 160 cm × 129 cm (5' 3" x 4' 3") (optional)
- ☐ Keep an eye out for an email about our Team Coordinator webinar that will take place in the fall.

Participating at an In-Person Event

- ☐ Review the [SRM Competition Day overview](#) to become familiar with the event flow.
- ☐ Assign team roles or make a plan for switching roles periodically during the *Event*.
- ☐ Use the meeting agendas in this Team Coordinator Guide to develop student coding and engineering skills.
- ☐ Develop and refine solutions for each *Mission Objective* your team needs to complete; you will showcase your *Mission Objectives* live at the tournament.
- ☐ Create a backup plan for *Mission Objectives* in case your code doesn't work as intended at the tournament.



- ☐ Prepare materials to bring to the event (robots, colored Tiles, coding devices, creative elements, etc.).
- ☐ Create a gameplan for your team to set up each *Mission Objective* at the Mission Field. The Event Host will be providing the Code Mat, so it's recommended to develop a strategy to set up your colored Tiles and field components on the Code Mat in three minutes or less, and a plan to remove these components after the Mission is completed.
- ☐ Consider how to transport the field components to the Mission Field, which may include bringing a small, rolling cart.
- ☐ Qualifying In-Person / Live Remote Events will include Missions 1 - 2.
- ☐ Championship In-Person Events will include Missions 1 - 3.
- ☐ If the Mission includes a timed scoring element, create a plan for a Student to record the time at the Mission Field. Teams are responsible for bringing their own timing device.
- ☐ Create a team chant, cheer, and/or t-shirt for your team. (optional)

Competing in Sphero In-Person Championship Event

- ☐ Review the *Championship Advancement Criteria* in the [indi Mission Manual](#) for more information on how to qualify for a Sphero In-Person Championship Event.
- ☐ [Register](#) for the Sphero In-Person Championship Event for your region **once you receive notification that your team has qualified.**
- ☐ Develop and refine solutions for all of the *Mission Objectives*, including the Championship Mission 3.
- ☐ Book travel arrangements and get school approval for travel, if required.
- ☐ Plan a team event to celebrate your results and success!



Tips for In-Person Competitions

The Sphero Global Challenge started as an exclusively virtual event, allowing teams to participate from all corners of the globe. However, starting in the 2026-2027 season, the **Sphero Robotic Mission** competitions will include numerous opportunities to participate in-person at Qualifying and Championship events. These events offer fun and collaborative opportunities to compete against other teams. To find in-person competitions near you, visit our growing list at myTEAMevents.org. You can even inquire about hosting an in-person competition!

If your team is participating in an in-person event, TEAM Alliance staff will work with the in-person tournament Event Host to provide information about the Sphero Robotic Mission tournaments. The Event Host will contact all registered teams about details leading up to the event, and include important information on the event page on myTEAMevents.org. All communication about the tournament will come from the Event Host to help you prepare.

Consider the following when supporting your team with preparing for an In-Person Competition

1. **Practice the Competition Format** — Run several timed practice sessions so students know what to expect and feel comfortable completing their Missions within the allotted time, including the setup and transportation of the Mission field elements.
2. **Prepare, but Don't Chase Perfection** — Help students focus on reliable strategies and achievable Mission Objectives rather than feeling like everything must work perfectly on the competition day.
3. **Let Students Take the Lead** — Encourage students to troubleshoot, make decisions, and understand their programs and strategies so they can confidently work together at the event.
4. **Plan for the Unexpected** — Talk through what students should do if a robot behaves differently than expected, a program doesn't work, or they need to adjust their strategy during a Mission.
5. **Make the Experience Bigger Than the Score** — Encourage students to cheer for other teams, meet new people, explore other teams' creative solutions, and celebrate everything they accomplished throughout the season.



TEAM COORDINATOR TIP:

Competition Day is about **much more than your team's final score!** Encourage students to enjoy the experience, cheer on other teams, make new friends, and take time to see the creative ideas and solutions other students have developed. Every team will approach the *Mission Objectives* differently, and seeing those different approaches is part of what makes an In-Person Event exciting. Help your students arrive ready to do their best, learn from others, celebrate their accomplishments, and most importantly—**have fun!**

SRM Online Submission Season Checklist

Use the following checklists to stay on top of the competition requirements and timeline.

Registering for the Sphero Robotic Missions

- ☐ Log into your account on myTEAMevents.org. If this is your first time as a Team Coordinator, you may need to [create an account](#) and add your organization.
- ☐ [Register](#) and [pay](#) for your team(s), and select the In-Person and/or Online Submission option.
- ☐ **Online Submission Season Registration:** [Register](#) for an Qualifying Online Submission SRM event.

Preparing for the Sphero Robotic Mission

- ☐ Review the details of each *Mission Objective* in the [indi Mission Manual](#).
- ☐ Download the Online Submission presentation template: sphero.cc/SRM-indi-template
- ☐ Identify and recruit students to form a team. The recommended team size is three to five students. Once students for each team are selected, add them to the [Student Roster](#) and send the required digital TEAM Alliance Participation Waivers to their parent/guardian.
- ☐ Gather robots. The team needs two indi robots for the Missions.
- ☐ Designate 1-2 coding devices for the Sphero Edu Jr app to customize how indi responds to colors, if desired. indi can be used in a screen-free environment and programming indi with the Sphero Edu Jr app is not a requirement for a successful solution to each Mission Objective.
- ☐ Install the Sphero Edu Jr. app on the coding devices (optional)
- ☐ Learn more at <https://sphero.com/pages/apps>
- ☐ Get to know the parts in the [Sphero Craft Pack](#) (optional).
- ☐ Identify a room that students can use for team meetings and to set up the competition *Mission Field* on the Code Mat. The *Mission Field* is **two (2) indi Folding Code Mats side by side**. The total size is 160 cm × 129 cm (5' 3" x 4' 3"). Online Submissions can use any indi [Code Mat](#) or a homemade Mission Field **with the correct dimensions**.
- ☐ Identify a room that students can use for team meetings and to set up the *Mission Field* on the [Code Mat](#).
- ☐ Keep an eye out for an email about our Team Coordinator webinar that will take place in the fall.

Participating with SRM Online Submissions

- ☐ Set up a team meeting schedule.
- ☐ Assign team roles or make a plan for switching roles periodically during the season.

- ☐ Use the meeting agendas in this Team Coordinator Guide to develop student coding and engineering skills.
- ☐ Develop and refine solutions for each *Mission Objective*.
- ☐ Film your team's solution to each *Mission Objective*. Encourage your students to submit their best attempts, even if they are not perfect!
- ☐ Prepare materials for submission using the Online Submission instructions in the [indi Mission Manual](#) and the "Tips for Online Submissions" section of this guide.
- ☐ Focus on completing tasks instead of perfection.
- ☐ Reach out to support@teamalliance.org for support and answers to any questions you may have. You can also check out the Sphero Robotics Programs [Facebook page](#) for support from the community.
- ☐ Each Online Submission Event on myTEAMEvents.org will include the submission deadline and submission instructions in the General Information section. Review this carefully to ensure your materials are submitted on-time.
- ☐ Qualifying Online Submission Events will include Missions 1 - 2.
- ☐ Championship Online Submission Events will include Mission 3 only.
- ☐ The top teams from each Qualifying Online Submission event will be invited to their Online Submission Championship for their region. Look for an invitation (email and in myTEAMEvents) to see if your team qualified.
- ☐ Regardless if you qualify or not, plan a team event to celebrate your success!

Competing in Sphero Online Submission Championship Event

- ☐ Review the *Championship Advancement Criteria* in the [indi Mission Manual](#) for more information on how to qualify for a Sphero Online Submission Championship Event.
- ☐ [Register](#) for the Sphero Online Submission Championship Event for your region **once you receive notification that your team has qualified**.
- ☐ Develop and refine solutions for the Championship Mission 3.
- ☐ Review the submission deadline and instruction in the General Information section of the Sphero Online Championship event page on myTEAMEvents.org.
- ☐ Plan a team event to celebrate your results and success!

Tips for Online Submissions

Your team's performance is determined by Evaluators according to scoring associated with each *Mission Objective Rule* in the *Competition Rules* document. Closely adhering to the submission guidelines outlined in the *Competition Rules* document will position your team to receive their highest possible score.

Consider the following when supporting your team with their Online Submission

1. Review the submission guidelines closely in the *Competition Rules* document.
2. Use the provided [slideshow template](#) to document your work. Ask students to use it and the Submission Guidelines in the *Competition Rules* document as a guide for what should be included in their submission.
3. **Capture clear video footage** for each *Mission Objective*. **Videos:**
 - should be in .mp4, .mov, or .avi format
 - should show the *Mission Field* and the indi robot(s) for the duration
 - should be taken from a top-down perspective
 - must be embedded in the slideshow template, and **make sure the videos are viewable by anyone with the link**
4. Include close-up images from multiple perspectives (birdseye, sideview, etc.) to show your team's engineering and design solutions. Clearly indicate in the presentation your **"Theme Story Points" Field and Robot Design Features**.
5. Include slides that capture **"Implementation Points" Mission Strategy and Coding Features**. Take screenshots of the coding Tiles and/or Sphero Edu Jr program files to include in your team's submission. Encourage your team to be as thoughtful as possible so Evaluators can understand your team's primary obstacles, solutions, strategies process, and overall growth.



TEAM COORDINATOR TIP:

A perfect score may be your team's goal for each *Mission Objective*, but **perfection is definitely not a criteria for submission**. The scoring system is designed to reward teams for all successes in each *Mission Objective*, even if they are not able to finish the objective completely. **Sphero encourages all teams to submit their best work** and not get hung up on perfection.

Team Roles

We recommend teams of **three to five students** so everyone has opportunities to participate, contribute, and build teamwork skills. Teams may include more than five students; however, awards are provided based on the recommended maximum of five students per team, so additional awards may not be available.

We encourage students to take on a role for the competition (or switch them for each *Mission Objective*) so that they feel like they have specific responsibilities. Suggested roles could include, but are not limited to the following:



Programmers

A programmer is responsible for making sure that your indi robots do exactly what you want them to do. With several of the *Mission Objectives*, students are using two indi robots at the same time, so you can have two programmers at the same time.



Engineers

An engineer is responsible for the building of competition objects and placing them in the field based on the *Competition Rules*.



Debuggers

A debugger is an expert at troubleshooting. They are responsible for asking questions and coming up with procedures for solving problems with the code and/or engineering.



Designers

A designer gives your *Mission Objectives* that extra flair! They have an eye for making things beautiful and awesome, and ensure they are aligned with the season theme. The designer can also be the videographer and help with coordinating the materials for Online Submissions.

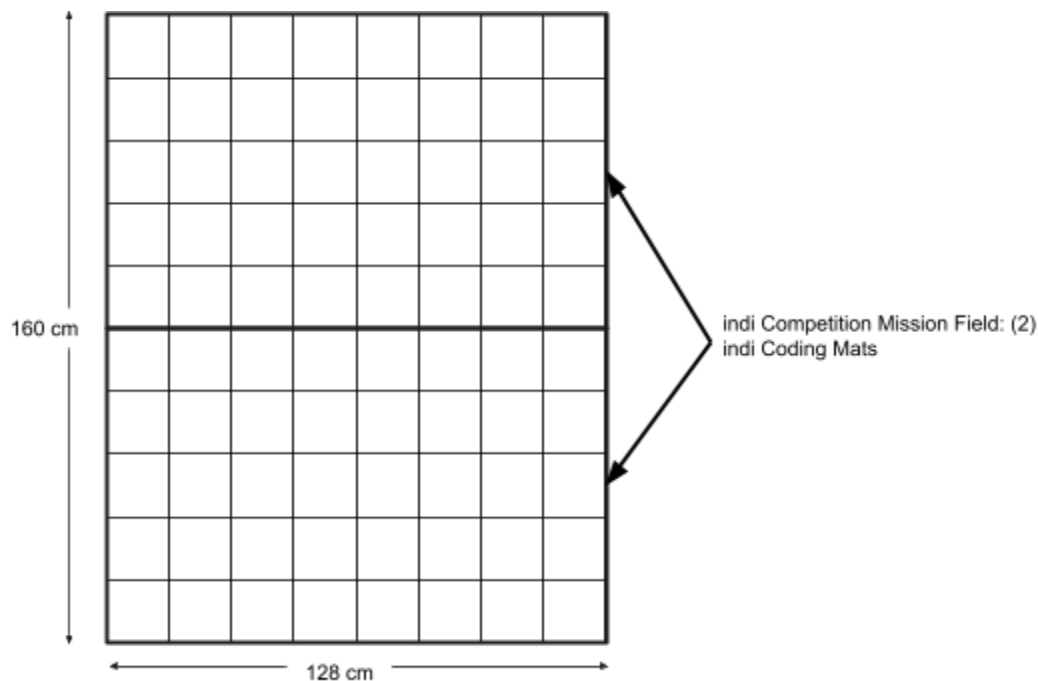


Mission Manager

A mission manager is a leader. They are great at bringing the team together to come up with plans and lead brainstorming sessions on how to approach each *Mission Objective*. Mission managers should also be experts in the *Competition Rules* to ensure the team is in compliance with all of the rules and regulations. They may also be tasked with controlling a timer for Missions that include timed scoring elements.

Mission Field

The competition *Mission Field* is two (2) indi Folding Code Mats side by side (on the long side). The total size is 160 cm × 129 cm (5' 3" × 4' 3"). The [indi Folding Code Mat](#) comes in a 4-pack, so the 4-pack can create two indi competition *Mission Fields*.



In-Person Events must use the two indi Folding Code Mats as the Mission Field for the indi Missions. **Event Hosts** will supply the Mission Fields at In-Person Events.

Live Remote Events and **Online Submissions** can use any indi Code Mat or a homemade Mission Field with the correct dimensions.

You have three options for your *Mission Field*:

1. Purchase the [Sphero indi Code Mat](#). Use two indi Folding Mats to create a Mission Field.
2. Use a different Sphero Code Mat—either from a previous Sphero Global Challenge event or from classroom use provided they are the same overall dimensions.
3. Use tape to mark lines every 16 centimeters and make your own *Mission Field*. You can construct it directly on the floor or on a transportable surface like a piece of plywood, tarp, or shower curtain.

Competition Materials

In order to complete all of the Mission Objectives, you will need the following items:

Required Materials for Competition

- Two (2) [indi robots](#)
- A 2 x 1.5 meter hard, flat surface for a Mission Field
- Video recording device (Online Submissions Only)

Recommended Materials for Competition

- [Sphero indi Code Mat](#)
- [Sphero Craft Pack](#)
- Access to the [Sphero Edu Jr app](#) and 1-2 coding devices

Meeting Agendas

The nine meeting agendas in this Team Coordinator Guide will help familiarize your students with indi, coding, and prepare your students for tackling the Mission Objectives.

There are three types of agendas in this coordinator guide:

- In **Intro Sessions**, students get comfortable with indi.
- In **Learning Sessions**, students are introduced to key coding concepts that will help them tackle the Mission Objectives from the [indi Core Collection](#). You can add more lessons or skip them depending on your student's prior knowledge of coding indi.
- In **Mission Sessions**, students are given dedicated time to apply what they have learned to completing the Sphero Robotic Mission Objectives.

<i>Intro Sessions</i>	<i>Learning Sessions</i>	<i>Mission Sessions</i>
Agenda 1: Welcome to Sphero Robotics Missions Agenda 2: Team Roles	Agenda 3: Routines Agenda 4: Looping Patterns Agenda 5: Measuring a Maze <i>Optional if using Sphero Edu Jr. App</i> Agenda 6: Meet the App Agenda 7: Sing to Me	Agenda 8: Example Mission Session

Every team starts with different skills and knowledge bases. Pick and choose from the meeting agendas to meet the needs and timeline for your team. If your team is new to the Sphero Robotics Missions and indi, you might choose to complete every agenda. However, you do not need to complete them in order.

Mission Sessions

Mission Sessions give students dedicated time to apply what they have learned and prepare for the competition. Unlike Intro and Learning Sessions, these meetings can be more flexible and should be Student-Powered, with Team Coordinators serving as facilitators rather than leading a structured lesson. Encourage students to set goals for each session and divide their time among coding and testing their robot, developing and building field elements that connect to the season's theme, and practicing the Missions under competition-like conditions. Build in plenty of opportunities for students to test their ideas, identify what is and isn't working, make adjustments, and try again.

Welcome to the Sphero Robotics Missions

Meeting Agenda #1

SESSION TYPE: INTRO SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: • indi robots • Color Tiles • Challenge Cards: 1 & 2 Optional MATERIALS: indi Educator Guide - Lessons 1 - 4	LEARNING OBJECTIVES: Students will be able to: • Explain what makes indi move • Describe what makes a good teammate
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WARM - UP

1. Introduce the Sphero Robotics Missions for the current season.
 - Review the Mission Objectives for the current competition season. Below is an overview of the 26-27 SRM Smart City Missions:
 - i. “Welcome to Smart City! Get ready to put your indi robots to work helping the city stay busy, clean, and on the move! This season, your team will use two Sphero indi robots to solve exciting challenges around the city. You’ll plan routes so your robots can safely pass each other on busy streets, send them on a delivery adventure through tunnels and over ramps, and, if you make it to the Championship, help collect trash and recycling from around the city. Along the way, you’ll build your own city features, create colorful paths, test your ideas, and find clever ways for your two robots to work together. There are lots of ways to solve each challenge, so use your creativity, teamwork, and problem-solving skills to show what your indis can do in the Smart City!”
 - Remind teams that they only need to complete two Mission Objectives: Mission Objective #1 and Mission Objective #2 for Qualifying Events. Mission Objective #3 will be added for Championship Events.
 - Explain that this activity will get them started with learning how to use the color tiles to make indi move.
2. Hold up and introduce indi to your team. A few questions you might ask:
 - How do you think indi moves around?
 - [Turn indi on] Why do you think there’s a light on the bottom of indi?

- [Show color tiles] Why do you think these came with indi? What do they do?
- 3. Place a green tile on the floor and ask students to make a prediction about what will happen if you set indi on the tile.
- 4. Next, add a red tile and have indi drive from the green to the red tile.



- 5. Say:
“In the Sphero Robotics Missions, indi will be traveling to different places. You’ll have to create a path for indi using these color tiles.”

WORK TIME

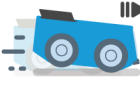
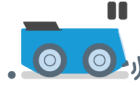
- 1. Give your team(s) about 10 minutes to explore indi and the color tiles. They should experiment to discover how different colors control indi's movement.
 - Provide the Challenge Cards 1 & 2 to help share how indi will respond to the colored tiles.

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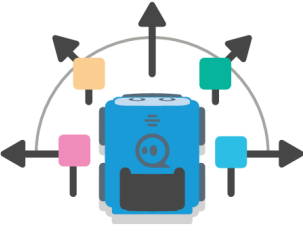




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TEAM COORDINATOR TIP:

Do not assign roles for this section, you'll be introducing them next. Observe how students work together without any structure.

WRAP-UP

1. Discuss:
 - A successful team is made up of good teammates. What makes a good teammate?
 - Did anyone have a “job” while working together?
2. While working together, students will take on different roles. Introduce the roles:
 - **Programmers** are responsible for making sure that your indi moves exactly how you want it to.
 - **Engineers** are in charge of building the 2D and 3D props.
 - **Debuggers** are experts at problem solving. They are responsible for fine tuning the indi paths and helping to solve problems with the engineers and designers.
 - **Designers** give your Mission Objectives that extra flair! They have an eye for making things beautiful and awesome. The designer can also help record the video of the Mission Objectives.
3. Together with students, read through the rules for Mission Objective 1 in the SRM Mission Manual.
 - Ask students to share what each of these roles may do to help accomplish the Mission?
 - i. Programmer
 - ii. Engineer
 - iii. Debugger
 - iv. Designer
4. Discuss:
 - What role do you find most interesting?
 - Let students know they'll be trying out some of these roles in your next meeting.



TEAM COORDINATOR TIP:

If you'd like to give your students a more in-depth and scaffolded introduction to indi and the color tiles, refer to Meet indi: Lessons 1-4 in the [indi Educator Guide](#). This may take up to 30 minutes per Lesson.

Team Roles

Meeting Agenda #2

SESSION TYPE: INTRO SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: • indi robots • Color Tiles • Challenge Cards: 3 - 14 OPTIONAL MATERIALS: indi Educator Guide - Marathon	LEARNING OBJECTIVES: Students will be able to: • Describe the effect of each color tile on indi's movement • Create a path for indi to follow • Learn more about the programmer and debugger team role
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WARM-UP

1. Revisit what happened in your last meeting and ask students to describe how they were able to make indi move.
2. Say:
 - "Today we'll explore what it's like to create different paths for indi and you'll take on some of the team roles we spoke about in our last meeting."
3. Remind students of the roles:
 - **Programmers** are responsible for making sure that your indi moves exactly how you want it to.
 - **Engineers** are in charge of building the 2D and 3D props.
 - **Debuggers** are experts at problem solving. They are responsible for fine tuning the indi paths and helping to solve problems with the engineers and designers.
 - **Designers** give your Mission Objectives that extra flair! They have an eye for making things beautiful and awesome. The designer can also help video the Mission Objectives.
4. Say:
 - "Today we'll be using two of these roles: the programmer and the debugger."

WORK TIME

1. Give each group an indi robot, colored tiles and set of [Beginner Programmer Challenge Cards](#) that come with the indi Student Kit.
2. You can either assign the role of the **programmer** and the **debugger** to students or allow them to self-select. Note: Depending on the size of your team(s), you might have multiple **programmers** or **debuggers**.
3. Challenge the students to come up with the longest path possible with their colored tiles. NOTE: If you want a more scaffolded lesson, you can use the "[Marathon](#)" indi Core Lesson.
4. Discuss:
 - How did the programmers help to meet this challenge?
 - How did the debuggers help to meet this challenge?
5. Depending on your remaining time, have the teams complete some or all of the challenges on the Beginner Programmer Challenge cards 3 - 14. Have the students switch roles for each challenge.

WRAP UP

1. Review what students learned about programming their indi robots in this session.
 - How does each of the color tiles control indi's movement?
 - What did you do in your role as a programmer or debugger?

indi Core: Routines

Meeting Agenda #3

SESSION TYPE: LEARNING SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: • indi robots • Colored Tiles • indi Educator Guide - Routines (see Additional Supplies)	LEARNING OBJECTIVES: Students will be able to: • Move indi through the classroom at different speeds. • Explain why we move in the classroom, the hallways, and the playground in different ways. • Connect how routines can be used in Mission Objectives
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WARM UP

1. Lead a discussion using the Exploration 1 and Exploration 2 activities in the [Routines lesson](#).

WORK TIME

1. Have students complete the Skills Building and Challenge activities in the [Routines lesson](#).

WRAP UP

1. Review one or more Mission Objectives with students. Discuss how routines are used to accomplish the Mission Objectives.
2. Optional: Have students start to brainstorm a routine for Mission 1. Capture ideas with pictures so that students can go back and work on them in later sessions.

indi Core: Looping Patterns

Meeting Agenda #4

SESSION TYPE: LEARNING SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: - indi robots - Colored tiles indi Educator Guide - Looping Patterns (see Additional Supplies)	LEARNING OBJECTIVES: Students will be able to: - Identify patterns that repeat or loop. - Make patterns that loop. - Apply loops to Mission Objectives
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WARM UP

- Lead a discussion using the Exploration activities in the [Looping Patterns lesson](#).

WORK TIME

- Have students complete the Skills Building and Challenge activities in the [Looping Patterns lesson](#).

WRAP UP

- Review Mission objectives and have students discuss if they see any repeated patterns.
- Optional: Have the students create a loop with the colored Tiles that can be used to accomplish one or more of those repeated patterns.

Note: Loops can be an advanced topic for students and not all Missions may benefit from using loops, so this lesson can be skipped. If students do use loops, ensure they practice talking about loops to help them with earning Implementation Points.

indi Core: Measuring a Maze

Meeting Agenda #5

SESSION TYPE: LEARNING SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: • indi robots • Colored Tiles • Coding Mat (or equivalent) • indi Educator Guide - Measuring a Maze Lesson (see additional Materials)	LEARNING OBJECTIVES: Students will be able to: • Measure distances using indi's color tiles. • Express distances in terms of color tiles. • Explain the intended path indi will follow.
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WARM UP

1. Lead a discussion using the Exploration activities in the [Measuring a Maze lesson](#).

WORK TIME

1. Have students complete the Skills Building and Challenge activities in the [Measuring a Maze lesson](#).

WRAP UP

1. Review one or more of the *Mission Objectives* from Mission 1 or Mission 2 with students. Have the team(s) place colored Tiles to accomplish one or more of the Mission Objectives.
2. Have teams share the intended path the indi will follow and how far the indi robot travels in terms of the colored tiles. This will be good practice for sharing this with Evaluators during the competition!

(Optional) indi Core: Meet the App

Meeting Agenda #6

SESSION TYPE: LEARNING SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: • indi robots • Colored Tiles • Compatible programming device(s) with latest version of the Sphero Edu Jr app installed • indi Educator Guide - Meet the App	LEARNING OBJECTIVES: Students will be able to: • Connect indi to the Sphero Edu Jr app. • Drive indi in a controlled manner around the classroom. • Send a new program to indi.
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WARM UP

1. Lead a discussion using the Exploration activities in the [Meet the App lesson](#).

WORK TIME

1. Demonstrate each of the Skills building activities for students in the [Meet the App lesson](#). After each demonstration, have the students try to recreate the activity on their device.
2. Have the students complete the Challenge Activity in the [Meet the App lesson](#).

WRAP UP

1. Review the *Mission Objectives* with students. Discuss how they could customize their code using the Sphero Jr App to complete one or more *Mission Objectives*.
2. If students use the Sphero Jr App to customize their code for Competitions, demonstrate how to capture that so they can share with the Evaluators.
 - **In-Person Events:** Showing the device or bringing a screenshot/picture and explaining how it works.
 - **Online Submissions:** Taking a screenshot/picture and adding it to the presentation with notes to explain how it works.

(Optional) indi Core: Sing to Me

Meeting Agenda #7

SESSION TYPE: LEARNING SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: • indi robots • Colored Tiles • Compatible programming device(s) with latest version of the Sphero Edu Jr app installed • indi Educator Guide: Sing to Me (see Additional Supplies)	LEARNING OBJECTIVES: Students will be able to: • Change indi's code so that each color represents a note in a song. • Space color tiles so that the timing and tempo of the song are corrects
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WARM UP

1. Lead a discussion using the Exploration activities in the [Sing to Me](#) lesson.

WORK TIME

1. Have students complete the Skills Building and Challenge activities in the [Sing to Me](#) lesson.

WRAP UP

1. Review the *Mission Objectives* and/or theme for this season with the students. Ask the students if there are any sounds that may help make their Mission Objectives more exciting.
2. Record any initial ideas for the students to reference when they start working on their own Mission Objectives.

Example Mission Session Agenda

Meeting Agenda #8

SESSION TYPE: MISSION SESSION

TIME REQUIRED: 30-40 minutes

REQUIRED MATERIALS: • indi robots • Colored Tiles RECOMMENDED MATERIALS: • indi Competition Mission Field (2 indi Code Mats) • Sphero Craft Pack • Compatible programming device(s) with latest version of the Sphero Edu Jr app installed	LEARNING OBJECTIVES: Students will be able to: • Apply coding and problem-solving skills to complete Mission Objectives. • Test, evaluate, and improve robot programs and field elements. • Build teamwork and confidence through competition practice.
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Working with indi Teams to Prepare for Competitions

Working with Kindergarten–2nd grade students is all about keeping robotics **fun, active, and achievable**. Young students may need more guidance and structure than older teams, but they are also incredibly creative and eager to experiment! Keep these tips in mind as you prepare your indi team:

1. Keep Mission Sessions Short

Young students have shorter attention spans. Break practices into small activities—such as 10–15 minutes of learning or planning followed by hands-on time with indi. Movement breaks can help, too!

2. Show First, Then Let Them Try

Introduce new concepts with a quick demonstration, then put the robot in the students' hands. Young students learn best by **seeing, touching, testing, and trying** again rather than through long explanations.

3. Focus on One Challenge at a Time

A complete Mission can feel overwhelming. Break each Mission Objective into small, achievable steps and celebrate progress along the way. Once students master one step, add the next.

4. Create Predictable Team Routines

Use the same basic routine each time your team meets: gather together, review today's goal, work with the robot, and finish by sharing what they learned. Familiar routines help young students know what to expect and stay focused.

5. Give Everyone a Job

Keep all students involved by giving them simple roles (or team roles), such as placing color tiles, setting up the field, testing indi, checking the Mission requirements, or sharing the team's ideas. Rotate roles so everyone gets a chance to participate.

6. Ask Questions Instead of Giving Answers

When something doesn't work, resist the urge to fix it for them! Ask simple questions like, **"What happened?"** **"What could we change?"** or **"What should we try next?"** Give students time to experiment and discover their own solutions.

7. Make Competition Day About the Experience

For many K–2 students, simply participating in a robotics competition (In-Person or Online Submissions) is a big accomplishment! Help them understand that competition day is about **showing what they created, trying their best, meeting other teams, and having fun**—not just earning a high score.



TEAM COORDINATOR TIP:

Mission Sessions should be flexible! Adjust the amount of time spent coding, building, testing, and practicing based on your team's progress and how close you are to competition day. If your students already have the fundamental skills covered in the Intro and Learning sessions, they can skip those and start with the Mission Sessions.

WARM - UP

Review Progress & Set Goals

Gather around the Mission Field and review one goal for today's session. Below are some options to start a Mission session:

- Discuss what worked, what challenges remain, and what the team would like to accomplish today.
- Review any specific Missions and scoring objectives that they would like to work on that day.

- Have students identify one or two specific goals for the session.
- Ask students to explain the goal in their own words: “What are we trying to help indi do today?”
- Demonstrate or review one indi concept the team may need, such as using a color tile to make indi turn, stop, or change direction.
- Let students make a prediction: “Which tile do you think we should try? What do you think indi will do?”
- Review the Mission theme with the students and show real-world examples. Ask: “What are some ideas to add creative field or robot elements to help tell a story?”

WORK TIME

Create, Code, Test & Improve

Give students dedicated time to work toward their goals. Depending on where they are in the season, students may:

Try It!

Have students set up their first idea and run indi. Don't worry if it doesn't work!

Talk About It

After each attempt, ask simple questions:

- What worked?
- Where did indi go?
- What should we change?

Change & Try Again

Let students make one change at a time and test their new idea. Encourage different students to place tiles, start indi, observe what happens, and suggest changes.

Put It Together

As students make progress, connect the smaller successes until they can attempt the complete Mission Objective.

Next Level

Students that are ready to take it to the next level can use the Sphero Jr App to customize indi's response to tile colors, and modify indi's colors and sounds. Students can continually add to their Mission Fields to customize their Mission to build onto their “Theme Story Points”.



TEAM COORDINATOR TIP:

If students begin losing focus, take a quick movement or water break and then return to the Mission. Two shorter work periods can be much more productive than one long one!

Example team objectives in a Mission Session:

- Code and test their robot on the Mission field.
- Design and build field elements related to the season theme.
- Experiment with strategies for completing Mission Objectives.
- Troubleshoot problems and improve their programs.
- Practice team roles and responsibilities.
- Complete timed Mission practice runs.

Encourage students to use an iterative process: Try → Observe → Adjust → Try Again. Team Coordinators should guide students with questions and encouragement while allowing students to make the coding, design, and strategy decisions.

WRAP-UP

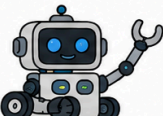
Celebrate progress and get ready for next time.

Gather the team together and ask:

- What did we accomplish today?
- What was tricky?
- What did we change that made indi work better?
- What should we try next time?

End by celebrating a specific success from the session—even if the team didn't complete the Mission Objective. Take a photo or make a quick note of the team's final setup so it's easy to pick up where they left off at the next Mission Session.

Consider keeping a visual chart to record achievements to ensure the team is prepared to run their Missions on the Competition day.

 MISSION READINESS TRACKER Are we ready for Competition Day? 							
SRM TEAM	1. PROGRAMMING COMPLETE  Coding Tiles are ready	2. MISSIONS PRACTICED  Practiced all Mission Objectives	3. FIELD ELEMENTS BUILT  All required field elements built and ready	4. PRACTICE RUNS COMPLETED  Completed timed practice runs as a team	5. TEAM ROLES & STRATEGY  Team roles assigned and strategy set	6. COMPETITION READY!  We are ready to compete!	NOTES / NEXT STEPS 
 SRM EXPLORERS	✓ Complete	✓ All Missions Practiced	✓ All Built	✓ 3 Practice Runs Completed	✓ Roles Assigned	✓ READY!	- Improve Run #1 time - Fine tune autonomous
 SRM INNOVATORS	✓ Complete	✓ All Missions Practiced	✓ All Built	✓ 2 Practice Runs Completed	✓ Roles Assigned	○ ALMOST!	- Build two field elements - Practice Missions 1 & 2
 SRM BUILDERS	✓ Complete	✓ 2 of 3 Missions	○ Not Started	○ 0 Practice Runs Completed	✓ Roles Assigned	✗ NOT READY	- Finish building elements - Practice more Missions
✓ = Complete ✓ = In Progress ○ = Almost There ○ = Not Started ✗ = Not Ready						GOAL: Work together, practice hard, and have fun on Competition Day! ★	

Example Mission Readiness Tracker with three different SRM teams tracking their progress.

Support

We couldn't be more excited about your team's participation in Sphero Robotics Missions. For more information about Sphero Robotic Missions and to get involved in our community, you can find links to additional resources below.

Contact Us: support@teamalliance.org

indi Resources: <https://edu.sphero.com/indi/resources>

Sphero Coding Wiki: sphero.cc/JS-help

Sphero Equipment or Coding Support: support.sphero.com