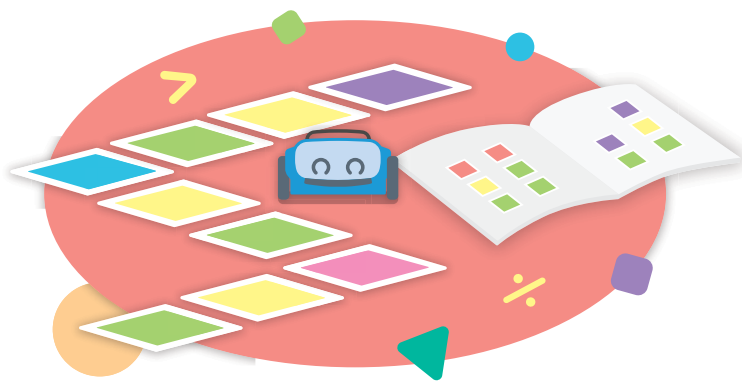# Sphero® indi™

Summer Camp Guide
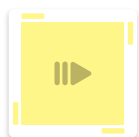
Get ready for a summer of
fun, hands-on learning
with indi!

Introduce your **youngest campers** to the **fundamentals of computer science** and **computational thinking** with Sphero's newest robot, indi! indi will challenge your students to flex their **critical thinking**, **creative confidence**, and **teamwork** all in an entirely screen-free environment. indi is **easy** for camp counselors to implement and **fun** for students to use, making it the ideal robot for your summer camp.

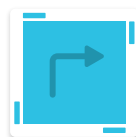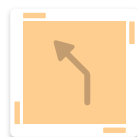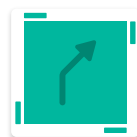|							
Go, go faster!	**Slow down**	**Stop**	**Celebrate!**	**Turn 90° left**	**Turn 90° right**	**Turn 45° left**	**Turn 45° right**

What's in this Guide?

The indi Summer Camp Guide includes resources, activities, and ideas to make it easy for you to **integrate indi into any camp experience**, whether its focus is on computer science, STEM, or just plain old fun. We know that every camp and every camper is different, so dive into the **resources** below to prep and customize how you'll use indi this summer:

- Camp Materials
- Curriculum Overview
- Tips and Troubleshooting
- Resources

Camp Materials

This summer camp guide was designed for **indi**, **the indi Student Kit,** and the **indi class pack**. indi—Sphero's latest robot—is designed to introduce young campers, ages 4-8, to the fundamentals of computer science, computational thinking, and STEM in an **entirely screen free environment**. Students place and adjust color tiles to control indi's movement and engage in **open-ended**, **imaginative play-based learning**.

indi Student Kit

The indi Student Kit is ideal for one to three campers at a time and includes:

- 1 Sphero indi robot
- 20 durable, latex-free rubber color tiles
- 15 Self-Guided Challenge Cards
- Decorative stickers
- Carrying case
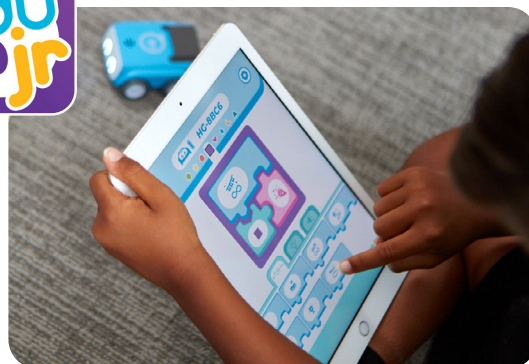
indi Class Pack

The indi Class Pack can accommodate a entire group of campers and includes:

- 8 indi robots
- 8 individual carrying cases
- Charging case
- Color tiles
- A standards-aligned educator guide
- 15 Self-Guided Challenge Cards

Sphero Edu Jr App

Level up your programming with indi by reconfiguring the color tile commands in the app designed specifically for pre-readers.

- App Store (iOS)
- Google Play (Android and Chrome OS)
- Fire OS (Kindle)

Curriculum Overview

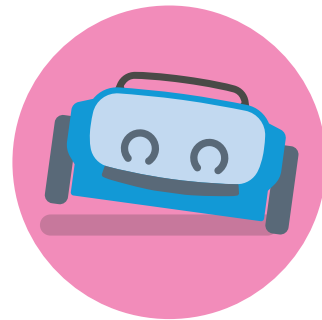Your indi summer camp curriculum is divided into **three sections:**

1. indi Essentials
2. Interdisciplinary indi
3. Going Further with indi

Pick and choose the activities below to **customize your own summer camp** with indi. The majority of the lessons come from the **indi Educator Guide**. Reference the guide if you are looking for more fun and engaging activities for your campers.

indi Essentials

Get your students started with indi by learning how the robot works through open-ended explorations and challenges.

Meet Sphero indi

- Like most robots, indi has different parts and pieces that help it do all the amazing things it can do. Learn about the different parts that help indi see, move, and light up!

Stops and Celebrations

- indi loves its new class and enjoys all it is learning. Help indi learn more about moving around the classroom by teaching it how and when to stop.

Left or Right (Part 1)

- indi is finding it a little difficult to make its way around the room by only driving in a single direction. Can you learn which color tiles will help indi turn (change directions) left or right so it can enjoy more of the classroom?

Left or Right (Part 2)

- More turns mean more possibilities. Help indi learn two more new colors, teal and orange.

Identifying Patterns (Math)

- There are patterns all around us. Patterns add balance and beauty to our world. Sometimes we make the patterns ourselves and sometimes nature makes them for us. What patterns can you see? What patterns can you make for indi?

Looping Patterns (Math)

- Sometimes the patterns we see repeat and don't ever stop. Have you ever noticed that? Things like day and night, days of the week, seasons in a year, and so on. Can you think of anymore looping patterns that we can teach indi?

Simple Distances (Math)

- Understanding the various distances indi can travel is helpful when creating puzzles and paths for indi to follow. Flip over some color tiles and use them to help measure the distance indi travels before it comes to a stop.

Storytelling with Colors (Language Arts)

- An indi path can tell a story. Lay out color tiles to tell a story then share it with your class as indi travels by!

Storytelling Path (Language Arts)

- Storytelling is a way that we share ideas, share our culture, and share experiences with others. What is your favorite story to listen to or to tell? Share a favorite story with indi through a well-thought-out path of color tiles and creative scenery.

Mini City (Social Studies)

- indi loves school but would really love to learn more about your world outside of school. Create a map for indi to drive around and get to know places outside of school.

Sequences in Nature (Science)

- Sequences in nature that repeat themselves are called cycles. All living things, the weather, and other natural events are parts of different cycles. Teach indi about one of these cycles using the color tiles and your creativity.
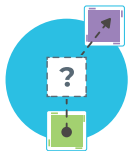
Going Further with indi

Meet the Sphero Edu Jr App

- It is time to take learning with indi to the next level. Sphero Edu Jr app is an all new block programming app that teaches some of the basics of code and computer science principles. In this activity, students will learn how to navigate Sphero Edu Jr app and begin programming indi.

Sing to Me

- Did you know that indi loves music? Using the color tiles and Sphero Edu Jr app, indi can sing you a classic melody or a song of your own creation. In this lesson students will experiment with color tiles spacing to learn about tempo and timing.

Beginner's Programming Challenge Cards

- Work your way through the Challenge Cards from the easiest to the most challenging. The print Challenge Cards are also in your indi Student Kits and Class Pack. Once campers have solved them all, they can make their own challenges to share with their friends using our **Google Slide template**.

Facilitation Options

Camp organizers and counselors have multiple options for integrating indi into their camp schedules. Pick and choose wich option or options will work best for your situation.

Whole Group

Use the activities with a large group (up to 30 campers) at a time. Introduce the activity, then send campers back to their work areas to learn, explore, and have fun. Whole group learning is also ideal for summarizing key points and sharing paths during circle time with all students watching and discussing indi's movement.

Small Group

Consider more focused instruction on indi with a higher counselor to camper ratio. This will ensure campers get started on the right foot. This mode of facilitation can be ideal when students need a little more support like with the math or language arts activities.
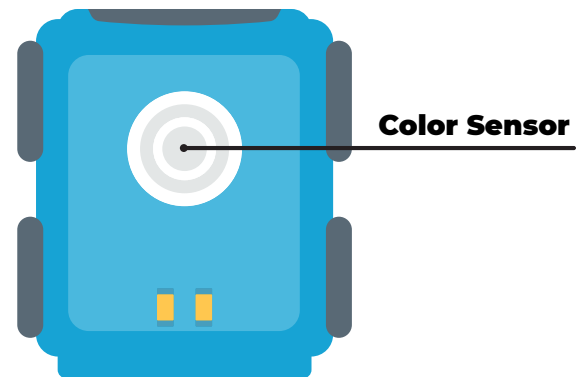
Stations

indi can also make an ideal topic for exploration during station or free choice time. Allow campers who are particularly excited by indi to spend some more time with the robot. The self-guided **Beginner's Programming Challenge Cards** are an excellent structure to use with stations.

Tips & Troubleshooting

Understanding the Color Sensor

- Each color tile is pre-programmed to instruct indi how to move and operate.
- Some classroom floors may have colorful patterns that could interact with indi's color sensor. If you notice this happening, place the color tiles edge to edge to avoid any interference from other colors.
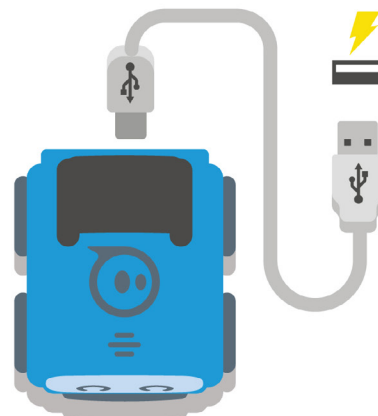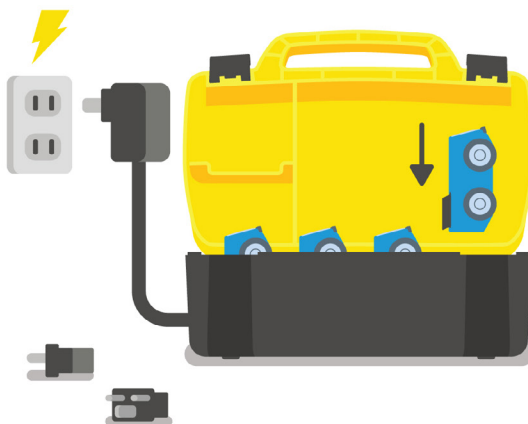
Color Sensor

Charging

Individual indi

- Plug the included Micro-USB cable into indi and the other end into a USB port or wall adapter.
- Make sure that you are using the USB cable provided with indi or a USB cable that provides power (rather than a cable that only transports data).
- Make sure the USB port is providing enough power to properly charge indi. If you plug the USB cable into your laptop, please ensure your laptop is plugged in to provide enough power. Use a USB wall charger when possible.

indi Class Pack

- Plug the end of power cord into the class pack charging case. Then plug the other end of the power into an outlet.
- Make sure each indi is seated properly in the charging case.
- Be sure to check that the charging leads on the bottom of indi are clean and free of any debris.
- Unplug the charging case for long-term storage.

Sphero Self-Service Resources

Access more resources to support your camp with indi on our **self-service resource page**.

Inspiring the Creators of Tomorrow

Sphero is empowering the future creators of tomorrow and setting them up for success. We couldn't be more excited about the future of education and the part we're playing. For more information about Sphero and to get involved in our community you can find links to additional resources below.

- **Sphero Blog:** https://sphero.com/blogs/news

- **Support:** https://support.sphero.com

- **Contact Us:** https://sphero.com/pages/contact-us

- **Brand Assets:** https://brandfolder.com/spheroedu

- **Facebook:** https://www.facebook.com/GoSphero

- **Twitter:** https://twitter.com/spheroedu

- **Instagram:** https://www.instagram.com/sphero