Summer Camp Guide

Get ready for a summer of hands-on learning!

Forget Summer Brain Drain! With the Sphero Summer Camp Guide, your campers will engage in increasingly complex challenges that flex their critical thinking, creative confidence, teamwork, and coding skills. Leveraging the Sphero BOLT robot this program presents you with all of the tools and resources needed to easily implement your Sphero camp, with clear and organized guidelines for facilitators and parents' stamps of approval.

What's in this guide?

The Sphero Summer Camp Guide includes a suite of resources, including 30+ hours of instructional STEAM and Computer Science content, to make your summer camp easy to implement and engaging for campers of all ages. We know no two camps are the same, so dive into the resources below to prep and customize your programming:

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

Camp Materials

Sphero Robots

The Sphero Summer Camp Guide was designed using the Sphero BOLT and Sphero BOLT Power Pack.

We recommend 1 robot for up to 3 campers working together.

- BOLT is Sphero's most advanced coding robotic ball to date, providing even more ways to express inventive ideas and experience the power of programming.
- The BOLT Power Pack includes 15 Sphero BOLTs and plenty of accessories to serve up to 30 learners.
- Facilitators should have at least 1 extra robot for building sample inventions or lending campers extra materials.

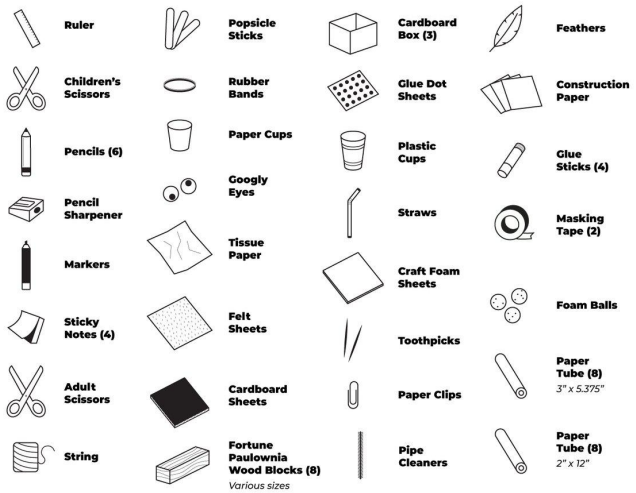
Sphero Edu App and Devices

All Sphero robots must be paired via bluetooth with the Sphero Edu app on an accompanying device. The Sphero Edu platform works on almost any device through our mobile app (iOS, Android, Fire OS), desktop app (Windows, Mac, Chrome) or website. Some platforms don't support all robots and features so please review our device compatibility: https://support.sphero.com/article/3tzmrkc6lx-edu.

Extension Materials

Creativity soars when campers combine their programmed robots with other materials and their inventions come to life. We recommend having an assortment of building and design materials for each group to share.

We offer the Sphero Craft Pack which includes the materials below:



Curriculum Overview

Your Sphero summer camp curriculum is divided into four sections:

1. Introduction to Sphero and Programming
2. Design Engineering Challenges
3. Art Exploration
4. Games

Choose from the activity options below to craft your implementation. If you would like to expand beyond the provided curriculum, browse additional lessons at https://edu.sphero.com/cwists/category.

1. Introduction to Sphero and Programming

Introductory lessons familiarize campers with their Sphero robot and programming in the Sphero Edu app. Each introductory activity can be completed in 1 hour.

- Introduction to Sphero Edu
- Draw 1: Shapes -Beginning Draw
- Blocks 1:Loops -Beginning Block
- Blocks 2: If/Then, Else -Advanced Block
- Blocks 3:Lights -Advanced Block
- Blocks 4: Variables -Advanced Block
- Text 1: Hello World! -Block to Text

2. Design Engineering Challenges

Challenges include step-by-step instructions for designing contraptions and programming using your Sphero robot. Each activity can be completed in 1 hour, or extended with extra challenges.

- Bridge Challenge - Beginning Block
- Long Jump- Beginning Block
- Chariot Challenge- Intermediate Block
- Hydro-Hypothesis- Intermediate Block
- Tractor Pull- Intermediate Block
- Maze Mayhem- Intermediate Block

If your campers have prior experience with Sphero, or prefer more of a challenge, put the instructions aside and create design challenge prompts (such as "Program you BOLT to dance to a song and design a dance floor") to turn the activity into a more open-ended experience.

3. Art Exploration

Art challenges provide a prompt that campers can address in a variety of ways using Sphero and other materials. Iteration and design are key elements in these activities. These challenges can be completed in 1-2 hours. Additional remixes can extend the activity. Depending on how deeply you want to engage in the material, you may choose to break up your lesson into a few sessions.

- Holographic Projections- Beginning Block
- Art for Social Justice - Beginning Block
- Light Painting- Intermediate Block
- Spherographs- Intermediate Block
- Avoid the Minotaur- Advanced Block
- What a Character -Advanced Block

4. Games

Learners can use block programming to create and play fun games with their Sphero robot. Challenges can be completed in 1-2 Hours.

- Retro Games
- Jousting Tournament
- Egg and Spoon Race
- Simon Says Part 1
- Simon Says Part 2

Sample Schedules

Sample 10, 20 and 30-hour schedules are provided below:

10 HOURS

- Intro to Sphero Edu, Draw 1, Blocks 1 (2 Hour)
- Bridge Challenge (2 Hour)
- Art for Social Justice (2 Hour)
- What a Character (2 Hour)
- Simon Says Part 1 (1 Hour)
- Simon Says Part 2 (1 Hour)

20 HOURS

- Intro to Sphero Edu, Draw 1, Blocks 1 (2 Hour)
- Blocks 2 (1 Hour)
- Blocks 3 (1 Hour)
- Bridge Challenge (1 Hour)
- Chariot Challenge (1 Hour)
- Tractor Pull (2 Hour)
- Maze Mayhem (1 Hour)
- Art for Social Justice (2 Hour)
- Spherographs (2 Hour)
- Retro Games (2 Hour)
- Jousting Tournament (1 Hour)
- Egg and Spoon Race (2 Hour)
- Simon Says Part 1 (1 Hour)
- Simon Says Part 2 (1 Hour)

30 HOURS

- Intro to Sphero Edu, Draw 1, Blocks 1 (2 Hour)
- Blocks 2, Blocks 3, Blocks 4 (2 Hour)
- Text 1 (1 Hour)
- Bridge Challenge (2 Hour)
- Long Jump (2 Hour)
- Chariot Challenge (2 Hour)
- Hydro-Hypothesis (2 Hour)
- Maze Mayhem (2 Hour)
- Holographic Projections (1 Hour)
- Art for Social Justice (2 Hour)
- Light Painting (2 Hour)
- Avoid the Minotaur (2 Hour)

- Retro Games (2 Hour)
- Jousting Tournament (2 Hour)
- Egg and Spoon Race (2 Hour)
- Simon Says Part 1 and 2 (2 Hour)

Tips & Troubleshooting

Create an Educator Account

Sign up for Sphero Edu with an educator account to create and manage classes, assign activities, and monitor camper progress.

Assign Class Codes

Simply enter a Class Name (you could name it by camp session groups) and the class code will generate automatically. Give campers the class code to access their assignments and continue working on their programs. However, note that student progress is saved to the class rather than an account. This means that work cannot transfer from class to class, no personal data is saved, and students cannot publicly share their programs, or access community programs.

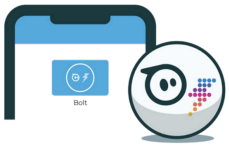
Learn more here: https://support.sphero.com/article/p5sgiis6u8-sphero-edu-class-codes.

Connect with Bluetooth

When you are ready to connect your robot, open the Sphero Edu app on a compatible mobile device with bluetooth on and sign in to your account.

From the home screen, select 'Connect Robot' :

Hold your robot right next to the device:



Select your robot type and look for the robot with the strongest bluetooth signal.

If you are having connection troubles, try the following strategies: If the robot does not connect to Sphero Edu, charge your robot for 15 seconds to ensure it's not in deep sleep, then try again. If your robot is disconnecting often and you are in a room with a lot of users, try turning off wifi and bluetooth on the devices that are not being used with a robot. Limiting a room to about 20 robots and programming devices or less is a good rule of thumb.

Charge Robots

BOLT robots charge via inductive charging in the provided cradle. Each cradle is powered through the provided micro-USB cable and a dedicated AC wall plug. The BOLT Power Pack lets you

charge, store, and carry 15 BOLT robots simultaneously. Built with an integrated cooling system, your robots can charge safely all from one place.

To charge, place your Sphero robot on the charging cradle heavy side down. You'll see a blue light blinking on the cradle to indicate it is charging. Ensure campers know how to place Sphero robots in the cradle for charging.

Storing and Labeling

Number your Sphero robots with a label maker or permanent marker. Also consider numbering the Sphero chargers and/or case to make for easy matching during clean-up.

If you don't have a BOLT Power Pack, carts and powerstrips may help with storage, charging, and organization.

Care and Maintenance

Sphero BOLT is shockproof and waterproof. Pop it, lock it, drop it. Your ball can handle it. That being said, we don't recommend testing this theory from the top of a tall building.

WHEN IN DOUBT, CONTACT US!

Our team of specialists is ready and waiting to help you out Monday through Thursday from 8am - 5pm MST. support@sphero.com

Supplemental Resources

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
- **Community Forum**: https://community.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