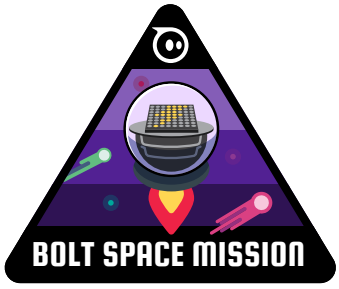
sphero

GLOBAL CHALLENGE

VIRTUAL AND AT HOME COACHES GUIDE



sphero.com/pages/global-challenge

Introduction

Our mission at Sphero is to inspire the creators of tomorrow. We understand that this school year will look different and we want to support our community with access to SGC whether participation is in person, virtual, or at home. This guide is designed to give coaches some tools and the structure to guide their student(s) through SGC in any learning environment.

Sphero Global Challenge with Virtual Teams

We highly encourage students to work in teams of 3-5 to help promote collaboration and team-work, and it will also help distribute the workload evenly. Virtual teams can work and operate similar to in person teams by adopting role allocation, virtual collaboration, and material distribution. Below are Sphero's tips and tricks for SGC with virtual teams.

Divide and Conquer

As a part of the competition, we recommend that students take on a role for the competition (or switch them for each mission objective) so that they feel like they are contributing evenly to the competition. Suggested roles and details are outlined in the primary Coaches Guide, with each student taking on a role for the competition.

Virtual Robotics Meetings

The primary coaches guide provides a template for lesson plans if you are incorporating the competition into your daily teaching plan, but it can also be used as a stand alone tool for SGC. Each mission objective is broken down into two session types: learning sessions and work sessions. You can adapt these to your needs and provide more work sessions, or fewer learning sessions if need be.

Set up virtual meetings with your team utilizing meeting software like Zoom, Google Hangouts, or Microsoft Teams. To find success with SGC, we recommend a minimum of 12-14 team meetings to address the learning needs of the students with programming and circuit building. If you are incorporating Sphero Global Challenge into your lesson plans, you can adjust to meet the needs of your classroom environment.

Collaboration through Online Tools

Encourage team members to collaborate through online tools such as Google Docs to communicate, share ideas, and update on progress.

It is also very beneficial for the team coach to be established as a teacher in the Sphero Edu app so that activities can be assigned to the students and so that progress monitoring can take place on the Sphero Edu app.

Materials Lending Library

If coaching a virtual team, you might consider developing a check-out program for your team's materials, including Sphero robots, littleBits and other supplies. Below you'll find suggestions on how to provide materials for students to check out for use at home on a temporary basis to support their work on the challenge.

How could this work?

- Keep it organized! Use Sphero storage containers, plastic containers, or backpacks.
- Make sure that Sphero and littleBits kits are clearly labeled. Consider adding a list of contents to each kit.
- Use Google Forms as a way for team members to request kits.
- Let team members have the kits long enough that they can explore and create, while also being sustainable for all team members to have access to the tools to complete their portion of the challenge.

Printable Competition Field

- As part of the registration fee for the Sphero Global Challenge, you will be given access to many coaches resources. One of those resources is a printable Competition Field (or Space Code Mat) for the BOLT: Space Mission. You can print this file on 8.5" x 11" paper and follow the instructions to put together a paper version of the competition field.

Send Code to Coaches

- If multiple robots can't be checked out at one time, consider having students send you their codes so you can test it out on the robots.

Sphero Global Challenge At-Home

SGC can be adapted for at-home learning. Below are Sphero's tips and tricks for SGC at home.

Parent/Tutor as Coach

Coaches can be parents or tutors. If your child wants to participate in SGC at home, they can do so individually or with a sibling. If siblings are in different age groups, they must compete in the middle school age bracket.

You will need to have all of the required materials to participate in SGC. Check with your child's school to see if they have a lending program for Sphero and littleBits tools. The competition field for BOLT: Space Mission is printable and comes with the registration fee.

All Roles in One

If a student chooses to participate in SGC individually, they can take on the exciting challenge of playing all competition roles, including, but not limited to: programmer, engineer, and designer! While this format will require additional work on the participants end, it also offers them the opportunity to think critically and creatively to foster greater learning.

Activities as Meetings

To find success with SGC, we recommend guiding your student(s) through the following activities. They have been curated based on the meeting agendas outlined in the primary coaches guide to address the learning needs of students. If you are incorporating SGC into your at-home lesson plans, you can adjust to meet the needs of your learning environment.

RVR+LB Activities:

Use the following Sphero Edu activities to learn the skills necessary to complete the challenges:

- **RVR+LB Mars Mission: Movement** https://edu.sphero.com/cwists/preview/50565x
- **RVR+LB Mars Mission: Sensor Data** https://edu.sphero.com/cwists/preview/48731x
- **RVR+LB Mars Mission: Clear the Zone** https://edu.sphero.com/cwists/preview/48727x
- **RVR+LB Mars Mission: Move the Cargo** https://edu.sphero.com/cwists/preview/48728x

BOLT Space Mission Activities

Use the following Sphero Edu activities to learn the skills necessary to complete the challenges:

- **BOLT Space Mission: Sensor Data** https://edu.sphero.com/cwists/preview/49364x
- **BOLT Space Mission: Loops and Functions** https://edu.sphero.com/cwists/preview/49365x
- **BOLT Space Mission: Infrared Communications** https://edu.sphero.com/cwists/preview/49366x
- **BOLT Space Mission: Engineering** https://edu.sphero.com/cwists/preview/49367x

Additional Resources

During a time of uncertainty and change, Sphero is committed to helping kids learn and have fun no matter where that is or what it looks like. We believe that SGC will provide students many opportunities to have fun and build lasting memories and 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 Website** https://sphero.com/pages/global-challenge
- **Blog** https://sphero.com/blogs/news
- **Community Forum** https://community.sphero.com