Sphero Chariots of Fire

Original MKE Mixers Team
MCFLS

Audience

School age children, Teens, Adults

Description

Create and navigate a fun maze with Spheros.

Budget

Free

Mixes

- Tech Mix - Box 2: Robot Mix

Advance Planning

Mark your race course on the floor using the tape. Use a large oval for a basic race, with a line or square through the middle to mark the lane boundaries for laps (circuits). Tape a short line along one side to mark the starting point. For advanced driving, make your race course any shape requiring precision turns and add walls, ramps, and obstacles. (10 feet by 5 feet)

Day-of-Event Activity

1. Set up each Sphero with a Chariot. If the Chariots are the same color, add numbers, flags, or other flair to each Chariot to differentiate them.
2. Divide the kids into teams. Depending on the ratio of Spheros to participants, you can have each participant race individually in elimination heats, or set up a relay system where each team member has a chance to drive a lap or several laps before handing off to the next person.
3. Pair each Sphero with a tablet via Bluetooth, and make sure it is connected to the Sphero app before distributing tablets. This will avoid confusion as to which tablet controls which Sphero.
4. Use the app to set the speed to 50% for each Sphero, or have the kids decide what speed the Spheros should be set to. They should all be the same – no cheating!
5. Allow each team 5-10 minutes of practice time to get used to driving. Explain how to use the app to set the Sphero's orientation for proper navigation, and the difference between using the app's built-in arrows or tilting the tablet as a joystick.
6. When ready, line up each Sphero Chariot on the starting line.
7. Begin the count-down... and RACE! Optional: Play "Chariots of Fire" during the final race!

Advice

Mix it Up:

- Using the Tickle app, have each team code their Sphero to navigate the racetrack automatically, and have them take turns running their program on the track. The race will be won by whichever team completes the track with the most speed and accuracy.