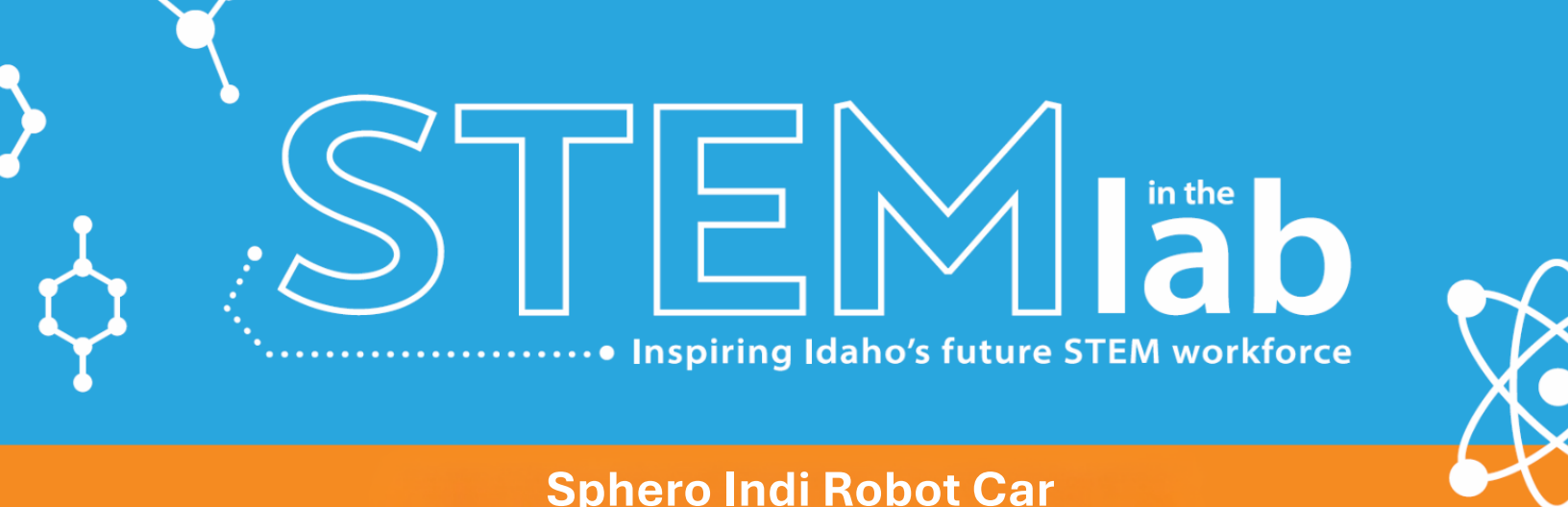




STEM^{in the}lab

..... • Inspiring Idaho's future STEM workforce

Sphero Indi Robot Car

MISSION

To introduce students to the basics of robotics and programming through hands-on activities with the Sphero Indi Robot Car. Students will learn how to use color codes to control the robot's movements, fostering an understanding of cause-and-effect relationships and basic programming concepts.

VOCABULARY

Robot: A machine that can follow instructions and do things for us.

Code: Set of instructions that tells a computer or robot what to do.

Programming: Telling a computer or robot what to do.

GRADE LEVELS

This activity is appropriate for students in grades: K-5

MATERIALS

- Sphero Indi Robot Cars (one per group)
- Color code cards (included with Sphero Indi)

ABOUT THIS ACTIVITY

In this activity, students will use the Sphero Indi Robot Car to learn about basic programming and robotics. They will use color code cards to create paths and control the robot's movements. This hands-on activity promotes problem-solving, critical thinking, and collaboration.



DIRECTIONS

1. Turn on the Sphero Indi Robot Car by pressing the power button.
2. Sphero Indi Robot Cars use color codes to interpret commands and navigate. Each color code card corresponds to a specific action (e.g., green means go, red means stop).
3. Place the color code cards in sequence to create a path for the robot.
4. Position the Sphero Indi Robot Car at the starting point of the path, which should always be a green card (Sphero always starts on green).
5. As the robot moves over the color code cards, it will interpret and execute the commands.
6. Observe how the robot responds to different color sequences and how it navigates the path you've created.

RESOURCES

- [Screenless Coding & Learning Robot for Kids | indi Robot Car | Sphero](#)
- **Sphero Indi Activity Guide:** A guide with more detailed instructions and ideas for using the Sphero Indi Robot Car in the classroom.
- **Online Tutorials:** Videos and tutorials on the Sphero website to help students and teachers get started with the Sphero Indi Robot Car.

LEARN MORE

Students + Parents + Educators

For information on grants, training and student opportunities, curriculum ideas, and other resources, please visit ***stem.inl.gov***.

