

Autonomous Car

60 minutes

Digital Creation Lab

WHAT THIS LESSON DOES

In this lesson, you'll explore how autonomous cars function by learning about their sensors and navigation systems. Then, follow step-by-step instructions to create your own autonomous car simulation in Scratch, programming it to navigate a custom track.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand the concept and workings of an autonomous car.
- Develop skills in creating a new Scratch project and manipulating sprites.
- Learn to use variables and conditional statements in Scratch to control sprite movements.
- Apply knowledge of sensors in programming an autonomous car to navigate a track.
- Enhance problem-solving skills by implementing speed control and reverse functions in the autonomous car project.

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HOW THE LESSON RUNS

How an autonomous car works

Create a new Scratch project

Add the car sprite

Shrink the car

Draw a test track

Place your car on the track

Create a speed variable

Drive forward

Turn right

Turn left

Speed up and slow down

Reverse

Wrap up