

LESSON 30

LED Strip Precision Game

80 minutes

Exploring Electronics and Light

WHAT THIS LESSON DOES

Engage in a fun, interactive game using LED strips and your Microbit. Learn to program the LED strip, create variables, set up levels, and create functions. Develop your skills further by making the LED light move, hit targets, and handle game over scenarios. Finally, download your code, play the game and challenge others!

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand and apply the concept of LED strip programming using Microbit.
- Develop skills in creating and manipulating variables in a coding project.
- Learn to create and use functions for specific tasks within a coding project.
- Gain proficiency in using conditional statements to control game outcomes.
- Develop the ability to download and test code on a physical device.

LED Strip Precision Game

HOW THE LESSON RUNS

Introduction

Create a new Microbit project

Add the neopixel extension

Setup the LED Strip

Create some variables

Setup the level

Create a refresh function

Make the blue light move

Go back to the start

Hit the target

Miss the target (game over)

Download your code and play the game