

LESSON 6

Exploring Microbits

60 minutes (2 periods)

Robotics & Engineering Basics

WHAT THIS LESSON DOES

Get started with programming a microbit in this hands-on lesson. You'll learn to create a project, display messages, and make your microbit react to button presses. Follow the steps to code and explore its exciting features!

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand the basic functionality and features of a microbit.
- Create a new project using the MakeCode for microbit website.
- Use the Project Editor to write and simulate code.
- Program the microbit to display numbers and text on its LED grid.
- Program the microbit to respond to button presses with specific actions.

BEFORE THE BELL

- Spark student curiosity by introducing the tiny programmable computer as a gateway to creative coding. Guide learners through initial setup and coding tasks on the MakeCode platform, encouraging them to experiment with displaying messages and icons. Focus on key concepts like event-driven programming and simulation testing. Watch for technical glitches with device connections, offering troubleshooting support. Engage students by linking activities to real-world tech applications, and differentiate by allowing advanced learners to explore additional features while supporting beginners with step-by-step prompts.

Exploring Microbits

HOW THE LESSON RUNS
What is a microbit?
Create a new project
The Project Editor
Add Our First Code!
Delete Some Code
Display Your Name
Show a Happy Face
Connect your Microbit
Play Some Music
Explore!