

Microbit Sounds

60 minutes (2 periods)

Intermediate Robotics & Engineering

WHAT THIS LESSON DOES

Get started with creating sounds on your micro:bit! Follow simple steps to build a new project, play melodies, experiment with tones, and add sound effects. Customise your music by adjusting notes and tempos to make it unique.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand the basics of programming music and sound on a microbit.
- Create and modify melodies using different notes and tempos.
- Program and experiment with playing individual tones.
- Design and adjust sound effects using various waveforms and settings.
- Test and refine music and sound projects on a microbit.

BEFORE THE BELL

- Encourage students to explore creativity by guiding them through coding music and sounds on a micro:bit, starting with setting up a new project in the MakeCode editor. Prepare by testing the provided code snippets for melodies, tones, and effects to ensure they work seamlessly. Facilitate engagement by prompting experimentation with different notes and tempos, and address potential challenges like syntax errors by offering real-time debugging support. Highlight key concepts such as frequency and waveform in sound design, and differentiate by allowing advanced students to create complex melodies while supporting beginners with pre-built options for effective learning.

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HOW THE LESSON RUNS
Introduction
Create a New Project
Play a Melody
Play Some Tones
Play a Sound Effect
Wrap Up