

Microbit Voting System

60 minutes (2 periods)

Intermediate Robotics & Engineering

WHAT THIS LESSON DOES

In this lesson, you'll build a voting system with microbits, using multiple voting units and one central unit. Start by creating two projects on the MakeCode Microbit website to programme the distinct functionalities for each type of microbit.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Develop a microbit voting system with separate voting and central microbits.
- Programme the voting microbits to cast a single 'Yes' or 'No' vote.
- Configure the central microbit to receive votes, count them, and reset the voting system.
- Implement a reset function on the voting microbits to allow for multiple rounds of voting.
- Enhance the voting system by adding a security feature to ensure the integrity of the votes.

BEFORE THE BELL

- Prepare to guide students in creating a microbit voting system. They'll create two projects on the MakeCode Microbit website, one for voting microbits and another for a central microbit. They'll program the A and B buttons to cast votes, set up the central microbit to receive votes and reset the system, and display the vote results. They'll also enhance the system with a security feature. Ensure students understand the coding involved and the importance of testing their system.

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HOW THE LESSON RUNS

Create a Project

Set up the Voting Buttons

Set up the Vote Receiver and Reset

Receive the Reset Signal

Display the Vote Results

Test Your Enhanced Voting System

Enhance your project