

LESSON 8

Reaction Timer

60 minutes (2 periods)

Robotics & Engineering Basics

WHAT THIS LESSON DOES

Follow this guide to build a fun project on your Micro:bit. Start by creating a new project, add a welcome message, set up a countdown, introduce a random delay, create variables, and record your reaction time.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Develop skills in creating and managing a new project on the Micro:bit platform.
- Acquire knowledge on how to create and display messages using code.
- Understand and apply the concept of countdowns and delays in programming.
- Learn to create and utilise variables for storing time stamps.
- Gain proficiency in recording and displaying user interactions in real-time.

BEFORE THE BELL

- To spark student curiosity, begin by linking the concept of reaction times to real-world scenarios like sports or gaming, setting a motivating tone for the coding journey. Prepare by testing the Micro:bit platform and code snippets in advance to troubleshoot connectivity or syntax issues. Facilitate by guiding students through each coding step, encouraging experimentation with delays or messages for personalisation. Focus on key ideas like variables and randomisation, while watching for challenges in understanding timing logic. Engage learners with pair challenges to compare reaction speeds, ensuring a lively, interactive session that balances learning and fun.

Reaction Timer

HOW THE LESSON RUNS	
Create a New Project	
Creating a Welcome Message	
Creating a Countdown	
Adding a Random Delay	
Create Variables	
Recording Player Reaction	