LESSON 1

Your First Python Program

40 minutes | Python from the Start

WHAT THIS LESSON DOES

Students write and run their first Python program in the micro:bit Python editor, linking familiar ideas from blocks to typed code, indentation, comments, and sequence.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Students write, run, and debug a first Python program; connect Scratch and Arcade ideas to Python syntax, indentation, comments, and sequence.

BEFORE THE BELL

- Students logged in to the platform with devices ready and a modern browser open.
- Open the micro:bit Python editor in a new tab and check that Run works on a sample project.
- Have a projector or board ready to model the editor layout, the Run button, and a short indentation example.
- Decide the class save routine for Python projects so work is there next lesson.

Your First Python Program

HOW THE LESSON RUNS

4 min	introduction	Start: What We're Building
6 min	content	Introduction to Python
5 min	content	Access the Micro:bit Python Editor
4 min	content	Python Indentation
4 min	content	Python Comments
2 min	content	Write Your First Python Program
3 min	content	Add Comments to Your Code
4 min	content	Understanding Code Sequence
2 min	content	Wrap up
3 min	content	Make Sense: What Worked, What Broke
2 min	content	Reflect
1 min	summary	What You Covered

TEACHING MOVES

- Model the first typed lines on the board before pairs type, reading each line aloud so students hear the link to blocks they already know (show, wait, scroll).
- Treat indentation as a named debugging skill: ask whether a line should sit inside a block or stand alone before anyone hits Run.
- When sequence is introduced, pause after Run and ask what happened first, second, and third so order stays visible.
- Keep the wrap-up short; the learning is in running and fixing the short program, not in extra theory.

WHAT TO WATCH FOR

- Missing or mistyped from microbit import * so display commands fail: restore that first line and Run again.
- Indentation errors after colons or mixed tabs and spaces: realign with four spaces and re-run.
- Quotes or brackets left unmatched in display.scroll or image names mistyped: compare carefully to the model line and fix spelling before Run.

DIFFERENTIATION

- Support: Provide a printed checklist (import line, scroll message, Run) and stay with pairs on the first successful run.
- Extension: Invite confident students to change the message, swap images, or adjust the sleep time and explain the new sequence.
- Extension: Ask them to add one clear comment that would help a classmate understand each main line.